BIBLIOGRAPHY OF PRINTED MATERIAL
PERTAINING TO
RATIONALIZATION, STANDARDIZATION, AND INTEROPERABILITY (RSI)

DECEMBER 1984

U.S. ARMY MATERIEL SYSTEMS ANALYSIS ACTIVITY
LOGISTICS STUDIES OFFICE
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ABSTRACT

Printed material pertaining to Rationalization, Standardization, and Interoperability (RSI) was collected and prepared in conjunction with Logistics Studies Office Project 042, Identification and Documentation of Rationalization, Standardization, and Interoperability (RSI) Functions.

REPORT TITLE: Bibliography of Printed Material Pertaining to Rationalization, Standardization, and Interoperability (RSI)
ACKNOWLEDGMENTS

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Information Exchange
INTRODUCTION

1. This Research Note contains a bibliography of Rationalization, Standardization, and Interoperability (RSI) material.

2. The material is arranged in four sections: Published Works and Articles, Military Directives, Letters and Messages Pertaining to RSI, and Reports that may be found in the Defense Logistics Studies Information Exchange (DLSIE), with abstracts.

3. The bibliographic entries were collected in conjunction with Logistics Studies Office Project 042, Identification and Documentation of Rationalization, Standardization, and Interoperability (RSI) Functions.
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Minutes of the Second US Workshop on Alliance Logistics - 12-14 July 1983, Office of the Deputy Chief of Staff for Logistics, Department of the Army, Washington, DC 20310.


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MILITARY DIRECTIVES

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AR 12-2, Executive Agency Designation for Selected Army Security Assistance Functions/Activities.

AR 34-1, Standardization: United States Army Participation in International Military Rationalization/Standardization/Interoperability (RSI) Programs, 15 October 1979.


AR 70-1, Army Research, Development, and Acquisition, Washington, DC: Department of the Army, 1 May 1975.


DA Pamphlet 700-127, Integrated Logistic Support Management Model (ILSMM) and Glossary.


DODD 2010.1, Support of International Military Activities, 2 September 1981.

DODD 2010.5, DOD Participation in the NATO Infrastructure Program, 4 October 1976.

DODD 2010.8, DOD Policy for NATO Logistics.

DODD 2010.9, Mutual Support between the United States and Other NATO Forces, 25 August 1980.

DODD 2125.1, Military Assistance Program Offshore Procurement, 18 June 1970.


DODD 4120.3, DOD Standardization Program, 10 February 1979.


DODD 5000.1, Major System Acquisition Procedures, 8 March 1983.

DODD 5000.9, Standardization of Military Terminology, 23 March 1981.

DODD 5000.12, Data Elements and Data Codes Standardization Procedures, 27 April 1965.

DODD 5000.27, Logistics Data Element Standardization and Management Program, 28 March 1975.


DODD 5100.27, Delineation of International Logistics Responsibilities, 29 December 1964.


DODD 5230.11, Disclosure of Classified Information to Foreign Governments and International Organizations, 2 March 1979.

DODD 5530.3, International Agreements, 6 December 1979.


DODI 2050.1, Delegated Approval Authority to Negotiate and Conclude International Agreements, 6 July 1977.

DODI 5010.15, Standardization of Work Measurements (Vol 2 through 10), June 1977.

DODI 7000.10, Contract Cost Performance, Funds Status, and Cost/Schedule Reports, 28 September 1966.
LETTERS AND MESSAGES PERTAINING TO RSI

1. DA letter, DAMO-ZN, 5 April 1979, subject: Army Priorities for Rationalization, Standardization, and Interoperability.


5. DARCOM letter, DRCPI, 6 December 1979, subject: Readiness Rationalization, Standardization, Interoperability (RSI) Initiatives in the Area of Interoperability.

6. VCoFS letter, OCoFSDA, 18 December 1981, subject: Gen Vessey to Gen Keith, Significant Effort to Achieve Interoperability and Standardization Between ABCA Armies.

7. DARCOM letter, DRCDE-I, 1 February 1982, subject: Gen Keith to Mr. Myers, Ensure Support and Compliance to Support Effort to Achieve Interoperability and Standardization.


15. DA letter, 8 August 1977, subject: NATO Focal Point for the Army Secretariat and Army Staff (DATRO Charter).


23. DAMO Memo, 18 July 1977, signed by LTG Meyer, requesting milestones on a list of recommendations/actions w/43 actions resulting from DA study on S/I.


26. SECDEF Memo, 12 September 1977, subject: Adviser to the Secretary and Deputy Secretary of Defense for NATO Affairs.


28. Joint Chiefs of Staff Memo for DDR&E, 12 September 1977, subject: High Priority Categories for NATO Standardization or Interoperability (S/I).
29. DEPSECDEF Memo, 4 May 1978, subject: General Policy on Compensatory Coproduction and Offset Agreements with Other Nations.


31. MFR, HQ DARCOM, Briefing to DCGMR, DRCPS-C, 28 August 1979, subject: Readiness Rationalization, Standardization, and Interoperability (RSI).

DEFENSE LOGISTICS STUDIES INFORMATION EXCHANGE (DLSIE) REFERENCES

(Listed by DLSIE LD Number)

LD Number: 39128A
Title: NATO Rationalization and the US Army.
Sponsor: Office, Deputy Chief of Staff for Operations and Plans, DA, Washington, DC 20310
Authors: COLs John H. Madison, Jr., and Edward P. Freedman; LTC James A. Frick, USA, William B. Hankee, et al.
Abstract: This study reflects the need for establishing a NATO actions program in the US Army to provide guidance and direction for numerous actions and activities. Such a program could establish overall credibility to US Army interest in achieving greater combat effectiveness through increased cooperation with allies. Current actions and developments are discussed to support the program need. Conclusions are reached and recommendations offered on US policy for NATO rationalization, NATO command and control actions, and management of US Army participation in NATO rationalization efforts. Extensive bibliography included.

LD Number: 39160AZ
Title: Analysis of NATO Standardization and Interoperability (U).
Sponsor: Office, Deputy Chief of Staff for Operations and Plans, DA, Washington, DC 20310
Authors: COL John A. Crofts; LTCs Frank L. Smith and Dean A. Rodeman; MAJ James L. Wilmeth, III, USA, et al.
Abstract: This analysis addresses the potential savings in logistics structure spaces and the likelihood of realizing these potential savings. An assessment of relative operational advantages that could be obtained by increased standardization of NATO weapons, improved NATO force interoperability, and sharing of standardized logistic stocks with current force structures and weapon types is addressed in the study. The analysis is directed to those countries providing forces to the AFCENT zone of NATO.
Title: NATO Standardization and Interoperability - Handbook of Lessons Learned.

Sponsor: Office, Deputy Chief of Staff for Research, Development, and Acquisition, DA, Washington, DC 20310

Authors: William B. Williams, Virginia W. Perry, and Harold F. Candy.

Abstract: The purpose of this study was to develop a handbook of lessons learned based on an analysis of selected standardization and interoperability programs, primarily Army, in which the US has participated. It is felt that the problems inherent in achieving standardization can be alleviated to some degree by analyzing and documenting the experiences of past programs. For the most part, the study concentrated on those programs on which the US was dependent on Europe for the technology. The objectives were to identify the political, legal, economic and technical problems encountered by the Army and DOD and to develop guidelines for future programs.

Conclusions: Not applicable.

Recommendations: (1) A handbook of lessons learned be published and disseminated. (2) Responsibilities and procedures for insuring handbook currency be promulgated in a Department of the Army or US Army Materiel Development and Readiness Command (DARCOM) regulation. (3) All future rationalization, standardization and interoperability (RSI) lessons learned be incorporated in the handbook and in the Defense Logistics Studies Information Exchange (DLSIE) data base.

Title: Rationalization, Standardization and Interoperability: Tactical, Economic and Political Considerations.

Sponsor: Program Manager, Defense Systems Management College, Fort Belvoir, VA 22060

Author: ILT Ralph W. Patterson, USA.

Abstract: Rationalization, standardization, and interoperability (RSI) of weapons systems and equipment within the North Atlantic Treaty Organization (NATO) has become an integral part of planning for the defense of Western Europe. When the North Atlantic Treaty was ratified some 30 years
ago, Europe was just emerging from the devastation of World War II. The United States was producing 50 percent of the gross world product. Consequently, Western European countries could devote their resources and energies to rebuilding under a protective nuclear shield provided by the US. A major shortcoming of the treaty was that it failed to provide for the sharing of the defense burden once Europe had recovered. The massive arms buildup by the Warsaw Pact has brought this into focus. Officials of the NATO nations generally agree that the forging of an effective military machine will require a collective military-industrial effort. The question, then, is not what is needed. The real question addresses the how and why of RSI. In this article, the author discusses the tactical, economic and political considerations.

LD Number: 45253A
Title: NATO Rationalization/Standardization/Interoperability: Is It a Feasible Goal and What Will Its Effect Be on NATO and the Acquisition Community?
Sponsor: US Army Logistics Management Center (Florida Institute of Technology), Fort Lee, VA 23801
Author: Danton G. Steele, II.
Abstract: The purpose of this paper is to assess the validity, feasibility, and probable success of current efforts to achieve NATO rationalization, standardization and interoperability (RSI) and to determine the impact these efforts will have on selected components within the acquisition community and on the creation of a viable cooperative fighting capability within NATO.
Conclusions: The position taken against total RSI/standardization and the creation of a common logistics base is founded on current, not easily-reconciled differences that make standardization impractical and too costly to envision for the immediate, foreseeable future.

LD Number: 45709F
Title: NATO and Rationalization, Standardization, and Interoperability.
Sponsor: Army Logistician, US Army Logistics Management Center, Fort Lee, VA 23801
Author: LTC Glynn E. Parker, USA.

Abstract: During the past year an increasingly popular subject of discussion has been what has come to be known as rationalization, standardization, and interoperability, or RSI. The RSI program when it is fully understood, planned, and implemented by the NATO alliance members, will lead to a blending of the allies' separate efforts into common programs that will result in greater effectiveness and efficiency. This article discusses RSI and how it will keep the NATO flag flying.

LD Number: 46065A

Title: Rationalization, Standardization, Interoperability (RSI) - The Family of Weapons Concept.

Sponsor: Industrial College of the Armed Forces, Fort Lesley J. McNair, Washington, DC 20319

Authors: LTCs Robert N. Grove, Donald J. Callahan, Howard E. Espin, Walter J. Gabrysiak, USA, et al.

Abstract: This report relates to rationalization, standardization, and interoperability (RSI) within the North Atlantic Treaty Organization and specifically addresses the family of weapons concept. The report contains a background chapter, chapters on three technical issues (acquisition, technology transfer, and industrial), a chapter each on seaborne, land, and C3 systems, a chapter on the Delphi survey made in conjunction with this study, and a final chapter containing conclusions. Appendices backing up the basic text are included in the back of the report.

LD Number: 46781A

Title: Rationalization, Standardization, Interoperability (RSI) - A Policy Statement.

Sponsor: National Defense University, Fort Lesley J. McNair, Washington, DC 20319

Authors: CPTs Robert E. Alexander and James E. McNulla, USN; COL Michael J. Babbidge, USAF; CDR Larry E. Blose, USN, et al.

Abstract: This report relates to rationalization, standardization, and interoperability (RSI) within the North Atlantic Treaty Organization and specifically assesses why
progress toward weapon-system collaboration has been so difficult to achieve. The report contains a background chapter, a chapter of key policy issues, one on structural and motivational issues, a chapter on the Delphi survey made in conjunction with this study and a final chapter containing conclusions and recommendations. Appendices backing up the basic text are included in the back of the report.

LD Number: 48018A
Title: The Buy American Act in Light of NATO RSI.
Sponsor: US Army Logistics Management Center (Florida Institute of Technology), Fort Lee, VA 23801
Author: CPT Richard E. Wooten, USA.
Abstract: The purpose of this research effort was to ascertain the relative importance of the Buy American Act in DOD procurement based on waivers granted and the frequency of applying the domestic preference restrictions of the Act in DOD procurement actions. The guiding question of the research effort was "Does the Buy American Act serve the public's best interest in DOD procurement?"

LD Number: 49851E
Title: Major RSI Approaches.
Sponsor: Program Manager, Defense Systems Management College, Fort Belvoir, VA 22060
Author: John S. Fargher, Jr.
Abstract: This article is based on chapter two of the guide for the management of multinational programs. The guide was developed by the Defense Systems Management College for program managers involved in international logistics.

LD Number: 50908A
Title: NATO RSI Policy: An Overview.
Sponsor: Kaitz (Edward M.) & Assoc. Inc., 1800 M St NW, Suite 310 North, Washington, DC 20036
Authors: Edward M. Kaitz and Heinz A. Gorges.

Abstract: This paper examines the complex issues surrounding the implementation of NATO rationalization, standardization, and interoperability (RSI) policy and in particular as it impacts on the role of the program manager. Further, the underlying basis for the discussion is to associate various key words of RSI policy with various key functions, i.e., to examine the implications of policy-level RSI for the practical implementation-level of the policy. This paper should be regarded as a first step in an examination and clarification of the military, economic, and political issues surrounding NATO RSI policy.

LD Number: 51005
Title: Identification/Documentation of Readiness RSI Functions.
Sponsor: US Army Materiel Development and Readiness Command (Dir for Progs, Anal and Eval), 5001 Eisenhower Ave., Alexandria, VA 22333

Abstract: The lack of standardization of RSI (rationalization, standardization, and interoperability) mission functions and procedural manuals severely constrain visibility and understanding of the program throughout DARCOM and is reflected in the interface shortfalls. This study will (1) examine the nature and extent of interface voids and take action to establish required interfaces in official documents; (2) identify and update mission and function manuals; and (3) standardize RSI functions/subfunctions at all levels to provide visibility and improved management and control. The study cannot be limited to the DARCOM RSI program. Consideration must be given to establish interfaces both internal and external to DARCOM.

LD Number: 52009A
Title: Interoperability Handbook on Logistics.
Sponsor: US Army Training and Doctrine Command, Fort Monroe, VA 23651

Abstract: This interoperability handbook is designed to support US/German cooperation in the field of logistics. Its purpose is to create, on a long term basis, those fundamentals for interoperability in the logistics field which are indispensable for mutual support within NATO.


Author: Antonio J. D'Ambrosio.

Abstract: This report presents the results of a trip of Mr. Antonio J. D'Ambrosio to NATO HQ, Brussels, Belgium, 30 November - 4 December 1981. The purpose of attendance at subject meeting was to participate in the role of logistics technical support representative to the senior US representative, LOGWP and Chairman, SSS-C.

Title: Reforger Exercise 81.


Author: Antonio D'Ambrosio.

Abstract: This memorandum presents a trip report of DARCOM's representative, at Reforger Exercise 81. The purpose was to brief units visited on DARCOM interoperability initiatives, priorities, and objectives.

Title: Agreements on Inter-NATO Defense Trade.

Sponsor: US General Accounting Office, 441 G St NW, Washington, DC 20548

Abstract: The broad policy of rationalization, standardization, and interoperability became the cornerstone of US policies within NATO in the 1970s. To address NATO cooperative armaments needs, the DOD encouraged common production of weapons and entered into memorandums of understanding to reduce barriers to inter-NATO defense trade. This report presents the results of a review of the general memorandum of understanding between the DOD and 11 allies of the NATO to determine whether these agreements had provided increased reciprocal
opportunities for firms of one country to compete for defense procurements by another country.

LD Number: 53811A

Title: DARCOM OIRD's Role in NATO Rationalization/Standardization/Interoperability.


Authors: Robert A. Gessert, J. Ross Heverly, and Arthur T. Port.

Abstract: Rationalization, standardization, and interoperability have become central concepts to improvement of NATO's conventional capability. For these concepts to become realities depends heavily on the full and prudent participation of the service materiel full scale development phase, the Office of International Research and Development (OIRD) will need to insure through it both the Department of Defense and the Department of State and their dealings with licensing and co-production policies, technology transfer, and the potential for the rationalization of European defense industry.

Conclusions: (1) The best opportunities for NATO RSI occur before a system enters life cycle management. (2) International cooperation in materiel development in particular contains both obstacles and hazards as well as opportunities. (3) During the full scale development phase, the Office of International Research and Development (OIRD) will need to insure through its monitoring that concerns for reliability and producibility are reconciled with standardization/interoperability considerations. Additional conclusions are listed.

Recommendations: (1) OIRD ensure through liaison and by working with DARCOM membership that the joint working groups receive necessary information and use it properly. (2) OIRD should monitor the preparation of the initial test design plan and outline test plan to ensure that foreign developments and NATO RSI considerations are given adequate and realistic attention. (3) OIRD initiate negotiations for obtaining any foreign test equipment items needed in an experimental test program and for obtaining the results of any foreign test that may be relevant. Additional recommendations are listed.
Title: NATO Standardization, Interoperability, and Readiness and H. R. 11607 and H. R. 12837. Hearings Before the Special Subcommittee on NATO Standardization, Interoperability and Readiness.

Sponsor: US Congress, Washington, DC 20515

Abstract: This is the report of hearings which were held to: (1) study the present state of standardization and interoperability within NATO; (2) identify areas of readiness problems in the alliance which result from a lack of joint procedures, doctrine or standard equipment; (3) determine the most feasible approach to achieving greater standardization and interoperability where it is determined that such will contribute to improved readiness.

Title: Problems in the Standardization and Interoperability of NATO Military Equipment, Part 1.

Sponsor: US Congress, Washington, DC 20515

Abstract: This is the report of a review of efforts of the Department of Defense to strengthen the conventional forces of NATO through greater standardization and interoperability of military equipment within the alliance.

Title: Interim Report on the Standardization and Interoperability of NATO Military Equipment, Fifteenth Report by the Committee on Government Operations.

Sponsor: US Congress, Washington, DC 20515

Abstract: This report is based on a study made by the Legislation and National Security Subcommittee which has been concerned with problems affecting NATO's defense posture. Many of the figures cited in this report were obtained from the United States military posture for Fiscal Year 1978, submitted to Congress by General George A. Brown, Chairman of the Joint Chiefs of Staff, and from other unclassified military sources.
Title: Minutes of the First US Workshop on Alliance Logistics - 21 March 1983.

Sponsor: Office of the Deputy Chief of Staff for Logistics, Department of the Army, Washington DC 20310

Abstract: The First US Conference on Alliance Logistics helped to establish a foundation for conducting semi-annual gatherings of US personnel (both civilian and military) who are involved in alliance logistics. The objective of future conferences will be to ensure that these individuals are apprised of, and are acting in concert with, Army goals and Department of the Army policy guidelines in regard to logistics. This document presents the minutes of the first conference.

LD Number: 55795B

Title: Minutes of the Second US Workshop on Alliance Logistics - 12-14 July 1983.

Sponsor: Office of the Deputy Chief of Staff for Logistics, Department of the Army, Washington, DC 20310

Abstract: This document presents the minutes of the second in a continuing series of workshops on US Alliance Logistics. The workshop is an ODCSLOG initiative to ensure that US Army representatives to the various alliance logistics fora speak with one voice. In addition, the workshop provides a forum for these individuals to share information, to receive guidance, and to be kept abreast of current and projected activities in alliance rationalization, standardization, and interoperability.
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