

Department of Defense

Joint Visual Information Concept of Operations

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SUBJECT: Joint Visual Information Concept of Operations (VI CONOPS)

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PURPOSE

This publication explains the Joint VI Enterprise and how it can be employed in military operations by exploiting a common set of architectures and procedures. The Joint VI CONOPS relies on proven processes, historic examples, and emerging solutions. It should be used as a road map to inform, transform, standardize and strengthen DoD imagery processes at every level.

EXECUTIVE SUMMARY

Successful communication requires the integration of actions, images, and words. Within the Department of Defense, there are an estimated 6,000 military, civilian and contract professionals who are specially-trained and equipped to provide visual communication capability to commanders at every echelon. The Joint Visual Information Concept of Operations provides a framework for integrating and synchronizing the actions of these visual communication professionals to achieve greater operational and strategic effects.

The core element of the Joint VI CONOPS is the Joint Visual Information Enterprise, which provides a framework aligning visual communication professionals, VI joint operations and visual content for more efficient use. This enterprise approach enables the warfighter to respond more quickly to the changing operational environment and serves as a guide for organizations to leverage Joint VI systems in reaching their communication objectives.

Timely, relevant, and compelling military imagery is a strategic asset for decision-makers and must therefore be deliberately planned and coordinated. The Joint VI Enterprise allows for digital imagery files to be transmitted once, widely distributed and made readily available to all users through a central on-line storage and distribution system. This approach also includes the capability to assist in the identification and dissemination of imagery requirements to expedite the collection, transmission and processing of high-value visual content to meet operational and strategic objectives. To maximize accessibility, usefulness and distribution of VI materials, the Joint VI Enterprise also includes a Customer Relationship Management system to track customer requests, provide order fulfillment, and collect metrics on imagery taskings.

Table of Contents

| | |
|--|----|
| 1. SCOPE OF THE JOINT VISUAL INFORMATION (VI) CONOPS | 4 |
| 1.1 Identification..... | 4 |
| 1.2 Joint VI Enterprise System Overview | 5 |
| 1.3 CONOPS Overview..... | 7 |
| 1.4 Revisions to this Document..... | 7 |
| 2. ENTERPRISE CONCEPT FEATURES, OPERATION, AND DETAIL | 7 |
| 2.1 Background, Objectives, Scope..... | 7 |
| HAITI - Operation Unified Response (OUR) | 8 |
| 2.2 Improvements Over Previous System | 8 |
| Wildfire Season – Southern California (July 2008) | 9 |
| 2.3 Summary of Capabilities | 11 |
| 2.3.1 Defense Media Activity (DMA)..... | 12 |
| 2.3.2 Defense Visual Information (DVI)..... | 12 |
| 2.3.3 Defense Imagery Management Operations Center (DIMOC)..... | 12 |
| 2.3.4 Defense Video & Imagery Distribution System (DVIDS)..... | 12 |
| 2.3.5 VI Planners | 13 |
| 2.3.6 Combat Camera (COMCAM) | 13 |
| 2.3.7 Other Visual Communication Capabilities..... | 13 |
| 2.4 Disadvantages, Limitations & Challenges | 13 |
| 2.4.1 Timeliness and Speed | 13 |
| 2.4.2 Branding | 14 |
| 2.4.3 Personnel | 14 |
| 2.4.4 Misperceptions of VI professionals and use of imagery | 14 |
| 2.4.5 Training Gaps | 15 |
| 2.4.6 Security Clearances | 15 |
| 2.5 Modes of Operation | 15 |
| 2.5.1 The Joint Imagery Management and Operations Cell (JIMOC) | 16 |
| 2.6 User Classes..... | 18 |
| 2.6.1 VI Users (Customers)..... | 18 |
| 2.7 Alternatives and Trade-offs Considered | 18 |
| 2.8 OPCON, Description and Context of Current Situation | 19 |
| 2.9 Constraints and Assumptions..... | 20 |
| 2.9.1 Constraints | 20 |
| 2.9.2 Assumptions | 20 |
| 2.9.3 Speed Matters | 20 |
| 2.10 Support Environment..... | 21 |
| 2.10.1 Training for VI Professionals | 21 |
| 2.11 Planned Enhancements/Improvements..... | 22 |
| 2.11.1 Defense Asset Management System (DAMS) | 22 |
| 2.11.2 Customer Response | 22 |
| 2.11.3 Joint VI Website | 22 |
| 2.11.4 Training | 23 |
| 2.11.5 VI Distribution System..... | 23 |
| 2.11.6 Resource Management | 23 |

| | |
|---|----|
| 3. SYSTEM IMPLEMENTATION AND OPERATIONAL CONSIDERATIONS | 23 |
| 4. OPERATIONAL SCENARIOS | 24 |
| 5. SUMMARY OF IMPACTS (DOTMLPF) | 24 |
| 5.1 Doctrine | 24 |
| 5.2 Organization | 25 |
| 5.3 Training | 25 |
| 5.4 Materiel | 25 |
| 5.5 Leadership & Education | 25 |
| 5.6 Personnel | 25 |
| 5.7 Facilities | 26 |
| 6. REFERENCES | 27 |
| 7. DEFINITIONS | 29 |
| | |
| APPENDICES | 32 |
| APPENDIX A: DVI & DIMOC Organization | 33 |
| A.1 Background | 33 |
| A.2 Organization | 33 |
| A.2.1 The Defense Media Activity (DMA) | 33 |
| A.2.2 Defense Visual Information (DVI) mission | 34 |
| A.2.3 The Defense Imagery Management Operations Center (DIMOC) | 34 |
| A.2.4 Historical Background | 35 |
| APPENDIX B: Characteristics of the Enterprise Approach | 36 |
| APPENDIX C: VI User Lists | 37 |
| The Primary VI professional Production Domains | 38 |
| APPENDIX D: VI Planning | 39 |
| Goal #1: Incorporate VI Requirements Across the Full Spectrum | 39 |
| What Detailed VI Plans Should Include | 40 |
| Think and Plan for VI! | 41 |
| Goal #2: Imagery Management at the COCOM and JTF Levels | 42 |
| Goal #3: VI Training for operations (for VI Planners and Joint Operators) | 42 |
| APPENDIX E: Case Studies - Operational Scenarios | 44 |
| APPENDIX E-1: Humanitarian Assistance - SOUTHCOM – Haiti | 45 |
| APPENDIX E-2: NORTHCOM Armed Forces Inaugural Committee | 51 |
| APPENDIX E-3: Piracy - Navy Rescue - DIMOC coordination and collaboration | 53 |
| APPENDIX E – 4: Republic of Georgia Humanitarian Assistance | 55 |

1. SCOPE OF THE JOINT VISUAL INFORMATION (VI) CONOPS

The objective of the Joint Visual Information Concept of Operations is to explain the operating concepts, capabilities and benefits of standardizing military imagery processes using the proven Joint VI Enterprise approach of integration, synchronization, management, and sharing of VI products across the DoD - providing the right image, at the right time, at the right place.

The Department of Defense (DoD) conducts daily world-wide operations employing a diverse workforce of 1.4 million active duty personnel, 848,000 reserve personnel, 700,000 civilians and 273,000 contractors. The sheer size, scope and complexity of DoD operations make communicating clear supporting themes and messages a major organizational challenge. To meet this challenge, the DoD sustains a small segment of the total workforce as professional communicators. Their operational mission is to advise commanders, develop plans, prepare communication products, and effectively communicate approved themes and messages on behalf of their organization and commander.

Within this segment of DoD communicators, there is a subset of about 6,000 military, civilian and contractor professionals who are specially trained and equipped to produce video, still and graphic images tailored to support established communication goals. These visual communication specialists are assigned across the entire spectrum of DoD organizations, Services, agencies and missions. The majority work in small units supporting one base, organization, or communication mission. Some are expeditionary and configured according to a multitude of visual acquisition and communication missions. Among the many visual specialties represented are: Combat Camera (COMCAM) operators, photojournalists, photographers, videographers, broadcasters, Combat Artists, graphic artists, Visual Information production specialists and Mass Communication specialists (to name a few).

For the purposes of this CONOPS, the remainder of the document will use the umbrella term of “VI Professionals” to refer to the personnel in all these job specialties who produce visual content. This CONOPS does not address the management of “derivative imagery” sources (such as soldiers with personal/cell phone cameras, helmet cameras, video teleconferencing, etc.) which are coincidental to military activities and not specifically guided by communication plans or goals. The VI CONOPS also does not include managing imagery obtained by remote platforms such as remotely piloted vehicles or satellites.

1.1 Identification. The Joint VI CONOPS is based on three decades of operational experience, in-depth process analysis, and the 2007 Public Affairs and Visual Information assessment of imagery operations in the Iraqi operational theatre. The Joint VI CONOPS provides a logical enterprise construct for supporting the 21st century warfighter and all Department of Defense communicators with timely Visual Information products and operational imagery as a shared strategic resource.

The Joint VI CONOPS is also substantially supported and propagated by established Department of Defense policy and doctrine:

- *VI shall be viewed and used as an essential information resource and a supporting capability for strategic communication. VI aids the DoD public affairs (PA) community in providing information to the public concerning DoD operations and programs in accordance with DoDI 5400.13 and Joint Publication 3-6; contributes to public diplomacy (PD) objectives in accordance with Joint Publication 3-61; provides strategic and operational supporting capability to information operations (IO) in accordance with DoDD 3600.01 ; aids operational planning and decision making and is critical to effective and efficient training; is fundamental to the historical and evidentiary record of DoD activities and actions; and supports DoD business operations and facilitates other critical DoD functions.(DoDI 5040.02, paragraph 4a.)*
- *DoD enterprise level operations and coordination support shall be employed to facilitate the acquisition, creation, transmission, replication, distribution, storage, or preservation of VI with strategic and operational usefulness to the DoD to maximize its effectiveness as a key information resource. (DoDI 5040.02, paragraph 4b(1))*
- *Strategic, operational, tactical, and joint-interest imagery shall be centrally received, managed, and distributed as a shared asset. Information about and access to such imagery shall be provided by or through central DoD VI information systems. Such information systems shall be established and operated in compliance with DoDD 8320.02. (DoDI 5040.02, paragraph 4b(2))*
- *Strategic, operational, tactical, and joint interest imagery shall be forwarded immediately to the DIMOC as a shared resource to support the operational and planning requirements of OSD, the Joint Staff, the Military Departments, and Combatant Commands. These requirements include situational awareness, information operations, mission assessment, legal documentation, and PA. (DoDI 5040.02, enclosure 9, paragraph 6)*
- *COMCAM imagery is a fundamental tool of decision makers and commanders that provides essential battlefield information. COMCAM imagery is to be shared, as required, to simultaneously support operational and planning requirements of OSD, the Chairman of the Joint Chiefs of Staff, MILDEPs, combatant commands, Defense agencies, and other DOD components.(CJCSI 3205.01C, paragraph 4b)*

Defense Visual Information (DVI), a principle operating component of the Defense Media Activity (DMA), is responsible for the content of the JOINT VI CONOPS. The most current version is available online at: <http://www.defenseimagery.mil/learning/vipolicy/misc.html>

Please send questions, updates, or other information via the website at: http://www.defenseimagery.mil/submitComments_input.action

1.2 Joint VI Enterprise System Overview. Achieving operational superiority in the modern information battlespace against foes who are often unconstrained by truth or accountability will require great unity of effort for U.S. and allied tactical, operational and strategic communication. To ensure these unified communication efforts fully resonate with target audiences in the 21st century, military communicators and military leadership must plan

for and incorporate compelling, truthful imagery products directly supporting the commander's established themes and messages.

Behavioral studies have shown people remember only 10 percent of what they hear and 30 percent of what they read, but about 80 percent of what they see and do. Consequently, military strategic messages supported with high quality images are much more likely to be remembered by target audiences. Strategic messages incorporating compelling visual content are also much more likely to be selected and used by civilian media outlets. To ensure the highest quality imagery is available to support desired communication objectives, the DoD employs the Joint VI Enterprise to help coordinate global VI acquisition, integrate VI production into operational plans, and to provide targeted product distribution of selected visual content.

The Joint VI Enterprise is a framework – a common set of architectures, procedures and doctrine, within which VI professional capabilities, military VI products, operations, and Joint VI systems are synchronized and integrated for more efficient use. For the purpose of this Joint VI CONOPS, VI professional capabilities within DoD are considered to be high demand, low density assets which must be optimized to provide compelling imagery for the widest spectrum of uses. A successful Joint VI Enterprise enables organizations across the DoD to respond more quickly to changing operational environments while also providing a ready reference to make assessments on the effectiveness of ongoing VI operations. The Joint VI Enterprise is adaptive to lessons learned during military operations and continues to be socialized and refined to best meet Joint Force and DoD requirements.

The Joint VI Enterprise integrates Joint VI systems comprised of specially authorized and assigned VI organizations capable of 24/7 operations with some or all of the following capabilities:

- VI planning, tracking and operational coordination services
- Imagery transport services to facilitate product transmission from garrison and deployed locations--including live video
- Timely processing of large volumes of imagery from multiple sources
- Imagery archiving and on-line hosting services
- Global VI product marketing, distribution and order fulfillment services
- Robust customer support and relationship management services

These Joint VI Enterprise systems regularly interface with Service- and DoD- VI professionals serving in tactical, garrison and deployed units. In general, VI professionals are trained, equipped and tasked to acquire, produce and deliver a broad range of VI material in support of their locally assigned missions. Visual communication personnel rely on the Joint VI Enterprise to maximize the distribution, impact and effectiveness of their locally produced products by providing centralized product storage, distribution and marketing services to meet a wide range of operational and strategic mission requirements. By leveraging Joint VI Enterprise systems, VI professionals can be relieved of many tedious, expensive and time consuming tasks while also ensuring their imagery products are made widely available to support a multitude of DoD communication missions.

DoD and U.S. Government (USG) personnel at every echelon use available imagery and VI products to support their unique mission needs. Since it is impractical and cost-prohibitive to develop separate VI production and distribution capabilities for every DoD organization and

echelon that uses imagery, users rely instead on the Joint VI Enterprise as a common imagery resource for obtaining the visual content needed to support their missions. In this way, the Enterprise provides a valuable service by ensuring critical DoD imagery products from around the world are made easily and quickly available to all users.

Finally, the ability of the Joint VI Enterprise to coordinate imagery requirements and facilitate the collaboration of global imagery production resources helps to minimize and even eliminate duplication of effort, thereby reducing cost and providing VI professional products and services to a much larger group of users. This concept is mutually beneficial to both the users of VI and the VI professionals who acquire and produce visual content.

1.3 CONOPS Overview. The Joint VI CONOPS is a mission-level CONOPS that reinforces VI as a key supporting capability and facilitates the expanded distribution and use of imagery beyond the tactical level into the operational and strategic levels as a strategic military assets for all DoD users.

1.4 Revisions to this Document. CONOPS are living documents and are regularly revised to reflect changes in system architecture, components and uses. This document is also be posted on www.defenseimagery.mil for easy reference and additions as necessary.

2. ENTERPRISE CONCEPT FEATURES, OPERATION, AND DETAIL

2.1 Background, Objectives, Scope. Using proven repeatable processes helps leaders and VI professionals achieve success in meeting the ever increasing demand for timely, quality imagery products. For example, U.S. Central Command (CENTCOM) directs all Public Affairs and Combat Camera (COMCAM) units deployed into their area of responsibility (AOR) to transmit their VI products to one of two Joint VI Enterprise systems; either the Defense Imagery Management Operations Center (DIMOC) or the Defense Video and Imagery Distribution System (DVIDS) hub. The operational goal is for VI professionals from all military Services to use a common set of procedures, software and hardware to move VI products into a Joint VI Enterprise system where it can be processed, widely distributed, archived, and made simultaneously accessible to all DoD imagery users. These two joint VI systems are interlinked so that imagery sent to either system is shared with the other. In FY2009 alone, the DIMOC and DVIDS systems processed and preserved 187,616 still images and 25,680 videos from the CENTCOM AOR. If it were not for the mandated use of the Joint VI Enterprise systems, virtually all of this high-value visual content would be more difficult to access and at risk of being lost when the deployed originating military unit departed the CENTCOM AOR.

Ensuring VI operations are deliberately planned, coordinated, and tracked greatly improves the timeliness and release of relevant, compelling imagery. Joint VI Enterprise capabilities help to coordinate identified requirements across all of DoD and the Joint Force, deconflicting where possible, to ensure the widest possible requirements are met. This collaborative process results in greater fulfillment of strategic and operational requirements by optimizing existing production capabilities through the targeted creation of VI products. Once created, these products can be easily repurposed to meet multiple communication objectives.

HAITI - Operation Unified Response (OUR). The effectiveness of the Joint VI Enterprise approach is also true for large-scale contingency operations such as Operation Unified Response (OUR), which responded to the Haiti earthquake from January through March 2010. Within hours of the earthquake on Jan. 12th, 2010, U.S. Southern Command (SOUTHCOM) planners contacted the DIMOC to request assistance in planning, coordinating, tracking, and processing visual documentation of the U.S. Government (USG) humanitarian response. The DIMOC immediately began tracking and communicating with all the VI professionals covering Joint Task Force - JTF Haiti; whether on the ground, afloat, or cycling in and out of country with relief supply flights. SOUTHCOM further directed that all imagery acquired during Operation Unified Response (OUR) be transmitted to the DIMOC for processing, distribution and archiving.

By the seventh day of the operation, there were 55 VI professionals in dozens of locations supporting JTF-Haiti. Through close coordination between SOUTHCOM, JTF-Haiti, the supporting components, and the DIMOC, these forces effectively responded to numerous strategic DoD and U.S. Department of State (DOS) communication requirements by producing high quality content targeted to support key themes and messages. By leveraging the Joint VI Enterprise, SOUTHCOM maximized the effectiveness of the deployed VI professional forces by using common systems to both disseminate requirements and to expedite imagery meeting those requirements. In the eight weeks following the Haiti earthquake, the DIMOC processed and preserved 7,421 still images and 163 videos from the SOUTHCOM AOR.

A critical need for timely compelling visual content across a wide spectrum of DoD communication channels was identified within the 2006 Quadrennial Defense Review on Strategic Communication. To better operationalize joint support for this requirement, the Assistant Secretary of Defense for Public Affairs (ASD/PA) directed the consolidation of three legacy Joint VI Enterprise capabilities (including the previous central reception activity, the Joint Combat Camera Center (JCCC)) into a new, more operationally-focused organization in 2007: the DIMOC. The DIMOC was aligned as the joint VI program of record for providing enterprise VI capabilities within the OASD(PA) field activity, the Defense Media Activity (DMA). In addition to the existing joint VI capabilities of imagery management, archiving and distribution, the OASD(PA) directed DIMOC to develop expanded imagery operations and coordination capabilities and a centralized customer service/relationship management capability providing a full suite of global enterprise-enabling VI services to DoD.

2.2 Improvements Over Previous System. Prior to the establishment of the DIMOC and its subsequent integration with DMA and DVIDS, imagery management and distribution within DoD was often ad hoc or reliant on a single narrowly scoped delivery channel. Standards were inconsistent and unclear, and the process used was frequently situation-specific based on the tactical requirements of the imagery producers rather than the users' missions and objectives. As previously noted, some legacy joint VI systems existed for several decades to distribute and preserve imagery. However, these were inefficient to meet today's fast-paced operational mission due to a long-established DoD and Service imagery life cycle processes based on physical records (tapes and film), rather than full digital records. The previous systems supported timely initial distribution of most visual products, but did not provide a common set of processes or sharing of all imagery as a strategic asset. The legacy life cycle process could result in a year or more delay for imagery records to be made available through the central archiving system.

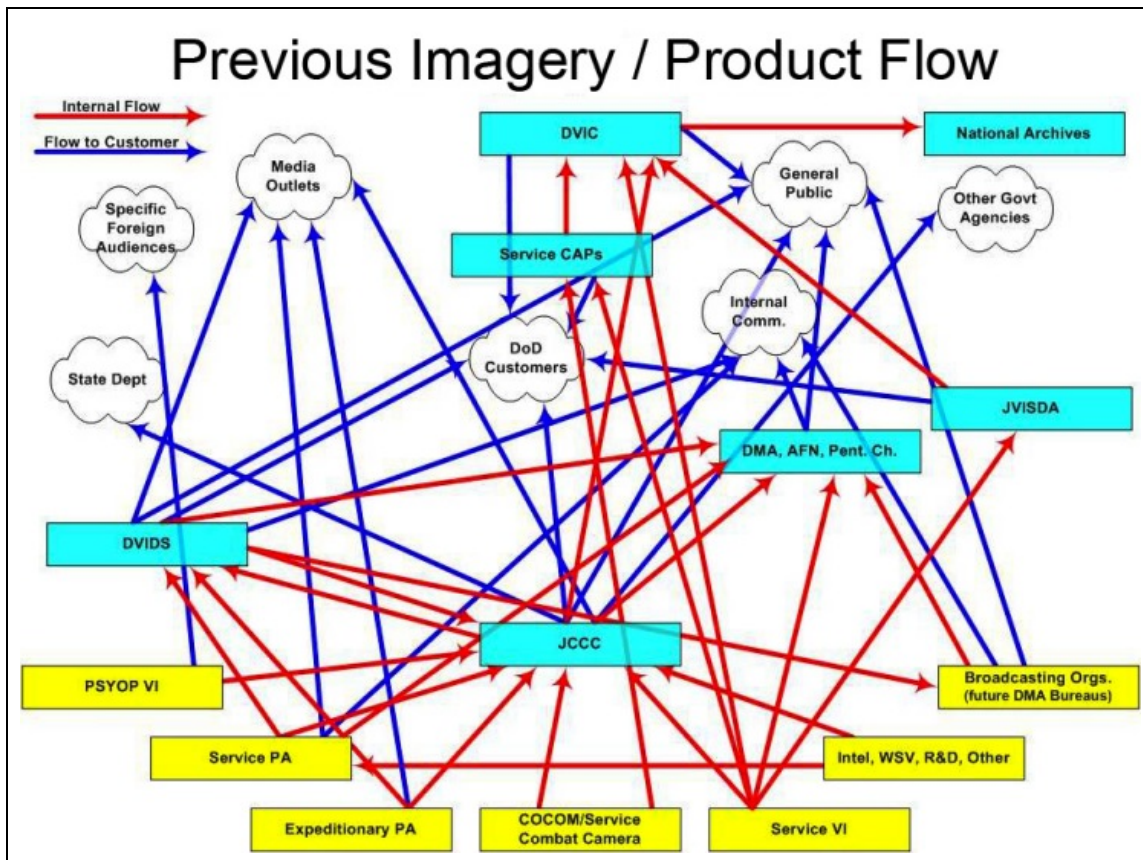


Figure 1. PREVIOUS DoD Visual Information Product Flow

KEY: In Figure 1 yellow text boxes represent the VI professionals' capabilities, blue text boxes represent the joint VI systems, cloud shapes represent the target audiences and the arrows represent the flow of visual content. A brief example based on actual events follows, which should help explain much of the imagery flow depicted in Figure 1.

Wildfire Season – Southern California (July 2008). EXAMPLE USING PREVIOUS SYSTEM: During a particularly bad wildfire season in Southern California, the governor called for federal assistance through the President. The President authorized DoD for support and the Secretary of Defense directed NORTHCOM to support the action. NORTHCOM established a Joint Task Force (JTF) to provide needed logistical and aviation support along with a robust Strategic Communication capability. Taskings were often implemented at different levels and different times. The State's response included the National Guard and the Emergency Management Assistance Compact (EMAC), both operating independently. The Federal response via NORTHCOM included mobilized and in-garrison active and reserve forces, including Combat Camera, public affairs and military broadcasters. The NORTHCOM communication team discovered the Training Tactics and Procedures (TTPs) for imagery distribution and management varied widely between all these imagery-producing units. As a result, obtaining timely and compelling imagery to support strategic themes and messages was problematic and some opportunities were lost. If NORTHCOM had been able to establish standard practices, policies and procedures for handling of imagery, (i.e. to send to DIMOC), it would have resolved many of the challenges experienced regarding the sharing of imagery. Multiple agencies and

organizations were working together with little or no command and control, resulting in the inability to employ imagery strategically.

To support the NORTHCOM theme of the integrated ability to provide effective Defense Support to Civil Authorities (DSCA). The following VI professional capabilities were deployed:

1. A Mobile Public Affairs Detachment (MPAD) from the Army National Guard [shown as Expeditionary PA in Figure 1].
2. Aerial and ground Combat Camera teams from the Air Force Reserve [shown as COCOM/Service Combat Camera in Figure 1].
3. One in-garrison Marine Combat Camera team to document Marine Corps firefighters responding to wildfires on Camp Pendleton [shown as Service VI in Figure 1].
4. One in-garrison Air Force Public Affairs documentation team to document Air Force firefighters responding to wildfires on Vandenberg AFB [shown as Service PA in Figure 1].
5. One video journalism team from the AFN Riverside California Broadcast Center to produce news reports for internal information distribution through AFN and Pentagon Channel [shown as Broadcasting Orgs in Figure 1].

NORTHCOM also noted the lack of a standardized OPCON arrangement complicated the operation, management of VI resources, and the ultimate distribution and use of imagery. The Combat Camera teams transmitted their still and video products to the Joint Combat Camera Center (JCCC), which was later consolidated into the DIMOC, for immediate distribution to internal DoD users, media outlets (via PA channels), other government agencies (U.S. Forest Service & State of California) and the general public. However, the deployed Army Guard MPAD transmitted PA stories and video to DVIDS for distribution to their home station while the AFN video journalism team sent edited video news reports directly to AFN and the Pentagon Channel for broadcast.

Once the wildfire emergency ended and the JTF stood down, all the deployed forces returned home, while the California in-garrison PA and VI forces returned to normal operations. Under the previous imagery process depicted in Figure 1, only then would the various VI professionals consider archiving the imagery acquired during the wildfires. Each separate unit would send selected imagery to their unique military Service Component Accessioning Point [CAP in Figure 1]. Each CAP would then make a determination if their military Service wanted to retain each image. Those selected images would be shipped to the Defense Visual Information Center [DVIC in Figure 1] where they would be processed and finally added to the official DoD imagery collection. The (JCCC) DIMOC would also send imagery (much of it duplicative of what the CAPs eventually sent) to the DVIC for possible archiving. Once all this visual material finally became available at the DVIC, other organizations could access and incorporate imagery into other products such as training productions. Finally, when all these visual records are old enough to be of little use to the DoD, the DVIC would offer them to the National Archives and Records Administration (NARA) to become a permanent Federal record.

This previous process was unnecessarily duplicative in that the same imagery was screened, selected and reviewed by up to four different organizations with overlapping functions. Further, deployed- and garrison-VI professional teams were sometimes required to transmit the same imagery to two or three different joint VI systems.

The following are key take aways from this example:

- If all military forces (e.g. USNORTHCOM JTF, deployed Active duty, Reserve, National Guard, and in-garrison forces) had followed a common process for "processing" imagery, all imagery users would have had much quicker access to more material.
- Development of the Joint VI Enterprise with common tactics, techniques, and procedures results in more efficient, timely, and effective operations with all imagery users receiving more material, much quicker than in the past.

To maximize the accessibility, usefulness and distribution of VI materials, the Joint Visual Information Enterprise framework also provides a imagery operations and coordination center and a customer relationship management system to coordinate the employment of VI professionals and in-field imagery acquisition, track customer requirements, and provide metrics on all customer requests. With the establishment of the DIMOC within the Defense Media Activity all these requirements have now being implemented. Imagery and media products can now be acquired according to identified requirements, transmitted to one of the joint VI systems, processed, widely shared, archived, and distributed in a matter of minutes or hours—not months or years.

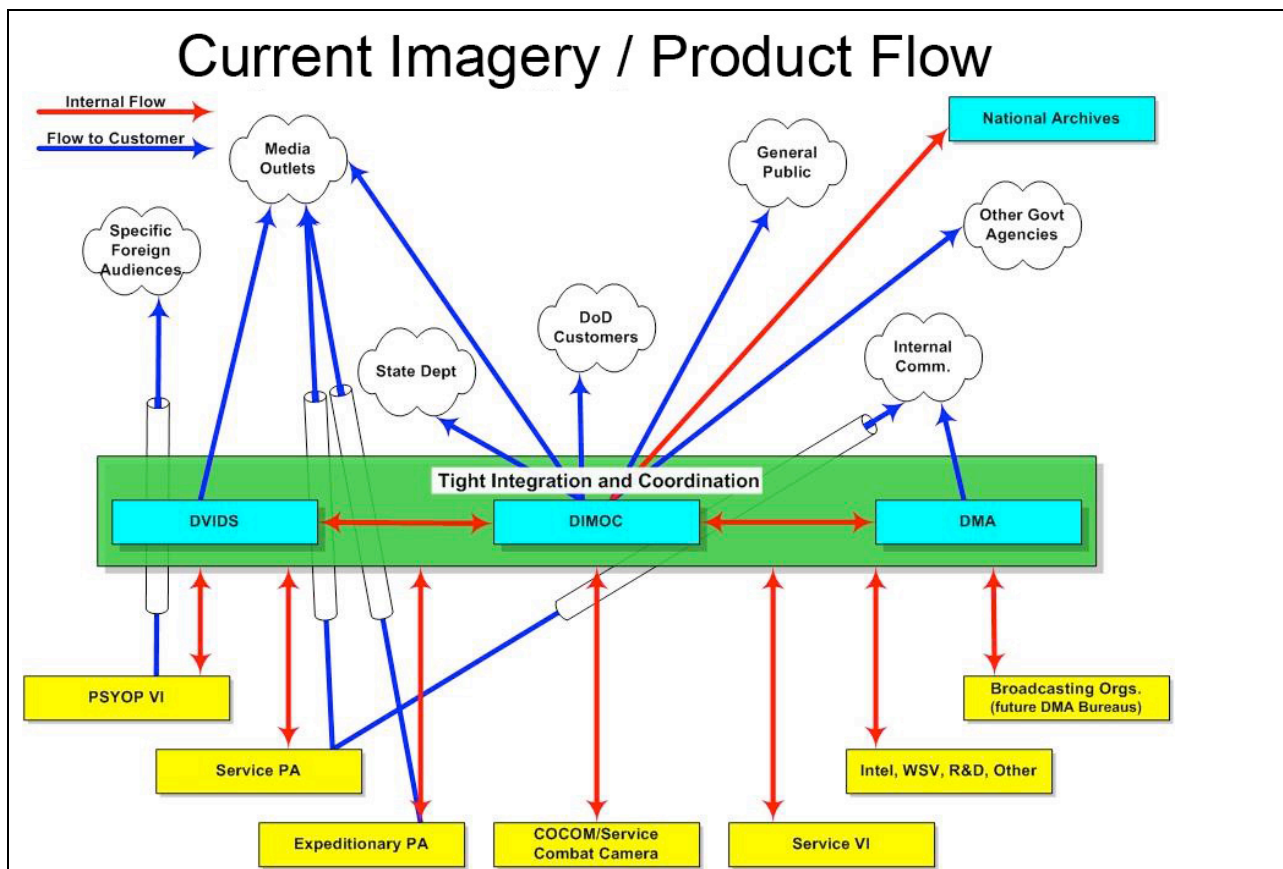


Figure 2. Current VI Enterprise Imagery Product Flow
As implemented under the Joint VI CONOPS.

2.3 Summary of Capabilities. The following systems make up the Joint VI Enterprise framework. (See Figure 4 and Appendix B – Characteristics of the Joint VI Enterprise).

2.3.1 The Defense Media Activity (DMA) reports to the ASD/PA and is the official joint PA and VI Program of Record. The DMA operates many joint internal and external communication outlets/channels including the American Forces Network, the Pentagon Channel, Stars and Stripes newspaper, the Department's Public Web and several enabling communications capabilities, including the Television-Audio Support Activity and the Defense Visual Information Directorate.

2.3.2 The Defense Visual Information (DVI) is a principle operating component of the DMA under the OASD/PA. (See the organization wiring diagram at Appendix A) DVI establishes policy and procedures to ensure imagery is made easily and quickly available to support a multitude of DoD and Joint missions while also ensuring the American people and the world have a visual record of U.S. military operations in support of our national and international interests. DVI is also responsible for overseeing joint VI services provided by the DIMOC. DVI is the military proponent for VI, policy-making, and oversight of VI programs. DVI helps to ensure DIMOC provides timely product transport, distribution, coordination, and preservation of high quality DoD imagery.

The joint VI proponent role of DVI is critical to the success of the Joint VI Enterprise. VI and COMCAM must be sufficiently addressed in joint doctrine to provide for the effective use of imagery during all phases of military operations. VI and COMCAM are included in JP 3-61 and JP 3-13, in which COMCAM is included as a supporting capability to information operations. DVI is working to incorporate VI wherever appropriate in doctrine for which visual content is either generated or used. Policy guidance must be broadened to include the Joint Operational Planning and Execution System (JOPES) methodology for the deployment of VI professionals in addition to current COMCAM Unit Type Codes.

2.3.3 The Defense Imagery Management Operations Center (DIMOC) is subordinate to DVI and provides an enabling architecture to (1) plan for, synchronize and integrate DoD-VI professional capabilities, (2) centrally manage and distribute current and historic VI, and (3) provide VI customer service and order fulfillment services. The DIMOC operates a "one-stop-shop" for both VI producers and users, satisfying as many requirements as possible. The DIMOC also provides a permanent central location for imagery and digitization of VI physical assets such as tapes and film. The DIMOC employs a secure (handling unclassified and classified imagery) 16 hours per day, five days per week (16/5) imagery operation and coordination center (IOCC) to facilitate operational planning, timely imagery acquisition and to integrate VI activities across multiple echelons. The DIMOC can temporarily surge to 24/7 operations to meet the worldwide OPSTEMPO.

2.3.4 The Defense Video & Imagery Distribution System (DVIDS) DVIDS is an Army contract first established in 2003 and managed by Third Army within the authority of a USCENTCOM fragmentation order (FRAGO) to provide enterprise VI services supporting USCENTCOM operations. Since then, DVIDS has been actively marketed to DoD users and media outlets, providing services and support to a much broader range of operations. It provides uplink, transmission, reception, distribution, marketing to news services, and usage tracking in support of DoD. It can also provide a

live video feed from the field. In addition, DVIDS provides a contracted maintenance and oversight capability for more than 200 portable satellite uplink terminals used to send imagery to the DVIDS hub for processing/delivery.

2.3.5 VI Planners are key VI subject matter experts who conduct operational planning to identify, coordinate and communicate VI requirements/resources for the COCOMS. The VI planners ensure VI professional capabilities are requested to fulfill the high priority imagery requirements for the joint warfighter. The value and importance of the VI planner is evidenced by the staffing of VI planners in six COCOMS. The VI planners participate in regular operational teleconference calls with DVI and DIMOC, representing their COCOM requirements and issues to the Joint Combat Camera Working Group.

2.3.6 Combat Camera (COMCAM) is a Joint Operation Planning and Execution System (JOPES) deployable, VI professional force capable of operating in all stages of military operations and conditions. COMCAM is a force multiplier and a specialized imagery capability allocated through the Global Force Management Allocation Process (GFMAP). Each military Service has dedicated COMCAM units which receive specialized training (advanced field and weapons training as well as aerial and underwater qualifications) to effectively integrate with any combat unit in austere and hostile environments.

2.3.7 Other Visual Communication Capabilities. Within the military Services, COCOMS, and the DMA, there are many PA, information operations (IO) and VI organizations with mobile and stationary teams capable of creating compelling visual content. Included among these capabilities are units like American Forces News (AFN) detachments, Mobile Public Affairs Detachments (MPADs), garrison VI shops, garrison PA shops, the Navy Public Affairs Support elements (NPASE), the American Forces Press Service, and photographers assigned to senior leaders such as the Secretary of Defense's personal photographer. In general, these capabilities deploy to provide specific coverage and media products as part of a military operation. However, their high quality visual content can easily be reused for other purposes when it is made available through Joint VI Enterprise systems.

2.4 Disadvantages, Limitations & Challenges. Perhaps the biggest challenge for fully establishing a Joint VI Enterprise is developing the reliability and trust necessary to draw the support of the military Services, JCS, and COCOMS. To moderate any risk of becoming a single point of failure, redundant and Continuity of Operation Plan (COOP) failover systems must be established to support a 99% availability rate. While the military Services and other organizations are often inclined to keep the imagery flow inside their organization, the Joint VI Enterprise is intended to ultimately lead to standardized processes, reduction of unnecessary duplication of effort and eliminating the practice of deployed military forces sending their products to their respective Service imagery portal instead of the Joint VI system as specified by the COCOM or JTF commander.

2.4.1 Timeliness and Speed. Quick imagery turnaround is often critical to the success of the mission. The Joint VI Enterprise assists in meeting the timeliness requirements by improving the planning, clearance, coordination and transmission processes. However, since the operational commander on the ground has release

authority and not the Joint VI Enterprise, the release process is often one of the primary challenges in the timely transmission of imagery. Effective VI planning and coordination is the key to achieve the commander's intent with compelling imagery. (See Haiti Case Study Appendix D).

DVI and the DIMOC can help expedite imagery movement by assisting commands and leadership address VI release policies, limitations of the internal communication system and transmission capabilities and equipment, all of which can negatively impact the timeliness and rapid delivery of the imagery produced. VI plans should include the maximum and minimum required bandwidth, computer hardware/software and the specific infrastructure needed to increase the timeliness and effectiveness of VI. (See VI Planning Appendix E)

2.4.2 Branding. Internal DoD users of imagery, especially in the COCOMS and the Services, are often unaware of how the Joint VI Enterprise can support their missions. To increase participation and use of VI, it is important to establish an appropriate level of understanding and recognition of those organizations, names and missions.

2.4.3 Personnel. Because of the wide range of visual communication capabilities, commanders should coordinate through their VI planners to clearly identify VI professionals with capability requirements in specific terms so that the appropriate visual communication professional can fulfill the mission. COMCAM is a specialized, sought-after VI capability which is not adequately resourced to respond to the increasing numbers of VI requests. Other VI professional resources should be considered when entering the planning phase of operations. DVI and DIMOC, in coordination with COCOM and Service VI Planners, are working to locate and track the use of VI professionals as part of the operations and coordination function. A Global Force Management Allocation Process (GFMAP) approach for VI professional forces other than COMCAM would help ensure more efficient use of existing VI and non-VI resources in the various AORs. Prioritizing requirements will also help to maximize the use of limited VI resources.

The Army and Air Force have VI Universal Type Codes (UTCs) that the COCOMS are also able to use in Request for Forces (RFFs) to request standard VI professional packages and capabilities for requirements that do not require the unique capabilities COMCAM forces possess. Some of the military Services have recently merged their PA and VI career fields. Individuals filling key VI jobs in the future will need applied skill sets and experience in VI planning, equipment, processes and management. Due to the wide range of VI professional capabilities, commanders should coordinate through their VI planners to clearly identify VI capability requirements in specific terms to ensure the operational mission can be resourced appropriately.

2.4.4 Misperceptions of VI professionals and use of imagery. Many warfighters erroneously perceive that photography of sensitive or classified events will compromise operations security and will be improperly released to the press. As a result, COMCAM and VI professionals have sometimes been denied access to key events. Without visual coverage, the Department may experience the loss of an important capability that could have been used to counter enemy propaganda, inform our

congressional leaders, serve as legal evidence, train our personnel, provide situational awareness and provide our military leadership with current visuals to support operational decisions.

The Joint VI Enterprise can help facilitate understanding and collaboration between the different organizations needing imagery. Exercise scenarios that address sensitive, classified situations involving imagery can help inform and educate operators and leadership. DVI and DIMOC are working to address this challenge, participating in outreach through conferences, class presentations, and working groups.

2.4.5 Training Gaps. All DoD personnel trained to operate cameras and VI production equipment should also be trained on the use of Joint VI Enterprise systems and how to leverage them for best effect. Training gaps related to standard imagery metadata, prohibited imagery alteration and planning for VI operations are addressed at the Defense Information School (DINFOS), where all DoD PAOs and VI professionals receive training. Additionally, the strategic use of compelling visual content through Joint VI systems is also addressed at several Senior Level, Intermediate Level, and Joint Professional Military Education (SLME/ILME/JPME) institutions. DVI is also working with DINFOS, the Joint Public Affairs Support Element (JPASE), the COCOMS, and the Services to capture and incorporate VI case studies and best practices into training.

Because individuals filling future key VI jobs will need additional skill sets and experience, specific training must address VI planning, requirements, guidance and VI management, including guidance and processes for requesting VI resources. (See Appendix E, VI Planning)

2.4.6 Security Clearances. To the maximum extent possible, VI professionals must have the appropriate level of security clearance required to do their job while deployed and in garrison. COMCAM personnel require a minimum of a secret security clearance. VI planner positions usually require a Top Secret (TS) clearance. Whenever higher security clearance levels will be required for an operation (such as TS-SCI) the requirement for properly cleared COMCAM and VI professionals must be addressed prior to deployment during the planning stages and must also be referenced as a requirement in the RFF.

For example: Special Operations Forces (SOF) often request COMCAM operations support at the TS-SCI level. COMCAM personnel must arrive with the required TS clearance and training to participate in the actual operation. Pre-planning helps, but commands must also establish specific requirements in their RFF.

2.5 Modes of Operation. Within the Joint VI Enterprise, DMA is a robust military media organization operating an extensive portfolio of content creation and delivery channels around the world. U.S. Joint Enabling Capabilities Command (JECC) and US Pacific Command (USPACOM) are the primary COMCAM force providers. These commands retain control of all COMCAM forces until operationally deployed under a separate JFC or JTF commander. Operational control (OPCON) for the Joint Combat Camera Team (JCCT) typically is retained at the joint force/JTF level. Tactical control (TACON) for COMCAM forces is generally provided by the locally supported tactical commander. Components may retain OPCON of their assigned COMCAM forces not attached or OPCON to the JCCT. (*See References: COMCAM MTPP*)

Within each COCOM, JTF, or AOR, the deployed visual communication capabilities provide compelling visual content to support strategic themes and messages as planned by VI and PA planners. The military Services organize their VI professionals as best suits their needs within COMCAM, VI, Information Operations (IO)/Military Information Support Operations (MISO) and PA offices. The military Services also provide VI expertise and VI planners for the COCOM S.

As imagery demand increases, VI expertise must be leveraged whenever and wherever possible. The Joint VI Enterprise provides VI and COMCAM expertise to maximize the effectiveness of all VI professional operations. DIMOC does this by providing a team of VI experts operating on an extended schedule, to enable deployed and in-garrison VI professionals to become a more strategic asset, available for all users. This includes USG users outside the DoD with requirements for visual content of U.S. operations to support their communication message. DoD's substantial imagery-producing capability can be effectively shared with other agencies when carefully planned and executed. For example, DOS does not usually have photographers on staff and often relies on DoD imagery for products depicting humanitarian relief to support Public Diplomacy. (See DODI 5040.02)

The Joint VI Enterprise provides more robust support across DoD. A PA and VI assessment of imagery operations in Iraq in 2007 identified a critical requirement for a imagery planning and management capability at the Multi-National Forces – Iraq (MNF-I) level. This recommendation was partially implemented in MNF-I and resulted in significantly improved imagery support for strategic communication messaging. While this concept proved promising, it has yet to be fully resourced in DoD or the COCOMS. The notional term for the conceptual planning and management capability is the Joint Imagery Management Operations Cell (JIMOC).

2.5.1 The Joint Imagery Management and Operations Cell (JIMOC) is an expeditionary element providing Joint Task Force commanders with critical imagery management and operations support within the AOR (*see Figure 3 below*). Under this construct, the JIMOC would operate as a "mini-deployed DIMOC" to provide forward-deployed imagery oversight, synchronization, reception, management and delivery for the JTF commander and his staff. A recommendation (from the Iraq Multi National Forces assessment in 2007) was made to re-designate the current COCOM Combat Camera Planners as Joint Imagery Management & Operations (VI) Planners (JIMOP) with authorities to facilitate the stand up and oversight of JTF level Joint Imagery Management & Operations Cells (JIMOC). The name has since been shortened to Visual Information planners. The intent for the JIMOC is to tightly integrate with the DIMOC to ensure imagery from current operations is also moved to CONUS and made widely available to operational and strategic users, as well as archived for historical use.

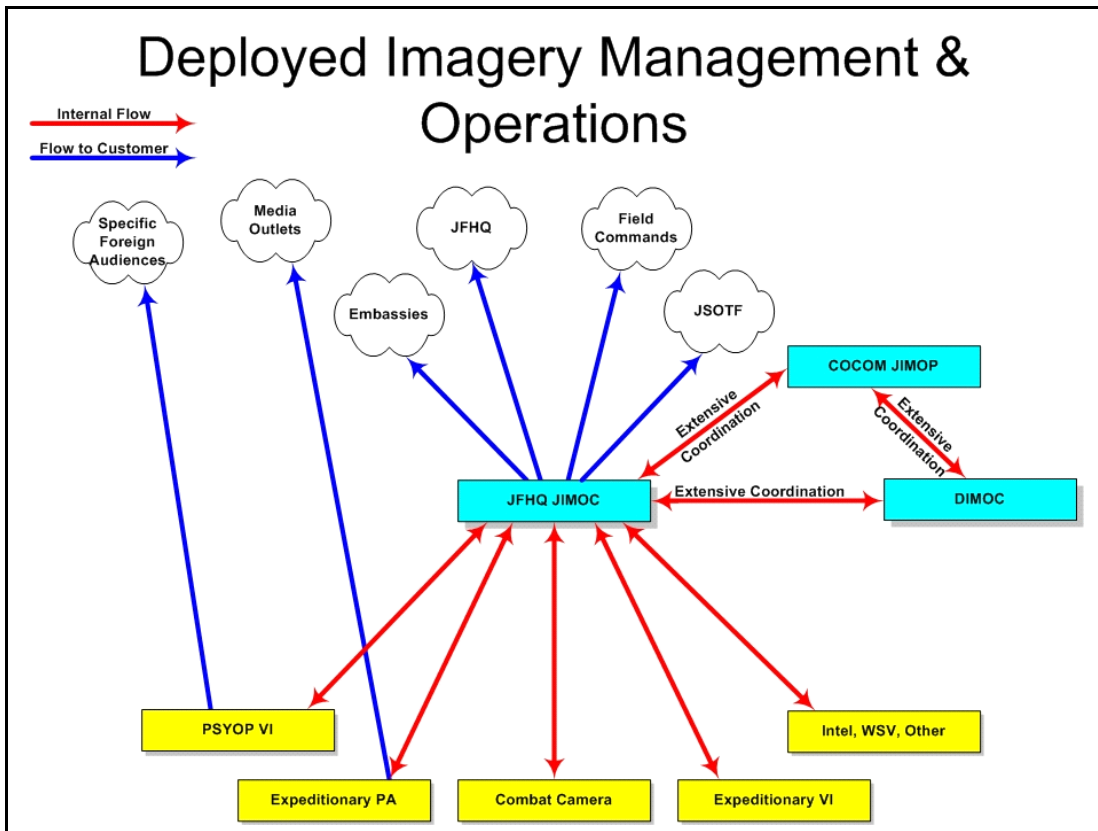


Figure 3. Joint Imagery Management and Operations Cell (JIMOC)

The JIMOC operational capability concept is more than a simple imagery management capability. It must also provide VI operations, planning & coordination capabilities. Technology clearly facilitates getting imagery out from any echelon within the AOR or JTF. However, the operational questions the JIMOC can address are:

- (1) Is the right imagery getting acquired and sent out?
- (2) Do senior leaders and other spokespersons/operators have access to compelling visual content to support their themes and messages?

While acquired imagery must ultimately be sent and stored at either DIMOC or DVIDS, the real strategic communicators with operational imagery requirements are the commanders who are in the fight. The JIMOC construct is more responsive to the JTF's immediate needs and eliminates the cumbersome process of making commanders reach back to stateside systems to get their own imagery. Until the JIMOC construct is validated and properly resourced, the closest suite of capabilities available today is a collaboration between the COCOM VI planner and a deployed COMCAM Imagery Management Team. *(See References: COMCAM MTTP)*

The JIMOC should be a deployable package similar to the Joint Public Affairs Support Element, which sends in quick-response senior PA teams to set up PA capabilities at the beginning of a JTF. Cohesive and experienced JIMOC teams should be among the early responders. These trained professionals are able to focus on the myriad of visual content produced by today's military operations – doing so on behalf of the Joint Force commander -- to ensure imagery is effectively targeted and coordinated (just as a JTF coordinates weapon fires). Appendix F is an example of this concept. The operational scenario summarizes the NORTHCOM Armed Forces Inaugural Committee's (AFIC) use of the JIMOC construct during coverage of the January 2009 Presidential inauguration. The DIMOC provided AFIC with a consistent imagery flow for the immediate VI requirements, as well as for the long-term archival historical requirements.

2.6 User Classes. The need for compelling visual content crosses many lines of operation in every command, resulting in a large number of customers or users. The user class defines and lists the groups who are the Joint VI Enterprise customers. (*See Appendix C User List*)

2.6.1 VI Users (Customers). The Joint VI Enterprise has users and contributors who sometimes fall within both categories. (*See Appendix C*) The two distinct but overlapping categories include those organizations that use the imagery and the imagery producers – VI professionals who photograph, videotape, and/or film events, people, equipment or other items to tell a story or document an event. Identifying the Joint VI Enterprise users and contributors helps to set achievable objectives and assess progress, as well as providing a feedback resource.

Through the Joint VI Enterprise, the people creating imagery for a single purpose can expand the imagery's usability by making it widely available in a secure way. The Joint VI Enterprise enables multiple uses, including the repurposing of content to create news stories and communication products.

2.7 Alternatives and Trade-offs Considered. An obvious alternative to a Joint VI Enterprise is to contract out for all the VI professional services or to buy DoD imagery from commercial businesses (such as the Associated Press). However, both alternatives are cost prohibitive and cannot meet the DoD communication needs. One significant benefit of using DoD professionals to produce imagery is that the Department owns all the intellectual property rights and maintain unlimited distribution and duplication rights for any mission requirement at no additional cost.

Another possible alternative is to establish separate production capabilities for every major imagery-using mission—tactical, operational, and/or strategic. This is also clearly cost prohibitive and would result in redundant, underutilized capabilities. It also carries the threat of non-standardization and loss of interoperability during joint military operations. Another indirect cost of using this approach is that imagery users would be forced to search across multiple sources and locations to find the right image to support their communication message.

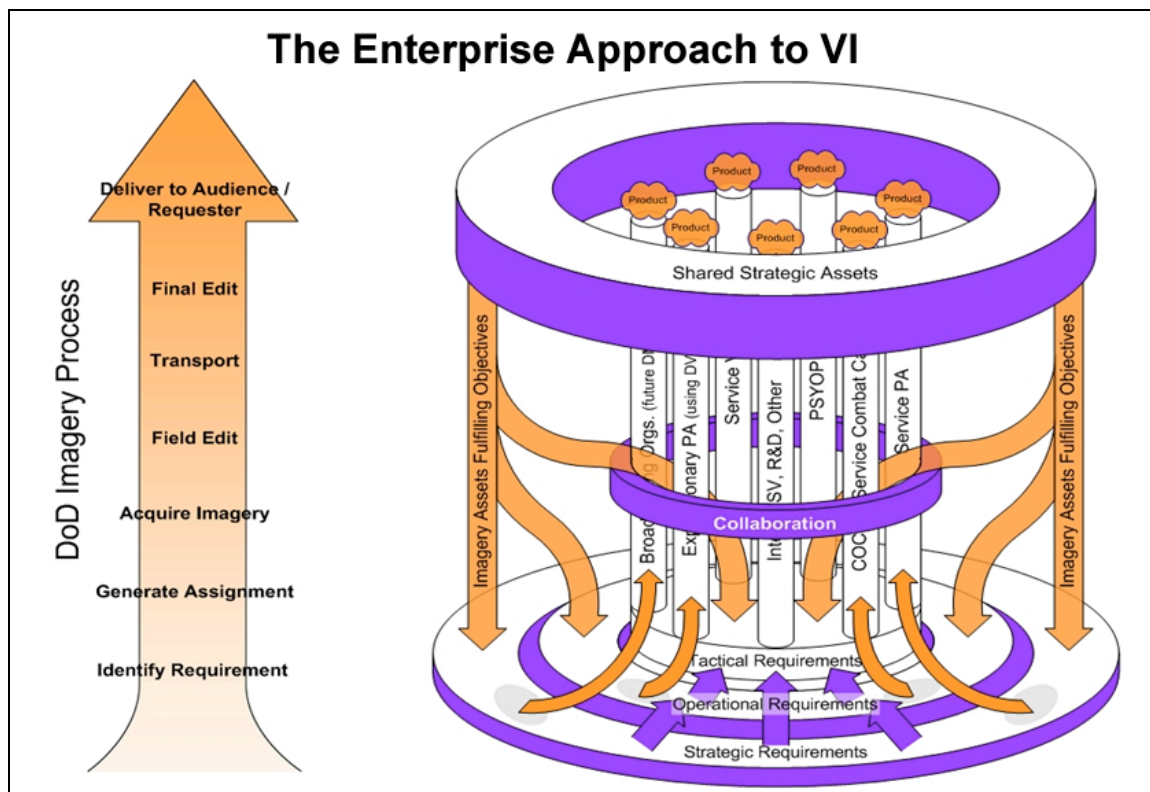


Figure 4. The Joint VI Enterprise and Imagery Process

2.8 OPCON, Description and Context of Current Situation. The Joint VI Enterprise framework is designed to enhance the long-established DoD imagery processes of turning commander/customer requirements into VI products delivered to the requester. As shown in Figure 4, the Joint VI Enterprise framework adds the following capabilities (highlighted in purple) to the traditional DoD imagery process:

1. Standardized means to collect strategic and operational requirements and direct them into the normal tactical execution of the various VI professional domains.
2. Provide situational awareness, collaboration, and coordination between the VI professional domains to limit duplication of effort and to maximize the effectiveness of deployed assets.
3. A common imagery processing and management system which enables the timely and widest sharing of imagery and VI products across the DoD and U.S. government.

For example, a DoD or Department of State (DOS) requirement for visual content showing international cooperation in military medical operations in Ethiopia can be collected by the DIMOC and sent through appropriate command channels to JTF-Horn of Africa for possible acquisition by VI professionals who are already deployed in the area.

The middle “collaboration” ring denotes the function DIMOC performs in coordinating and synchronizing the various VI requirements through the VI planners, COMCAM, and VI

professionals in the field. In the example given above, this collaboration effectively eliminates the need to send additional teams from the United States to document the medical operations in Ethiopia. The collection of imagery requirements and global collaboration is facilitated by the DIMOC operations and coordination capability which shares information, tracks VI professionals and links their imagery producers directly to the requesters through an on-line asset management system or through the www.DefenseImagery.mil website.

Important Note: *The Joint VI Enterprise allows for the existing tactical imagery domains (center columns) to continue operating under the OPCON/TACON of their current functional areas to satisfy their normal requirements. However, the framework enables these capabilities to also receive strategic and operational requirements and thereby produce visual content which meets the needs of the broadest number of users.*

The top purple circle refers to the DIMOC's enterprise online VI product repository which makes imagery widely available across all domains and provides imagery to customers at one location (www.DefenseImagery.mil). The architecture of the shared online repository allows for direct, secure and remote management of the visual content by VI professionals of their own content while making it simultaneously available to the COCOMS, military Services and all users.

2.9 Constraints and Assumptions

2.9.1 Constraints (*External limits - restrictions on implementation of the Joint VI Enterprise*) The Joint VI Enterprise framework tries to address what is arguably the largest limit on imagery: there will never be enough COMCAM units or VI professionals to fulfill all the requirements and missions generated across the DoD. Every command needs to find a way to meet their mission requirements. By using standard joint enterprise processes to support these requirements, the DoD gains a significantly broader availability of imagery to meet the needs of a larger customer base. The goal is to ensure the available VI professional forces are used in the most effective and efficient way possible, while also ensuring all imagery is preserved and made widely available.

2.9.2 Assumptions (*Internally imposed limitations*) VI professionals are often constrained on how they can distribute imagery. The Joint VI Enterprise assumes plans for military operations will include guidance on how imagery will be reviewed, cleared for release and transmitted. However, this is not always the case and should be a point of focus for all VI and PA planners. An inadequate clearance process will slow down the release of imagery. Without pre-planning, transmission of imagery is often hindered by communication bandwidth, infrastructure, and available equipment or even trained personnel to operate and maintain the equipment. The DIMOC provides a centralized ability to assist in developing imagery transmission plans and facilitating actual transmission as appropriate. The DIMOC also has the ability to securely handle uncleared and classified imagery up to the secret level.

2.9.3 Speed Matters. VI professionals must provide timely, quality imagery on a daily basis for multiple uses. The Joint VI Enterprise improves the timely release of relevant, compelling imagery by helping to ensure requirements are deliberately planned, coordinated, and tracked. The more the Joint VI Enterprise is leveraged to streamline and

improve the imagery process, the better the access can be for the users, especially the Services and the Joint Force.

2.10 Support Environment

2.10.1 Training for VI Professionals. To achieve maximum effectiveness with the Joint VI Enterprise framework, VI professionals should receive initial and ongoing training in leveraging the various VI enterprise systems, including VI planning, imagery clearance, DIMOC, and DVIDS. As a minimum, training should take place in the following ways:

1. Military enlisted personnel receiving qualification training in basic still photography and basic videography through the Defense Information School (DINFOS) should be trained in techniques for transmitting imagery to DIMOC and DVIDS. Further, the basic courses should use the central online Defense Asset Management System (DAMS) to manage military student visual content and to provide written instructor feedback. In this way, students and faculty learn to use the VI enterprise systems as a normal part of the DoD imagery process.
2. All military photo, video, broadcaster, and journalism students attending courses at DINFOS should be trained in the skill of creating visual content for various targeted effects. In addition to learning the normal tasks of visual story-telling, students should understand concepts of strategic and operational communication and how their content can either reinforce or undermine a JTF commander's themes and messages. Students should be able to describe and create content about the same subject to support different communication themes such as public diplomacy, internal information, PA and IO.
3. Intermediate and advanced VI and PA courses at DINFOS should teach leaders how to plan for and manage VI professionals to achieve the widest completion of requirements and how to leverage the coordinating capabilities of DIMOC to support their commander's themes and messages.
4. Mobile training teams should provide instruction to deployed and preparing-to-deploy units on imagery metadata standards, how to use hardware and software systems, and how to interface their systems with DIMOC and DVIDS.
5. Online certification training should be provided by DINFOS on imagery review, clearance and release procedures to ensure individuals who are granted this authority make decisions about release in accordance with policy and best practices.

New equipment training (NET) by industry is the most common training that allows for the latest Technology Insertion as a result of Life Cycle Replacement.

An example of available VI-related online training and guidance provided to the VI community is the DoD Captioning Style Guide at <http://www.defenseimagery.mil/learning.html>

Training increases awareness of the Joint VI Enterprise and promotes more effective use of VI assets. VI trainers at DINFOS and at the Senior and Intermediate Level Military Education institutions should incorporate the latest changes in tactics and procedures to stay relevant and provide the best value. In addition, DVI and DIMOC should regularly provide in-depth presentations at DINFOS, other schools, and military conferences to share how the Joint VI Enterprise can support the JTF commander's communication efforts. Finally, DVI and DIMOC can also provide training and assistance in drafting VI requirements, imagery annexes, OPORDS, RFFs and other imagery planning as needed.

2.11 Planned Enhancements/Improvements. The following enhancements are already in the planning and implementation phases:

2.11.1 Defense Asset Management System (DAMS) – In 2008, the DVI office launched spiral development of the enterprise-level Defense Asset Management System (DAMS), operated and managed by the DIMOC. The purpose of DAMS is to enable the distributed processing, management and delivery of VI content.

The first spiral of DAMS included still imagery and now contains more than 1,200,000 images. The secure and CAC-enabled architecture of DAMS was designed to enable commands anywhere in the world to manage their own content on the system. This concept proved effective in January 2009 when the Armed Forces Inaugural Committee (AFIC) (see Appendix D) used DAMS to process and deliver more than 2,200 images of the presidential inauguration. DAMS provides a common system with standard processes for handling still images, which is now used by DMA, the Army, Navy, Marine Corps and Air Force to process and archive imagery. In FY09, customers downloaded more than 14 million high-resolution images from DAMS.

The second phase of DAMS (spiral two) will add the capability to view, remotely manage and distribute full motion video. Full DAMS video capability is nearing completion and is similar to the current still image architecture that supports a distributed network of editors, content managers and delivery mechanisms to meet customer requirements. Future spirals of the DAMS will enable many other types of media and will become the online record center for virtually all DMA products by 2012.

2.11.2 Customer Response. DIMOC is enhancing responsiveness and integration with customer requirements by adding around-the-clock capability to process imagery and respond to customer requests. This capability is especially useful to COCOMS in different time zones and other organizations operating around the globe. DIMOC will be in constant contact with the COCOMS and the Services to track and fulfill operational imagery and VI product requirements. This capability includes full operations and coordination as well as imagery processing and delivery around the clock.

2.11.3 Joint VI Website. In April 2008, the DVI directorate (now part of DMA) increased customer access and understanding of VI products and services by combining five separate websites into a single joint VI website, defenseimagery.mil. Previously, customers were forced to use different websites for different VI products. They were often forced to place orders for multiple types of products in separate requests via separate phone calls or web-based forms that were different for every type of VI

product. The website provides a common federated search engine that produces search results of all types of products. Customers are able to place all desired VI products into a single online shopping cart and then place a single order. If customers cannot find the required imagery, they can request assistance via the customer service contact link.

2.11.4 Training. DVI is working with JPASE, the COCOMS, and other DoD leadership to integrate VI planning concepts into leadership training for PA, IO, PD, Civil Affairs (CA), and other lines of operation or organizations using DoD imagery to increase knowledge of the DAMS capability provided by DIMOC. DVI is incorporating new and updated VI doctrine, policy and planning concepts into the DINFOS courses where applicable. They are also sharing lessons learned, case studies and best practices with DINFOS, COMCAM and VI professionals in training and in the field.

2.11.5 VI Distribution System. Integration and synchronization of the Joint VI Enterprise framework will broaden support to the COCOMS. DIMOC and DVIDS currently leverage social media like Flickr to distribute selected imagery. The challenge is that the producers of imagery are circumventing the system and posting imagery on social media sites without any regard for sharing and forwarding the same imagery with the DIMOC or the Service. DIMOC is the official record center for still and motion media, satisfying the records management requirement of preserving imagery. DVI is working to leverage imagery found on social media websites that is not in the DoD collection, as well as other ways to share imagery.

2.11.6 Resource Management. The Joint VI Enterprise helps to improve resource management by providing broad access to imagery and by providing global situational awareness of VI professionals to DoD communicators by 2012. DVI has expanded its role as the VI subject matter expert in the Global Force Management Allocation Process (GFMAP), advising best use of VI resources and manpower through the future allocation process.

3. SYSTEM IMPLEMENTATION AND OPERATIONAL CONSIDERATIONS

The integration of DVI and DIMOC into DMA enables the Joint VI Enterprise to become even more agile and responsive to customer needs. This is because DMA is a global news and information military organization with bureaus and locations in nineteen countries. In addition to its enterprise role as DoD's imagery manager, DIMOC has also been given responsibility for archiving the visual content created by all the DMA activities.

Outside of DMA, military personnel, civilians, and units continue to produce still, motion and training products for various missions. They add value by making them easily accessible and preserving them as federal records in accordance with USC Title 38.

VI continues to be a force-multiplier and the need for compelling visual content is growing. Senior leaders regularly use imagery to engage with various foreign audiences and to convey the deeper meaning of messages. Visual Communication capabilities must be integrated into operational plans to be fully successful. (See Appendix D for more details on how to incorporate VI requirements into operational planning.)

VI supports many lines of operation (to include PA, IO, CA, SC, operations, etc.). Further, VI increases the effectiveness of communication at all levels – strategic, operational, and tactical. Imagery is essential to getting the COCOM’s messages and stories out in today’s media-rich environment. VI planners at every COCOM and the Joint Combat Camera Program Manager help to identify imagery requirements on behalf of commanders and facilitate the implementation of plans to acquire, process, transmit and deliver the right image, at the right time, at the right place. Specific requirements may be inserted in the Fragmented Order (FRAGO) on a day-to-day basis, thereby providing VI professionals with operational guidance. The template and VI assistance POCs are available in Appendix E.

4. OPERATIONAL SCENARIOS

The following operational scenarios/case studies provide detailed, real-life examples of how various commands have used joint VI systems and demonstrate how the Joint VI Enterprise framework is being leveraged. The intent is to update this section periodically with additional case studies, best practices, lessons learned and templates for repurposing by VI professionals, the Services and COCOM s. Below are the case studies available in Appendix E.

- SOUTHCOM Humanitarian Assistance - Haiti (Jan 2010)
- NORTHCOM Armed Forces Inaugural Committee - AFIC (Jan 2009)
- CENTCOM - Piracy – Navy Rescue - DIMOC coordination and collaboration (April 2009)
- EUCOM – Republic of Georgia Humanitarian Assistance (Aug 2008)

5. SUMMARY OF IMPACTS – Doctrine, Organization, Training, Materiel, Leadership & Education, Personnel, and Facilities (DOTMLPF)

Many DOTMLPF responsibilities for VI fall under the military Services. Each Service controls its own requirement and provides VI professional forces to the COCOMS. The Joint VI Enterprise, through DVI and the DIMOC, facilitates consistent global processes and imagery flow for all military operations. The Joint VI Enterprise helps eliminate redundancies while allowing for maximum re-purposing and re-use of imagery. Major military operations should always include the use of VI planners to develop a unified and executable plan for leveraging VI professionals and the Joint VI Enterprise to meet the commander’s strategic and operational communication goals.

5.1 Doctrine. Since there is no discrete “VI doctrine” per se, VI directives and instructions provide specific guidance that is available online at www.defenseimagery.mil under “Learning Resources.” (Also see a list of VI-related guidance in the References section.) Doctrinal references for Combat Camera (a sub-set of VI) are contained in Joint pubs 3-13, Information Operations and JP 3-61, Public Affairs. This VI CONOPS serves as a kind of pre-doctrinal document for joint Visual Information in that it provides a framework for warfighters to effectively employ VI professional forces during operations. As the proponent for Joint VI, DVI develops and oversees implementation of DoD-wide policies and procedures for DOD VI and Joint VI services. DVI is responsible for writing and developing VI guidance and doctrine to foster the most effective use of VI professional capabilities. VI guidance must reflect the need for every line of operation (PA, SC, IO, etc.) to effectively leverage VI professional capabilities and

to specify the maximum use of the Joint VI Enterprise to facilitate a “one-stop-shop” approach processing and archiving DoD imagery.

5.2 Organization. The Joint VI Enterprise impacts organizations by consolidating enterprise systems into a common architecture, providing for common processes, and preventing duplication of effort. DVI is responsible for overseeing the operation of the DIMOC and developing the Joint VI Enterprise framework as part of the DMA, which falls under the ASD(PA). DIMOC and DVIDS operate as Joint VI Enterprise systems and support imagery requirements from the Services, Joint Staff, and COCOMS, as well as other federal agencies (such as DOS). The DVI and the DIMOC organizational structure are available at Appendix A.

5.3 Training. The majority of VI training occurs at DINFOS. The training is periodically updated to address changes in the VI community and new technology. Training at DINFOS should be modified to leverage the joint VI systems and to instruct military students on how to use them effectively. Training also includes professional military education schools for leadership and VI personnel participation in Joint exercises. Increased VI participation in exercises and planning conferences will increase both the visibility and understanding of VI capabilities. COMCAM forces must be built into exercises and produce products as part of the exercise rather than to document the exercise. The intent is to “Train like they fight.”

5.4 Materiel. Equipment and supplies used by VI professionals include digital cameras, computers, digital transmission systems and related gear. The principles in this Joint VI CONOPS will be realized as DMA, the Services and COCOMS specify media systems, hardware and software that fully integrate into the Joint VI Enterprise. DIMOC is responsible for managing the central IT systems for VI, including the online archiving system, the Defense Asset Management System.

5.5 Leadership & Education. Responsibility for overall management and delivery of Joint VI Enterprise services rests with the ASD(PA). Leadership for the VI community and for Joint VI Enterprise is delegated through the DMA Director to DVI. In its VI proponent role, DVI regularly engages with the COCOMS and the Services to socialize the principles, policy and doctrine of Joint VI. DVI works with many DoD and USG agencies to promote the sharing of imagery and other visual content through the Joint VI Enterprise. DVI engages with senior military leaders to collect and act on their requirements for VI systems, policy and products. DVI is responsible for sustaining the Defense Visual Information Steering Committee (DVISC), the senior VI leadership forum for overseeing the operation and improvement of the Joint VI Enterprise. As VI continues to gain importance in communication, the demand for VI education and planning has increased respectively. DVI also chairs the Joint Combat Camera Planning Group (JCCPG) with representation from Joint Staff, the Combatant Commands, the military Services, as well as active and reserve Combat Camera units.

5.6 Personnel. The Joint VI CONOPS proposes a Joint VI Enterprise which maximizes the effectiveness of all VI professionals within the DoD. It assumes the Services will continue to require trained and equipped designated military members, civilians and contractors with visual communication capabilities. The Joint VI CONOPS impacts the Training Tactics and Procedures of all VI professionals by providing robust joint VI systems to assist in the processing, transmission, dissemination and archiving of imagery. This Joint VI Enterprise framework can be sustained regardless of how the military Services choose to organize their VI professional forces. In this way, it is not dependent on any single class of VI professionals, Combat Camera,

or other functional classification. As requirements for VI forces, including Combat Camera are requested through the formal Global Force Management process and sourced IAW service sourcing policies, DIMOC will maintain a database of deployed VI professionals by their garrison and deployed location as well as chain of command. This data can be leveraged to help VI professionals stay connected to senior leaders and to quickly notify COCOM VI planners to coordinate and share new imagery requirements with deployed VI professionals based on their location and capabilities.

5.7 Facilities. The Joint VI CONOPS specifies the establishment of an integrating construct for linking the many PA, VI, IO, and other imagery organizations and facilities into a Joint VI Enterprise. DIMOC maintains a database of all known DoD facilities with the capability to produce, manage and distribute visual content. DVI and DIMOC have received increased manning to implement Joint VI Enterprise expanded coordination, and operations support to link requirements with acquisition capabilities and facilities.

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