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## INFORMATION RESOURCES MANAGEMENT IN NATO

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**Abstract:** *The beginning of the 21<sup>st</sup> century has witnessed a special stage in the evolution of mankind given the historical major changes that have occurred and led to an information based society that trespasses any frontiers and gradually dilutes any temporal or spatial constraints. The technological revolution has led in the fields of communications and informatics major shifts that made room for an increase of their importance as a result of the opportunities that had never existed before to collect, refine, store and distribute information.*

Even though information has always been an essential element grounding the military decision making process especially during armed conflicts, the current characteristics of contemporary society turn it into a source of power and, hence, into one of the most important defense resources, as argued in our thesis.

Modern armed forces pay special attention to the aforementioned aspects since one of the main aims is to win the information battle given the extended role of information technology and of communications means in the battlespace.

Management related processes will no longer be possible outside the usage of information technology and they will become more and more integrated with armament systems, eventually leading to the usage of robots and remote controlled vehicles, extensive usage of intelligent ammunition, as well as of information technology based work methodologies and, hence, to the possibility to unfold military actions while also monitoring the enemy's actions. Modern warfare led by various units will require the collection,

elaboration and rapid transfer of information from the whole battlespace. Such a requirement involves the existence of a multitude of semiautomatic and armament systems able to compensate for the human being's physiological limits and for the technical performance of the classical equipment, to accomplish an optimal coordination of various forces and armaments under the constraints imposed by a compressed operational time, and to ensure human force preservation so that the latter can be used when special circumstances ask for it or to consolidate success.

We advance the idea that the information resource has become one of the main resource categories of modern warfare and that information technology and modern communications systems ensure the possibility to inform in real time, to influence public opinion, to model political action.

Given the current characteristics of the contemporary security environment which becomes more volatile, uncertain, complex, ambiguous and fluid as a result of the worldwide crisis and the unfavorable evolution of the current conflicts from Irak, Afganistan in which the forces of the

democratic countries participate with a direct result in financial constraints placed upon the military systems, we witness major changes in the military operations characteristics, especially the multinational ones. Despite the difficulties encountered in approaching the features and risks of these operations we have attempted to capture some aspects that are relevant considering all of the aforementioned aspects.

NATO Army forces conduct (plan, prepare, execute, and assess) operations based on the all-source intelligence assessment developed by the intelligence section. The all-source intelligence assessment is expressed as part of the intelligence estimate. *All-source intelligence* also refers to intelligence products and/or organizations and activities that incorporate all sources of information, most frequently including human resources intelligence, imagery intelligence, measurement and signature intelligence, signals intelligence, and open-source data in the production of finished intelligence (JP 2-0). All-source intelligence operations are performed by the intelligence section. They are continuous and occur throughout the operations process and the intelligence process. Most of the products resulting from all-source intelligence are initially developed during planning, and updated as needed throughout preparation and execution based on information gained from continuous assessment.

There is an ever-growing volume of data and information available on the operational environment from numerous sources that commanders can use to improve their situational understanding. Situational understanding enables the commander to better:

- Make decisions to influence the outcome of the operation.
- Prioritize and allocate resources.
- Assess and take risks.
- Understand the needs of the higher and subordinate commanders.

The commander depends on a skilled intelligence officer working to provide sound intelligence preparation of the battlefield

(IPB) products; support the intelligence, surveillance, and reconnaissance (ISR) effort; and provide all-source intelligence analysis, including conclusions and projections of future conditions or events needed to accomplish the mission within the commander's intent.

Intelligence results from the collection, processing, integration, evaluation, analysis, and interpretation of available information. This also applies to activities, which result in the product, and to the organizations engaged in such activities.

Using information from all disciplines and available sources, all-source analysts conduct analysis and produce timely, relevant, accurate, predictive, and tailored intelligence that satisfies the commander's requirements. All-source analysis provides an overall picture of the threat, terrain and weather, and civil considerations, as well as other aspects of the area of operations (AO). Thorough and disciplined all-source analysis reduces the possibility of error, bias, and misinformation through the consideration of multiple sources of information and intelligence.

During planning throughout the spectrum of conflict and operational themes, the intelligence staff is responsible for providing well-defined, specific all-source intelligence products and tools. The commander and staff expect and require these throughout planning, regardless of the specific process used:

- Threat characteristics.
- Threat templates and models.
- Threat course of action (COA) statements.
- Event template and event matrix.
- High-value target list (HVTL).
- Weather effects matrix.
- Modified combined obstacle overlay (MCOO) and terrain effects matrix.
- Civil considerations IPB overlays.
- Appropriate civil support products.

The military decisionmaking process (MDMP) combines the conceptual and detailed components of planning. Commanders use it to build plans and orders for extended operations as well as to develop orders for short-term operations within the



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framework of a long-range plan. The following discussion is structured around the MDMP steps because most staff members are familiar with them.

The MDMP begins with an analysis of the mission assigned by the higher headquarters. Most intelligence section actions during mission analysis facilitate the commander's situational understanding and contribute to one or more of the following tasks:

- Perform IPB.
- Maintain the intelligence running estimate.
- Update the intelligence estimate.
- Develop the initial ISR plan (in collaboration with the operations section).

Actions required to complete these tasks overlap. Thus, collaboration among intelligence staff members is essential. Additionally, the intelligence section provides intelligence input to other command post cells and elements needed to perform their tasks. Concurrently, intelligence staffs perform parallel and collaborative planning with the higher and lower echelon intelligence staffs. Doing this promotes a common situational awareness among staffs at all echelons.

Generally, the intelligence portion of mission analysis is an evaluation of the following categories of relevant information—threat, terrain and weather, and civil considerations. Additionally, it includes an analysis of the higher headquarters plan or order to determine critical facts and assumptions; specified, implied, and essential tasks; and constraints that affect ISR activities. Intelligence section actions during mission analysis result in the development of an initial ISR plan, the refinement of the commander's situational understanding, and the staff refining staff running estimates based on that same understanding. To avoid misunderstanding and ensure there is a clear

and common understanding of what is fact and what is assumption at this point, all-source analysts must tell the commander and staff "what they know and why they know it; what they think and why they think it; what they do not know and what they are doing about it." This promotes critical thinking and generates the staff discussion required to formulate sound COAs for offensive, defensive, stability, and civil support operations.

Mission analysis begins with an analysis of the higher headquarters order. The unit intelligence staff focuses its analysis on determining how the higher headquarters order commander and intelligence staff view the threat. This knowledge helps shape the IPB effort. The higher headquarters order also contains information on that headquarters ISR plan and available ISR assets. This information contributes to ISR synchronization.

The intelligence officer leads the staff through IPB. The other staff sections assist the intelligence section in developing the IPB products required for planning. IPB starts immediately upon receipt of the mission, is refined throughout planning, and continues during preparation and execution based on continuous assessment of operations. The following describes the primary results of IPB that support mission analysis.

- Evaluate Military Aspects of the Terrain;
- Evaluate Weather Conditions and Effects;
- Evaluate Civil Considerations;
- Develop Threat Capabilities;
- Develop Threat Models;
- Identify High-Value Target List;
- Develop an Event Template and Matrix;
- Determine Specified, Implied, and Essential Tasks;

- Review Available Assets;
- Determine Constraints;
- Identify Critical Facts and Assumptions;
- Determine Initial Commander's Critical Information Requirements;
- Determine the Initial ISR Plan;
- Update the Operational Timeline;
- Deliver a Mission Analysis Briefing;
- Derive Input from the Initial Commander's Guidance;
- Issue a Warning Order;

As the threat commander, using the threat situation template as a start-point and the event template and matrix as a guide, the intelligence analyst develops critical threat decision points in relation to friendly COAs, projects threat reactions to friendly actions, and projects threat losses. As the ISR officer, the intelligence analyst—

- Identifies new information requirements.
- Assists the staff in developing PIRs.
- Refines the situation and event templates.
- Develops the ISR overlay and synchronization tools.
- Assists in the development of the high-payoff targets (HPTs) and the DST.

Following an analysis of the COAs, the staff identifies its preferred COA and makes a recommendation to the commander. This usually occurs during a decision briefing presented by the operations officer. During this briefing, the analyst briefs any changes to the current threat situation and any terrain and weather, and civil considerations that have changed since the commander was last briefed.

The staff, led by the operations officer, prepares the order by turning the selected COA into a clear, concise concept of operations and supporting information. The order provides all the information subordinate commands need to conduct their operations. However, this is not the first time subordinate commanders and their intelligence staffs have seen this data. Parallel and collaborative

planning involves intelligence analysts at all echelons. They have reviewed each other's intelligence products as they were developed. At this point, they clarify changes and submit requests for additional information and product support. Before issuing the order, the intelligence section conducts an orders crosswalk with the rest of the staff as directed by the operations officer.

## **INTELLIGENCE, SURVEILLANCE, AND RECONNAISSANCE OPERATIONS**

The ISR process is comprised of a wide variety of intelligence operations: planning and direction; collection, processing and exploitation; analysis and production; dissemination and integration; and evaluation and feedback.

It should focus on the commander's mission and concept of operations. The process is not a linear or even cyclic operation, but rather represents a network of interrelated, simultaneous operations that can, at any given time, be fed by and feed other intelligence operations.

The output of the overall process is actionable intelligence—timely, accurate, and complete—that supports decision making at all levels of war.

Successful ISR activities depend on timely, relevant, and well-reasoned all-source analysis. Successful ISR activities are not based on advanced technology or intelligence reach. Individually, the Army's array of collection systems, intelligence processors, and network advantages do not ensure the commander's information requirements are satisfied. These are tools that, if used correctly, can enhance a unit's ability to answer questions in a timely manner

**1. PLANNING AND DIRECTION**  
**Planning and direction of ISR operations start with the identification of needs for intelligence regarding all aspects of the operational environment.**

The President and Secretary of Defense direct JFCs to engage in adaptive planning for the conduct of operations. The JFC should provide the commander's critical



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information requirements (CCIRs) to the joint staff and components. CCIRs comprise a comprehensive list of information requirements identified by the commander as being critical to facilitating timely information management and the decision-making process. Intelligence preparation of the operational environment (IPOE) alerts decision makers at all echelons of command to emerging situations and threats

Therefore, preparation of the operational environment is essential to supporting the commander's visualization process, determining (component-level) CCIRs, anticipating critical decision points during operations, and prescribing ROE. IPOE and target development processes identify and assess the adversary's COGs, key capabilities and vulnerabilities, intentions, and potential courses of action (COAs). By identifying known adversary capabilities, IPOE provides the conceptual basis for the JFACC to visualize how the adversary might threaten the command or interfere with mission accomplishment. By identifying specific adversary COAs and COGs, IPOE provides the basis for friendly and adversary COA comparisons, often referred to as wargaming sessions, in which the staff "fights" each friendly and adversary COA. This wargaming process assists intelligence and operations in identifying specific indicators that could confirm or deny a given adversary COA or are otherwise required to support a friendly COA. Using knowledge gained via intelligence analysis (IPOE and target development) and the wargaming process, commanders can anticipate when and where action will occur, enabling them to focus on broad friendly, hostile, and neutral force interactions to determine the most effective way to apply Air Force capabilities to achieve desired effects. With this foundation, an optimal ISR strategy designed to sequence ISR operations is

derived. ISR strategy is encapsulated in the joint air operations plan (JAOP) and is synchronized with theater and national ISR architectures and strategy. It provides the foundation for development and validation of intelligence requirements, captures the framework for planning and direction of ISR operations, and establishes guidance for the operation of all other elements of the ISR process. Anticipating where and when important events will take place provides a framework in which to orchestrate national, theater, and tactical assets to focus surveillance on specific target elements and guide decisions on how, when, and where to engage adversary forces to achieve the JFC's objectives. Requirements for intelligence to support operations are identified by the commander and the staff. In the course of intelligence planning and direction, intelligence planners identify the intelligence required to answer the CCIRs. Those intelligence requirements deemed most important to mission accomplishment are identified as priority intelligence requirements (PIRs). PIRs are general statements of intelligence need, such as "what is the operational status of the adversary's integrated air defense system?" or "what terrorist groups are active within the area of responsibility/interest (AOR/AOI)?" They provide the framework for prioritization of all ISR operations. PIRs are driven by, and in turn drive, the IPOE process to refine information requirements and support the commander's potential courses of action. The PIRs drive the development of detailed essential elements of information (EIs).

Over time, as new direction and guidance evolve, ISR planners will develop new requirements or modify existing requirements. Information requirements should be validated before collectors can be tasked to fill the requirement. ISR

requirements are validated by theater collection management authorities embedded in the JFC's staff. Theater collection managers will typically answer the following questions before validating an information requirement: Does the information requirement meet the commander's concept of operations? Has the information already been acquired but not distributed to the requester? Are there other ongoing operations that might satisfy the requirement? If any of these conditions is met, new ISR collection missions may not be necessary. Once validated, an information requirement becomes a collection requirement and the ISR planning process begins. The process for developing and validating ISR collection requirements is essentially the same during peacetime, crisis, and war—only the nature of the requirements and the timeliness in which they should be satisfied varies. Though the process remains the same across the range of military operations, carefully crafted intelligence requirements are essential in an effects-based approach to operations. An effects-based approach to operations (EBAO) is one in which operations are planned, executed, assessed, and adapted to influence or change systems or capabilities in order to achieve desired results. EBAO seeks to understand and exploit the complex connections among individual actions, the effects—direct and indirect—that those actions produce, how those effects influence the states and behaviors of complex systems in the operating environment, and how these effects contribute to the accomplishment of desired outcomes. The process of planning ISR operations begins once requirements have been established, validated, and prioritized. As intelligence collection requirements are aligned with available collection capabilities, the planning process addresses factors such as the availability of ISR assets, platform and sensor capabilities, adversary threats to ISR assets, and timeliness of the ISR response. These factors, when weighed together, affect how ISR assets are tasked and employed. In order to make the planning process more efficient, information requesters should clearly articulate their collection requirements and allow the collection managers and operations

planners to decide the best way to meet the requirements.

## **2. COLLECTION**

The collection portion of the intelligence process involves tasking appropriate collection assets or resources to acquire the data and information required to accomplish collection tasking. Collection includes the identification, coordination, and positioning of assets or resources to satisfy intelligence requirements. Collection managers develop collection plans based on the validated intelligence requirements of commanders and decision makers. The collection manager's task is to first verify the requirements have been validated. Once verified, the collection manager:

- Develops and manages a collection plan that integrates requirements with target characteristics.
- Determines the capabilities and limitations of the available organic collection assets and compares them to the collection plan.
- Develops a collection strategy to optimize the effective and efficient use of all available, capable, and suitable collection assets and resources.
- Identifies collection requirements that cannot be met by organic assets and forwards them up the chain of command for validation and tasking of non-organic intelligence resources.
- Directs processing and dissemination of collected data. Collection managers should understand the capabilities and limitations of each discipline and the procedures for ensuring target coverage by the appropriate collection asset and/or resource.

Collection managers keep requesters informed of collection status and capabilities so there are realistic expectations of what can be collected and what level of confidence can be placed in the information. The key to the collection manager's job is selection of the right combination of collection assets for a particular information requirement. Collection managers should focus on a multidisciplinary approach to collection tasking. Collection capabilities complement each other, and the





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AFASES 2011  
Brasov, 26-28 May 2011

collection manager should resist favoring or becoming too reliant on a particular sensor, source, system, or technique. Each system's limitations can be mitigated through the capabilities of the others, as different systems provide additional insights into the requirement. While a sensor, source, or system may seem to be an obvious choice to satisfy a requirement, flexibility is the key. Collection managers should match collection resources to the type of adversary activity most likely to be captured by collection operations. Rigid dependence on a single source may result in mission failure, especially if that source becomes unavailable or if the adversary takes measures to counter it. Lack of a multidisciplinary approach may also result in discernible patterns that may play into the adversary's counterintelligence or denial and deception efforts.

### 3. PROCESSING AND EXPLOITATION

Once the data satisfying the requirements are collected, they undergo processing and exploitation. Through processing and exploitation, the collected raw data are transformed into information that can be readily disseminated, used, transmitted, and exploited by intelligence analysts to produce multidisciplinary intelligence products. Relevant critical information should also be disseminated to the commander and joint force staff to facilitate time-sensitive decision making. Processing and exploitation time varies depending on the characteristics of specific collection assets. For example, some ISR systems accomplish processing and exploitation automatically and nearly simultaneously with collection, while other collection assets, such as HUMINT teams, may require substantially more time. Processing and exploitation requirements are prioritized and synchronized with the commander's PIRs. During processing and

exploitation, collected data are correlated and converted into a format suitable for subsequent analysis and production of intelligence. Processing remains distinct from analysis and production in that the resulting information receives only a cursory analysis for time-critical exploitation and has not yet been subjected to full analytical assessment. Relevant time-sensitive information resulting from this step in the process (especially targeting, personnel recovery, or threat warning information) should be immediately disseminated through intelligence broadcasts, secure information workspace or internet relay chat channels, imagery product libraries (IPLs), intelligence databases, or message reporting. Additionally, some information is suitable in its raw form to meet user requirements. For example, joint terminal attack controllers (JTACs) can receive a direct feed via ROVER from a Predator or other full-motion video collection source to provide an invaluable “over the next hill” look to support close air support operations. Raw information should be made available to users with the capability to receive it, the knowledge to understand the information they are receiving, and the authority to take action on it. IPOE provides a disciplined and dynamic framework for processing and exploiting large amounts of data. The knowledge gained as a result of comprehensive IPOE and target development, as well as our capability to anticipate adversary actions, depend on our ability to leverage and fuse all available information. Processing and exploitation architectures should take advantage of network centrality to enable the first part of intelligence fusion—the correlation of multiple source collection into a single, fused report of the operational environment activity. IPOE enables operators and intelligence analysts alike to remain focused on the most critical aspects of the operational environment

and adversary. Incoming information and reports can be rapidly incorporated into critical decision-making processes and provide a convenient medium for displaying the most up-to-date information and for identifying critical information gaps.

#### 4. ANALYSIS AND PRODUCTION

Information is converted into intelligence products through analysis and production, a structured series of actions which, although planned or usually occurring sequentially, may also take place concurrently. These actions include the integration, evaluation, analysis, and interpretation of information in response to known or anticipated intelligence production requirements.

- **Integration.** Information from single or multiple sources is received, collated, and entered into appropriate databases by the analysis and production elements of intelligence community organizations, the theater joint intelligence centers or equivalents, or subordinate joint force elements like the ISR division. Information is integrated and grouped with related pieces of information according to predetermined criteria to facilitate the evaluation of newly received information.
- **Evaluation.** Each new item of information is evaluated by the appropriate analysis and production element with respect to the reliability of the source and the credibility of the information. The reliability of the source and the credibility of the information should be assessed independently of each other to avoid the possibility of one factor evaluation biasing the other.
- **Analysis.** During analysis, deductions are made by comparing integrated and evaluated information with known facts and predetermined assumptions. These deductions are combined and assessed to discern patterns, links or recognized events.

- **Interpretation.** Interpretation is an objective mental process in which the significance of information is judged in relation to the current body of knowledge, covering both adversary and friendly forces, and existing information and intelligence. This mental process involves the identification of new activity and a postulation regarding the significance of that activity.

Taken together, these actions enable intelligence fusion—the synthesis of multiple event reports into an assessment of the nature of ongoing operational environment activity; the extrapolation of all operational environment activity into a predictive assessment of future activities; and the shaping of ongoing ISR operations to refine these assessments. To enable this level of fusion, analysts should work in collaborative environments which provide access to recognized, and often geographically separated, subject matter experts. Through collaboration, intelligence analysts are able to share information, discuss opinions, debate hypotheses, and identify or resolve analytic disagreements. Net-centric connectivity and access greatly enhance an analyst's ability to share, compare, and assess information. Intelligence analysis organizations at all echelons make unique contributions to analysis and production.

Battlespace awareness products provide the foundation for the commander's estimate process as well as a baseline for long-term analysis essential to understanding the multidimensional aspects of the operating environment. The daily demand to support immediate decision-making needs often exceeds existing analytic capabilities, particularly in the forward area. Resources, therefore, should be carefully allocated and made available for the long-term analysis required to sustain operations. The necessary degree of predictive awareness can only be achieved through full participation of our joint, interagency, and multinational/coalition partners in a collaborative environment linking all command echelons and





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Brasov, 26-28 May 2011

coordinating different functional nodes (e.g., reachback to analytic centers of excellence). In addition, every level of command should define and document the information it requires to build battlespace awareness, creating a deliberate information flow that is responsive to the commander's requirements.

### **PRODUCE**

The produce step involves combining analyzed information and intelligence from single or multiple sources into intelligence or intelligence products to answer known or anticipated requirements. The intelligence officer integrates evaluated, analyzed, and interpreted information from single or multiple sources and disciplines into finished intelligence products. As with collection operations, the intelligence officer must ensure the unit's information processing and intelligence production are prioritized and synchronized to support answering the CCIRs (PIRs and FFIRs).

Production also involves combining new information and intelligence with existing intelligence to produce intelligence in a form that the commander and staff can apply to the MDMP and supports and helps facilitate situational understanding. During the produce step, the intelligence staff exploits information by

- Analyzing the information to isolate significant elements.
- Evaluating the information to determine accuracy, timeliness, usability, completeness, precision, and reliability.
- Evaluating the information to determine if it is relevant, predictive, and properly tailored.
- Combining the information with other relevant information and previously developed intelligence.

- Analyzing or assessing the information to predict possible outcomes.
- Presenting the information in a format most useful to users.

### **5. DISSEMINATION AND INTEGRATION**

Dissemination of ISR products continues the process by giving the user information required for application in a timely manner. Dissemination may take the form of electronic transmission, hardcopy annotated imagery or maps, direct threat warnings, oral and written reports, or briefings. The dissemination process requires continuous management. Without effective management, communications paths can become saturated by information from single sources being retransmitted by many intermediate collection agencies, resulting in "circular reporting." Advances in technology are also affecting dissemination. Computers and modern communication systems have reduced the information-to-production timeline for delivering ISR products. Likewise, some collection systems are capable of disseminating collected information to requesters on a real- or near real-time basis, vastly increasing their responsiveness. This is especially important for those collection operations supporting ongoing military operations in which the situation may be evolving rapidly and perishable information may lose its usefulness within a matter of minutes or seconds. Implementing new "information profiles" technologies and capabilities puts power in the hands of the warfighter to obtain only pertinent information exactly when and where it is needed. Ancillary to the discussion of classified information dissemination is the need to expedite dissemination of declassified information. Commercial technology that enables continuous live media coverage of military

operations may require expedited declassification and public dissemination of intelligence products in order to counter enemy propaganda or support other operational objectives. ISR planning should include local procedures for rapidly coordinating public release of select intelligence. This expanding collection capability makes network centrality all the more important because real-time planning and targeting systems depend on tailored intelligence information. Requesters integrate the intelligence into their decision-making and planning processes, and technical barriers to rapid integration, such as system incompatibility or security barricades, complicate operations. Information superiority requires the timely integration of intelligence with operations in an easily understood format that facilitates decision-making at all levels while at the same time maximizing the amount of relevant information available. In the case of threat warning alerts essential to the preservation of life and/or vital resources, such information should be immediately communicated directly to and acknowledged by those forces, platforms, or personnel identified at risk so the appropriate responsive action can be taken. More generally, the integration of intelligence and operations on a continuous basis allows commanders and all operational planners access to the most current information available, thereby optimizing intelligence support to operation planning, preparation, execution, and assessment functions.

## **6. EVALUATION AND FEEDBACK**

After receiving the ISR products, the user evaluates the products to ensure they satisfy the requirement. The user then provides feedback to ISR planners, collection managers, and analysts to ensure the process continues to satisfy the requirement. It is imperative that intelligence personnel and consumers at all levels honestly evaluate and provide immediate feedback throughout the intelligence process on how well the various intelligence operations perform to meet the commander's intelligence requirements. All operations in the intelligence process are

interrelated and should be evaluated to determine the degree to which they facilitate each other and ultimately succeed in meeting the customer's requirements. For example, planning and direction establish the groundwork for all other intelligence operations, but they are also dependent on the results achieved by other operations in the intelligence process. The collection manager evaluates collection reports, ensures the appropriate requesters receive a copy, and determines, in conjunction with the requesters, if the requirements have been satisfied. Requester feedback establishes customer satisfaction and frees collection assets and resources to be redirected to satisfy other active requirements. Processing and exploitation and analysis and production are evaluated based on the degree to which customers are satisfied that the resulting information or intelligence answers their requirements. Intelligence personnel and consumers at all levels evaluate the quality of intelligence products relative to all the attributes of good intelligence. These attributes include the degree to which intelligence anticipates the needs of the commander, and is timely, accurate, usable, complete, relevant, objective, and available. Finally, intelligence and operations personnel jointly evaluate how well intelligence is disseminated and integrated with operations, and make changes as needed to improve the overall intelligence process.

### **References:**

JP1, Doctrine for the Armed Forces of the United States, 2  
JP2.0, Joint Intelligence, Defence Department, iunie 2007  
JP 2.01, Joint Intelligence Support to Military Operations, 1996  
JP2-01, Joint and National Intelligence Support to Military Operations, octombrie 2004  
JP 2.01, Joint Intelligence Support to Military Operations, 2009  
JP 2-01.3, Joint Intelligence Preparation of the Operational Environment, 2009  
FM2-0, Intelligence, Headquarters Department Of Army, U.S. Army  
<https://www.cia.gov/library/center-for-the-study-of-intelligence/>  
<http://www.ssu.gov.ua/sbu/control/en/publish>  
<http://www.dia.mil/college/publications/>  
<http://www.centerforintelligencestudies.org/>  
<http://www.dtic.mil/>



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