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Authority to Issue Interoperability Policy

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This research was conducted within the Acquisition and Technology Policy Center (ATPC) of the RAND National Defense Research Institute, a federally funded research and development center sponsored by the Office of the Secretary of Defense, the Joint Staff, the Unified Combatant Commands, the Navy, the Marine Corps, the defense agencies, and the defense Intelligence Community under contract W74V8H-06-C-0002.

Library of Congress Cataloging-in-Publication Data

Wong, Carolyn, 1952-
Authority to issue interoperability policy / Carolyn Wong, Daniel Gonzales.
pages cm
Includes bibliographical references.
ISBN 978-0-8330-8177-3 (pbk. : alk. paper)
1. United States. Navy—Management. 2. United States. Navy—Personnel management. 3. Sea-power—United States—Management. 4. Organizational effectiveness. I. Gonzales, Daniel, 1956- II. Rand Corporation. III. Title.

VA58.4.W64 2013

359.30973—dc23

2013036815

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Summary

Introduction

Achieving interoperability among Navy systems is instrumental to enabling critical functions, such as timely information exchange during operations and efficiencies in acquisition. For this reason, it is important to understand what parties have authority to issue policy that governs the facets of interoperability. In the Navy’s Service Acquisition Executive Organization, the office of the Assistant Secretary of the Navy, Research, Development, and Acquisition (ASN[RD&A]), systems engineering policy oversight is assigned to the Chief Systems Engineer (CHSENG). The program for management of systems engineering aligned to mission area is called mission area systems engineering (MASE). This report documents policy findings with respect to identifying the parties that have roles and responsibilities for establishing and issuing Navy interoperability policy related to MASE.¹

Methodology and Framework

We present a methodology and framework that can be used to create a network of guidance relevant to a particular issue. The framework, shown in Figure S.1, has three components: citation of authority, caveats, and party with authority. The citation of authority contains the source information, such as document identifier and section number where the statement of authority is found, and a summary of the statement of authority. The caveats are a summary of the conditions that must hold in order for the citation to be referenced as authority. The party with authority is the organization, office, executive, or entity that has authority to take the action specified in the citation if the caveats hold.

The first step of our methodology is to identify and examine guidance that governs the roles, responsibilities, and authorities pertinent to the issue being investigated. Next, the analyst must locate the specific passages in each guidance document that pertain to the issue being

Figure S.1
Authority Framework



RAND RR357-S.1

¹ This report is based on information current as of July 7, 2011.

examined and assess each passage for relevance.² The set of relevant passages can then be analyzed to logically establish the links among the passages and thus weave the passages into a network of guidance relevant to the issue being investigated.

By applying the framework to the elements in the network of guidance relevant to a particular issue, the analyst can create a roles and responsibilities (R&R) network of authority that identifies all parties with roles, responsibilities, or authorities with respect to the issue being investigated. Moreover, the R&R network shows the scope of the authority each official is assigned by guidance documents via the caveats that the law and relevant policy place on the authority of each official. Hence, an analyst can compare the scopes of authority and either (1) identify the single official responsible for handling the issue being investigated, (2) show that the issue being investigated does not meet any of the caveats and hence a potential gap in the guidance exists because no official can claim responsibility to address the issue being investigated, or (3) identify multiple officials whose scopes of responsibility include the issue being investigated. If multiple officials have R&R regarding the issue being investigated, the analyst can determine whether there are other policies and procedures that prescribe the coordination of the R&R of the multiple officials. If such policies or procedures exist, then the guidance specifying the authorities is potentially overlapping and redundant. If there are no policies or processes in place to coordinate the R&R of multiple officials regarding a particular issue, then the guidance is potentially ambiguous or inconsistent. Figure S.2 shows a schematic of the methodology.

ASN(RD&A) CHSENG MASE Policy Case Study

We applied the methodology to determine who has authority to issue Navy interoperability policy related to MASE. The resulting R&R network of authority relevant to issuing Navy MASE policy shows that there are 13 different paths of authority that could be cited by four different parties to claim authority to influence interoperability policy related to MASE. Two paths stem from Section 2223(b)(3) of Title 10 of the United States Code (10 USC § 2223(b)(3)). Three paths stem from 10 USC § 2223(b)(3), 10 USC § 5013(c)(3), and 10 USC § 5013(f). The other eight paths stem from 10 USC § 133(b), 10 USC § 139b(b), 10 USC § 5013(c)(3), 10 USC § 5013(f), and 10 USC § 5016(b)(4)(A).

Four paths show that the Secretary of the Navy (SECNAV) retains authority to issue Navy interoperability policy related to MASE. Four different paths show that the Department of the Navy (DON) Chief Information Officer (CIO) has authority to issue Navy interoperability policy related to MASE. Three other paths, distinct from the eight already mentioned, give the ASN(RD&A) authority to establish Navy interoperability policy related to MASE. Finally, a separate set of two paths give the ASN(RD&A) CHSENG a pivotal role to influence interoperability policy related to MASE.

The two direct paths available to the ASN(RD&A) CHSENG to influence interoperability policy related to MASE both require the MASE policy to be providing senior technical authority on interoperability. However, if the MASE policy is not providing senior technical authority on interoperability, there are four other paths the ASN(RD&A) CHSENG

² The Electronic Policy Improvement Capability (EPIC) can facilitate location of candidate passages for further examination. EPIC is described in Appendix A. See also Wong et al., 2013.

Figure S.2
Schematic of Methodology

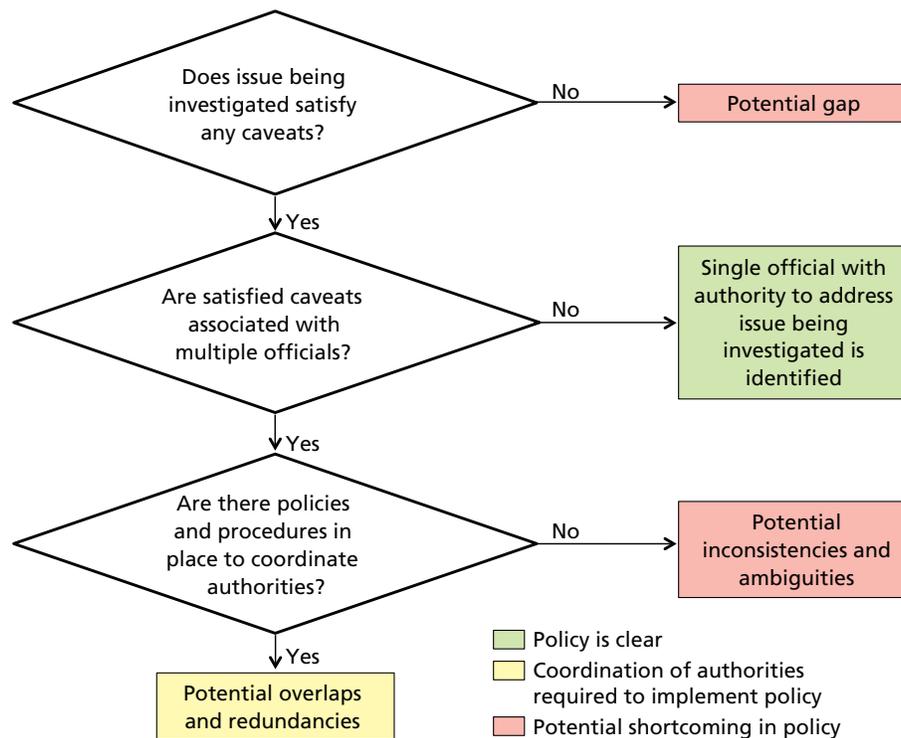
Build network of linked relevant guidance

- Identify guidance
- Locate relevant passages (Use EPIC to facilitate)
- Establish logical links among passages
- Weave passages into a network of linked relevant passages of guidance

Apply framework construct and fabricate R&R network

- Append source information to each passage to create citation of authority
- Determine caveats relevant to the issue being examined and attach caveats to citations
- Identify party with authority for each citation in the network

Analyze R&R network

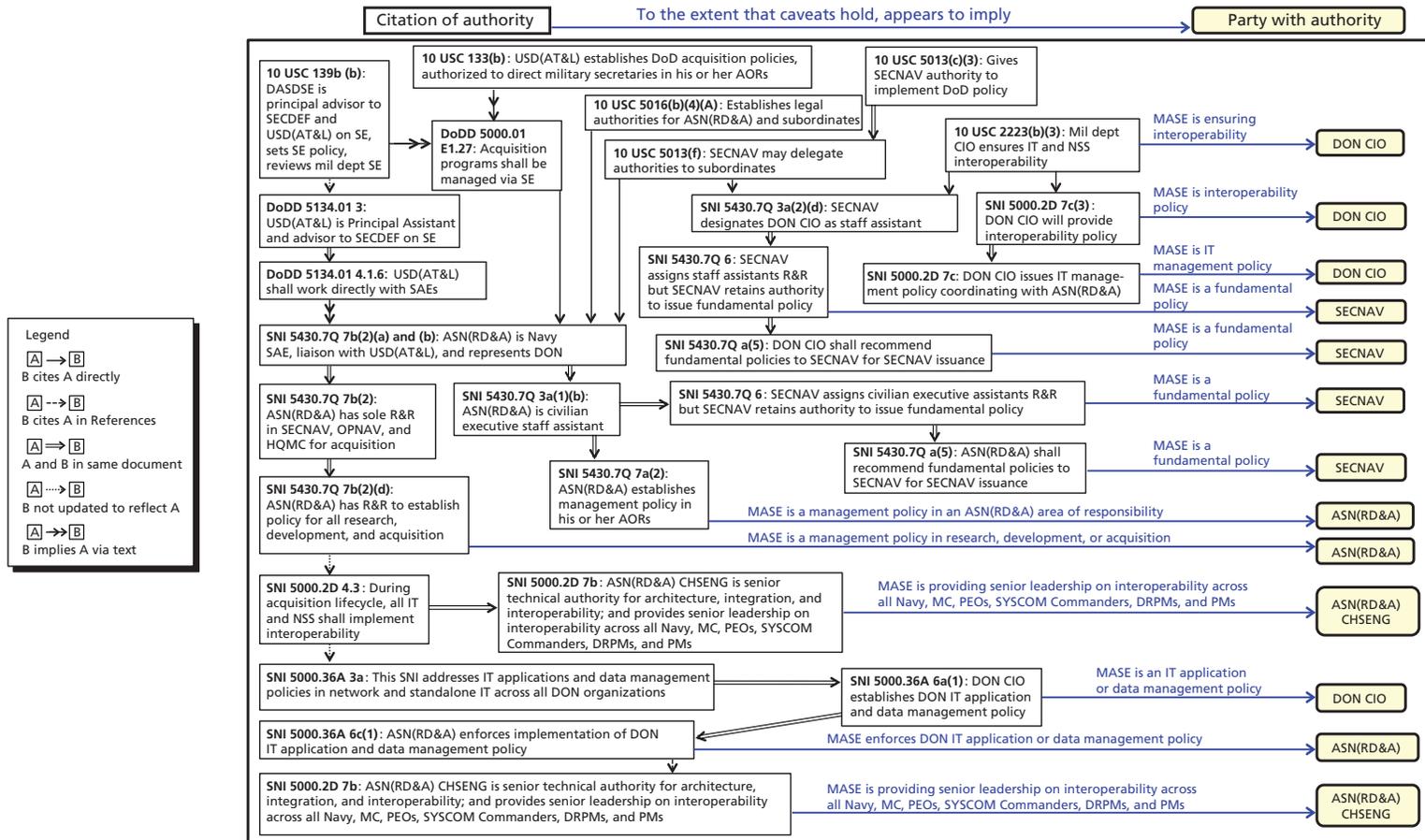


RAND RR357-S.2

can use to influence MASE policy. All four of these indirect paths require the ASN(RD&A) CHSENG to recommend MASE policy to the ASN(RD&A). If the recommended policy (1) is enforcing implementation of DON information technology (IT) application or data management policy; (2) is policy for research, development, or acquisition; or (3) is management policy in an area where the ASN(RD&A) has responsibility, then the ASN(RD&A) can issue the MASE policy recommended by the CHSENG. If the recommended MASE policy falls outside of the ASN(RD&A)'s scope of responsibility, the ASN(RD&A) can recommend the MASE policy to the SECNAV for the SECNAV to issue as fundamental policy.

Figure S.3 shows the R&R network of authority relevant to issuing Navy interoperability policy related to MASE.

Figure S.3
R&R Network of Authority for Interoperability Policy Related to MASE



NOTES: Figure is based on laws and policies current as of July 7, 2011. DASDSE = Deputy Assistant Secretary of Defense for Systems Engineering; Mil Dept = military department; USD(AT&L) = Under Secretary of Defense for Acquisition, Technology, and Logistics; AORs = areas of responsibility; CIO = Chief Information Officer; NSS = national security system; DoDD = Department of Defense Directive; SNI = Secretary of the Navy Instruction; SAE = Service Acquisition Executive; OPNAV = Office of the Chief of Naval Operations; HQMC = Headquarters Marine Corps; MC = U.S. Marine Corps; PEO = program executive office; SYSCOM = Systems Command; DRPM = direct reporting program manager; PM = program manager.

Recommendations

Our analysis shows that the body of guidance relevant to interoperability yields many paths of authority traceable to U.S. law and as many as four officials having responsibility for various aspects of interoperability. In such a situation, determining which official has responsibility for a particular facet of interoperability may not be straightforward, as illustrated in our case study of the ASN(RD&A) CHSENG's role in issuing Navy MASE policy. We recommend that all stakeholders, and particularly the ASN(RD&A) and DON CIO, take proactive steps to increase the routine communications necessary to maintain and grow collaborative working environments. Such actions will enable teamed approaches to quickly come to a shared understanding on issues of mutual interest.

Next Steps

In addition to the recommended actions, further research can enhance the government's capability to address potential inconsistencies, ambiguities, and gaps in policy:

- Research can help mitigate the probability of potential conflicts:
 - Additional proactive research can identify potential policy gaps, inconsistencies, ambiguities, and overlaps in complex areas that intersect many arenas. Such research can enable policy fixes before potential conflicts arise. Candidate areas for proactive research include more aspects of interoperability, information assurance, and cyberspace.
 - Inconsistencies in policy can arise from unsynchronized policies. Research and development of techniques that can help identify unsynchronized policies when existing policies are updated and when new policies are issued would serve to anticipate areas of potential conflict and thus provide forewarning to effect solutions before potential conflicts can occur. Such techniques can also help ensure consistency within and among bodies of policy.
- Collaborative approaches can go a long way in mitigating and avoiding potential conflicts when policy is not clear. Research in collaborative approaches and organizational management concepts that promote routine exchange of information and viewpoints and proactively foster collaborative working environments will increase management's arsenal of tools to address situations when policy is not clear.

Closing Remarks

This report presents an approach and framework for determining which parties have authority to issue Navy interoperability policy, the origins and implementation path of the authority, and the extent of the authority. The approach includes rigorous analysis by researchers to identify pertinent authorities in federal law supplemented by a means to facilitate discovery of roles and responsibilities in Department of Defense and Service-level policies. Comparisons of the scopes of roles, responsibilities, and authorities of executives assigned duties in official defense guidance allow researchers to create a network of authority for interoperability policy. This approach and the complementary analytic techniques we suggest be researched and developed can provide the government with the ability to create and maintain consistent and comprehensive bodies of policy that will ensure the effective and efficient operation of defense agencies.