

ALL-AGENCY COMPENDIUM OF BASIC COUNTER- IMPROVISED EXPLOSIVE DEVICE TERMINOLOGY



C-IED Centre of Excellence

Version 2

7 December 2014

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Foreword

Counter-Improvised Explosive Device (C-IED) doctrine and operations can be complex and are often an amalgamation of ideas and actions from other specific spheres of military and non-military operations. Terms, definitions and acronyms ascribed to C-IED may also be in use in other, more conventional styles of operations.

This document is a compendium of terms that relate directly to C-IED. Where terms have dual uses, then only specific C-IED terms are used here.

Many sources of C-IED doctrine and pamphlets, as well as related subjects, have been used to collect and collate these terms. Not all the references used are military and nor are they all US or European.

The NATO C-IED Centre of Excellence (COE) is the compiler, arbiter and custodian of this compendium. All requests for additions and amendments must be directed to the NATO C-IED COE in the first instance.

Scope

The scope of this compendium is limited by the security classification of the reference documents. Only unclassified documents have been used in the compilation of the terms and their definitions. This is to ensure the widest distribution of the material and to promote more universal acceptance. This will aid joint operations and integration of national forces when deployed on coalition operations.

This compendium should be considered as a living document and it will be updated according to the evolution of C-IED terminology, doctrine and concepts.

This document is the first in a series. It will be followed by other volumes referring to specific C-IED related terminology matters. Volume two will be a compendium of IED and IED components characterization and categorization terms.

DISCLAIMER:

This document is a product of the C-IED COE. It does not represent the opinions or policies of NATO and is designed to provide an independent position.

References

This compendium was produced with reference to the following sources of information

Agency	Source Name	Date
NATO	AJP-315(B)	May 2012
	AAP-6 NATO Glossary of Terms and Definitions Version 2	2012
	NATO Route Clearance Study Draft 2 ATP-3.12.1.X	
	Interservice IED Disposal Operations on Multinational Deployments – A Guide for Staff Officers AEODP-3(B) Volume 1	Sep 2010
	Allied Tactical Doctrine for Military Search – Study Draft 4	
	STANAG 2298 C-IED Edition 1 NATO WIT Capabilities and Standards	Sep 2010
JIEDDO	JIEDDO Attack the Network Lexicon	May 2011
	JIEDDO Weapons Technical Intelligence IED Lexicon	Oct 2012
UN	UN Landmine and Explosive Remnants of War Safety Handbook	2005
	UN Infantry Battalion Manual Volume 2	Aug 2012
	UN Mine Action Service IATG 04.10	May 2013
European Defence Agency	http://www.eda.europa.eu/projects/projects-search/counter-ied	Aug 2012
	http://www.eda.europa.eu/info-hub/events/2011/06/27/default-calendar/countering-improvised-explosives-devices-(cied)-basic-search-course	Jun 2011
	http://www.eda.europa.eu/info-hub/news/2014/09/16/counter-ied-experts-complete-european-guardian-exercise-in-vienna	Sep 2014
Europol	https://www.europol.europa.eu/	2014
NATO-Russia Council	NATO-Russia Council Consolidated Glossary of Cooperation	2011
International Committee of the Red Cross	Council of Delegates of the International Red Cross and Red Crescent Movement	Nov 2013
	Enhancing civilian protection from use of explosive weapons in populated areas: Building a policy and research agenda. John Borrie and Maya Brehm	Sep 2011
Landmine & Cluster Munition Monitor	http://www.the-monitor.org/index.php/LM/The-Issues/Glossary	2014
Medecins Sans Frontieres	http://www.msf.org/article/unexploded-ordnances-are-legacy-war-children-southern-sudan	Jul 2009
Action on Armed Violence	http://aoav.org.uk/2013/fact-sheet-explosive-weapons/	Aug 2013
	http://aoav.org.uk/wp-content/uploads/2014/03/Impact-of-explosive-weapons-by-gender-and-age-iraq-2003-2011.pdf	Jun 2012
Mines Advisory Group	http://www.maginternational.org/	2014
NORDEFECO	http://www.nordefco.org/	2014
Spanish Civil Guard	https://www.guardiacivil.es/es/institucional/especialidades/control_delas_armas/index.html	2014
Columbian Army	http://www.ejercito.mil.co/?idcategoria=211740	2014
French Military	Concept Interarmees De Fouille Operationelle PIA 03.161	Jun 2008
	Traitement du danger munitions et engins explosifs (MUNEX)	Jan 2007
US Military	US Joint IED Ops Device Operations 3-15.1	Jan 2012
	FM 3-34.210 Explosive Hazards Operations	Mar 2007
Council of The European Union	Concept for Countering Improvised Explosive Devices (C-IED) in EU-led military operations	Sep 2012
Canadian Military	Mobility Support – Route and Area Clearance - Version 2	Dec 2005

Definitions

NATO AJP 3.15(B) “Countering Improvised Explosive Devices” has been used as the baseline for the comparison of C-IED terminology. The following sections compare the range of terminology in use for a number of key C-IED terms.

Attack the Networks [NATO AJP 3.15]

Within C-IED to isolate the component parts of the networks through the coordinated and selective use of cognitive and physical activities to defeat the improvised explosive device system.

JIEDDO Attack the Network Lexicon (May 2011)

This line of operation consists of lethal and nonlethal actions and operations against networks conducted continuously and simultaneously at multiple levels that capitalize on, or create, key vulnerabilities and disrupt activities to eliminate the enemy's ability to function in order to enable success of the operation or the campaign.

US Joint IED Operations Device Operations

In the context of C-IED operations, "Attack the Network" operations specifically target the enemy's ability to resource and conduct IED attacks.

COMMENTS

The JIEDDO Attack the Network Lexicon provides the fullest interpretation. This is not surprising as their document focuses mainly on Attack the Network (AtN), not just C-IED. The modern concept of AtN extends beyond the borders of C-IED but is obviously still heavily linked to it.

RECOMMENDATIONS

The JIEDDO definition should be adopted. It is a truer expression of AtN and as such is important to the C-IED concept.

Biometrics [NATO AJP 3.15]

Within C-IED biometrics are defined as measurable biological and behavioral characteristics that enable the establishment and verification of an individual's identity.

JIEDDO Attack the Network Lexicon (May 2011)

Biometrics is the process of recognizing an individual based on measurable anatomical, physiological, and behavioral characteristics.

Russia-NATO shared terminology

1. The use of biological or behavioral characteristics to identify an individual
 2. The storage of biometric data
1. техника биометрической идентификации;
 2. биометрические данные

Colombian army

Data that individualize a subject, regarding name, age, address and other details. Recognition and verification that a person is the same as supposed. Procedure to determine the personal identity of an individual suspected or accused of a crime.

Datos que individualizan a un sujeto, con respecto a su nombre y apellido, edad, domicilio y otros. Reconocimiento y comprobación de que una persona es la misma que se supone o busca. Procedimiento para determinar la identidad personal del sospechoso o acusado de un delito.

US Joint IED Operations Device Operations

Data consisting of fingerprints, photographs, and biographical data of military detainees, enemy prisoners of war, or individuals of interest posing national security threats to the United States.

Allied Tactical Doctrine For Military Search

Biometrics is defined as the use of measurable, biological characteristics to identify a person. The two primary biometric measures which may be potential evidence are:

1. Fingerprints. Each individual has unique marks on the pads of their fingers, hands and feet which when pressed against any surface leave a greasy residue. It is possible to recover these prints and prove an individual has an association with a particular item of evidence.
2. Deoxyribo Nucleic Acid (DNA). DNA is the unique genetic material contained within each living cell. It is possible to recover human DNA from skin cells, bodily fluids and hair follicles.

COMMENTS

The key points here are the identification of an individual by using measurable data derived from anatomy, physiology and behavior.
Biology covers all the terms.

RECOMMENDATIONS

Concentrate on defining biometrics in general as part of an identification process such as in the JIEDDO definition. Consider defining related terms to amplify the basic definition, such as:

Biometric Data; Biometric Enrollment; Biometric Evidence/Intelligence; Biometric Database

Cache [NATO AJP 3.15]

A hidden store of things. For C-IED this means the same as 'hide'.

JIEDDO Weapons Technical Intelligence IED Lexicon (Oct 2012)

An IED related incident that involves the discovery and/or recovery of an IED not yet emplaced or employed, IED components, and/or IED paraphernalia.

UN Landmine and Explosive Remnants of War Safety Handbook

Post conflict settings can be the site of arms caches and weapons depots or dumps full of abandoned ordnance (AO). AO is ordnance that has not been used, but is no longer in the control of any particular force. AO could include mortars, grenades, bombs, rockets, bullets, artillery shells and so on. Caches of abandoned ordnance and poorly secured or maintained stockpiled munitions, sometimes located in or near communities, in military buildings, public buildings, school houses and so on, can produce catastrophic explosions. Poorly stored or maintained munitions may become more sensitive and suddenly explode. Intense heat from fires can also cause abandoned ordnance to detonate.

Russia-NATO shared terminology

A hiding place typically for weapons
тайник с оружием, схрон

Mines Advisory Group

A total of 447 caches (defined as containing 10 items or more) of SALW were destroyed

Colombian Army

Container, where weapons, ammunition, equipment or supplies are stored. Often underground.
Depósito, generalmente subterráneo, donde se almacenan armas, munición, equipos o víveres

US Joint IED Operations Device Operations

An IED incident that involves the discovery and/or recovery of unarmed devices, IED components, and IED paraphernalia, or explosive ordnance that involves long term storage in a permanent, fixed location.

Weapons Technical Intelligence Improvised Explosive Device Lexicon

An IED related incident that involves the discovery and/or recovery of an IED not yet emplaced or employed, IED components, and/or IED paraphernalia.

COMMENTS

NATO definition of a "hidden store of things" is very broad but probably sufficient. Some of the other definitions are too detailed and often concentrate on weapons and ammunition but caches can be many things from general equipment, to maps and terrorist targeting intelligence, in addition to various types of explosive or explosive precursors.

Some definitions ignore the fact that essentially a cache is hidden and clandestine. It is correct to say that a "hide" is the same as a "cache". A "Find" is not mentioned in any definition but it may be relevant to include reference to it here.

The UN definition is very detailed and concentrates on post conflict and is not specific to C-IED.

Colombian reference to "underground" is specific to the guerilla group Fuerzas Armadas Revolucionarias de Colombia (FARC) operating in rural areas and should be avoided in a general definition as it is too limiting.

RECOMMENDATIONS

Any definition should stress the diversity of items that may be found in cache.

The definition should reference the hidden and clandestine nature of cache especially when in the context of C-IED.

Similar and related terms should be defined and referenced, such as "hide", "find".

A "find" can be further broken down into various categories of relevance to Explosive Ordnance Disposal (EOD), Weapons Intelligence Team (WIT) and intelligence/planning staff and this should be considered.

Countering Improvised Explosive Devices [NATO AJP 3.15]

The collective efforts at all levels to defeat the improvised explosive device system through attack the networks, defeat the device and prepare the force.

NATO Route Clearance Study Draft 3

The collective efforts to defeat an improvised explosive device system by attacking networks, defeating devices and preparing a force.

United Nations Infantry Battalion Manual Volume 2 (Aug 12)

Related information: Techniques and Procedures.

Personnel trained to search vehicles and frisk suspected personnel.

Personnel capable of handling arrest and detention.

Personnel capable of handling an explosive laden vehicle or able to confiscate contraband material.

Key personnel have functional vernacular language skills.

CP personnel capable of handling emergency drills and casualty care and evacuation.

European Defence Agency - <http://www.eda.europa.eu/projects/projects-search/counter-ied>

To try and address the challenges presented by IEDs, it was necessary to define exactly what was meant by CIED. The process was started in 2007 when accepted international doctrine stated that Countering IEDs consisted of 6 key operational areas:

1. Detect
2. Mitigate
3. Neutralize
4. Exploit
5. Predict
6. Prevent.

In a European Defence Agency context, a group of willing participants set out to analyze exactly what each of these disciplines meant and break them down into military capabilities arriving at those that were specifically considered to be in the C-IED envelope. For example, predicting an IED attack involves, intelligence gathering, all sources intelligence fusion and intelligence preparation of the battlefield (IPB). A number of distinct capabilities necessary for CIED were deduced. Then those felt to be general military skills were deleted. For example, whilst all sources intelligence fusion is key to a CIED fight, it is similarly crucial in almost any military campaign and was therefore not in the scope of CIED. As a result, the capabilities below were published as forming a CIED capability:

1. Military Search
2. IED Exploitation
3. Route Clearance
4. Tactics Techniques and Procedures (TTPs)
5. Improvised Explosive Device Disposal (IEDD)
6. Mitigation
7. Detection
8. Counter Radio-controlled IED Electronic Warfare (CREW)

Spanish Civil Guard

The specific C-IED mission consists of organizing, managing and conducting operations aimed at searching for, detecting, neutralizing and making safe explosive devices. This overall mission comprises the following basic tasks: acting in the reestablishment of security after a bomb threat; gathering, studying, assessing and spreading relevant information concerning new detection and defusing equipment, techniques and procedures

US Joint IED Operations Device Operations

Closest Definition: counter-improvised explosive device operations

The organization, integration, and synchronization of capabilities that enable offensive, defensive, stability, and support operations across all phases of operations or campaigns in order to defeat improvised explosive devices as operational and strategic weapons of influence. Also called C-IED operations.

Concept for Countering Improvised Explosive Devices in EU-led military operations

The collective efforts at all levels to defeat the IED system by attacking the networks, defeating the device and preparing the force.

Mobility Support – Route and Area Clearance - Version 2

The collective efforts at all levels to defeat the IED system by attacking the networks, defeating the devices and preparing the forces.

COMMENTS

The NATO definition is the standard and has drawn on the 3 pillars of C-IED as originally put forward by JIEDDO: attack the networks, defeat the device and prepare the force. Aspects of this original thought is now a little dated with network engagement being a more up to date term and some confusion over IED defeat in relation to IED disposal or IEDD.

This is a general and overall definition that is understandable and well known.

The UN Infantry Bn Manual is listing Infantry specific actions and operations within C-IED and not defining the overall concept.

The EDA statement is in great detail and is more a total explanation of the operations and phases required followed by an overview of capabilities necessary to create an enduring overall C-IED capability. It is difficult to take as a stand-alone definition as it refers to other doctrine and general capabilities but it has merit.

The Spanish Civil Guard definition is too specifically focused on just the IED and makes no reference to preparing the force or attacking the networks. It is not all encompassing.

RECOMMENDATIONS

The NATO definition is probably the simplest and most encompassing. As a definition of concept it is adequate but consideration could be given to updating it and perhaps defining the concept more specifically.

C-IED Exploitation [NATO AJP 3.15]

C-IED exploitation is the process by which the components of an IED System are recorded and analyzed, in order to better understand the IED System and its components. This will include analysis of the networks; including adversary personnel, roles and relationships; IED Events; IED capabilities and associated components and materiel. It is important that exploitation activities are conducted persistently and iteratively in order to provide accurate intelligence, develop effective countermeasures and to contribute to effective targeting. Exploitation activities will include collection and analysis of technical, tactical and forensic information.

EU - Concept for Countering Improvised Explosive Devices (C-IED) in EU-led military operations (Sep 2012)

An essential element of defeating the IED system is exploitation. Exploitation provides one of the main sources of intelligence and technical knowledge required to defeat the IED system. Data sources for exploitation are the individual soldiers, Weapon Intelligence Teams (WIT), Military Police, Intelligence, Human Intelligence (HUMINT), Explosive Ordnance Disposal (EOD) and medical personnel. There are three other levels of C-IED exploitation.

NATO - Interservice IED Disposal Operations on Multinational Deployments - A Guide for Staff Officers

Incidents involving IEDs may provide technical intelligence and therefore should be investigated, where possible, by suitably trained staff and reported accordingly. Exploitation is undertaken to assist tactical, technical and forensic analysis. Exploitation of both the device, effects and tactics employed may assist with improving Force Protection, ECM, developing our Tactics, Techniques and Procedures (TTPs), targeting IED networks, attribution of sources, and criminal investigation. Intelligence gained can subsequently be passed to assist C-IED possibly including other IEDD teams. Therefore, IED exploitation is a key part of the wider C-IED battle and should be afforded a high priority. Policies and procedures for exploitation are to be determined with J2 involvement.

COMMENTS

There are only three definitions of this term in the documents listed, however it is an important component of the C-IED campaign.

The NATO definition in AJP 3.15 includes a good general description and also a summary of the uses of C-IED Exploitation. Overall it is an effective definition.

The alternative NATO definition given in the Staff Officers Guide for Interservice IED Disposal Operations on Multi-National deployments is also a good definition. It is more detailed in some ways than AJP 3.15 but is perhaps focused too tightly on the IED disposal activity rather than the general C-IED operations.

The Staff Officers Guide however, does emphasise how C-IED exploitation is a key factor in C-IED and how it should be afforded a high priority.

The Staff Officer's Guide also notes the planning requirements and control by the J2 staff.

The third definition is by the European Union and again is a general definition. It does however note the types of units and sources of exploitation as well as mentioning that there are three levels of C-IED exploitation although it does not specifically mention them.

RECOMMENDATIONS

All three definitions are accurate but tend to highlight differing aspects of C-IED exploitation. If a general definition is required, then that in AJP 3.15 is sufficient but aspects of the other two have relevance. It may be worth considering amalgamating aspects of all these definitions into one single new version.

If mention is made of the three levels of exploitation, then they should be mentioned and then later explained and defined separately under their own heading.

Destroy [NATO AJP 3.15]

Within C-IED destroy means actions to deliberately damage or dismantle an IED, or cause it to function, so that it is rendered useless and can no longer function.

UN International Ammunition Technical Guideline IATG 01.40 (May 13)

Serviceable explosive used in demolitions to initiate and destroy unserviceable ammunition and explosives during Explosive Ordnance Disposal (EOD) operations.

United Nations Infantry Battalion Manual Volume 2 (Aug 12)

Closest Definition: IED Defeat

It involves positive EOD actions against the IED or IED components once placed or found. These actions may include, but are not limited to, placing a disruptive charge, the use of cutting equipment or moving to a safe area for further action.

Colombian Army

Apply combat power so that the target is damaged, it cannot achieve the function for which it was designed, nor can it be restored to its service condition.

Aplicar el poder de combate de tal manera que se dañe el blanco, que éste no pueda funcionar para lo que fue diseñado, ni pueda ser restaurado a su condición de servicio.

Mobility Support – Route and Area Clearance - Version 2

To destroy an item of ordnance by explosives, normally by placing an explosive charge alongside.

COMMENTS

This is a generally misleading and unspecific term. The NATO definition applies it purely to IED and could encompass Blowing in Place (BIP), pre-detonation, attack by small arms fire and similar destructive actions rather than disablement or disposal. Rendering an IED useless, such that it will not function as intended, is not necessarily the same as rendering it safe and may entail more collateral damage.

RECOMMENDATIONS

This general term would be better replaced by several more specific terms such as BIP, pre-detonation, disablement and render safe.

Detect [NATO AJP 3.15]

Within C-IED actions to locate, access and confirm suspect IEDs.

<p>NATO AAP-6</p> <p>The discovery by any means of the presence of a person, object or phenomenon of potential military significance.</p>
<p>NATO Route Clearance Study Draft 3</p> <p>Detection is the actual confirmation of the location of obstacles. It may be accomplished through recon, or it may be unintentional. Detection is used in conjunction with intelligence-gathering operations, bypass recons, breaching, and clearing operations. The types of detection methods include visual, physical, electronic, and mechanical.</p>
<p>JIEDDO Weapons Technical Intelligence IED Lexicon (Oct 2012)</p> <p>Closest Definition: Method of Identification The manner in which a unit located a device, components or improvised weapon via visual observation, working animal, sensor, or human tip.</p>
<p>UN International Ammunition Technical Guideline IATG 01.40 (May 13)</p> <p>Related Information: Explosive Ordnance Disposal The detection, identification, evaluation, render safe, recovery and final disposal of unexploded explosive ordnance.</p>
<p>United Nations Infantry Battalion Manual Volume 2 (Aug 12)</p> <p>To locate an IED either deliberately or by chance and to put into place appropriate procedures for teams to follow, such as, marking, evacuation, cordoning and liaison with the IED-Defeat (IEDD) team when it arrives to undertake EOD action. Such action should be regarded as 'passive' and not be seen as an offensive EOD action.</p>
<p>Russia-NATO shared terminology</p> <p>Closest Definition: Detector</p> <p>A device or system, including the observation of living organisms, employed to recognize the emergence, presence or absence of warfare events or hazards.</p> <p>детектор Устройство или система, в том числе средство наблюдения за живыми организмами, применяемое для регистрации появления, присутствия или отсутствия военных событий или опасностей, связанных с применением химического, биологического, радиологического и ядерного оружия</p>
<p>Mines Advisory Group</p> <p>Closest definition: Locate Many of MAG's workforce are amputees who, having recovered from landmine accidents and despite disability, have gone on to become 'deminers' - people who locate and destroy landmines and other explosive weapons.</p>
<p>Spanish Civil Guard</p> <p>Searching for and locating devices</p>
<p>US Joint IED Operations Device Operations</p> <p>The ability to perceive, utilizing technologies or natural sensory abilities, information, activities, material, or persons, potentially related to a friendly, neutral or threat network.</p>

Concept for Countering Improvised Explosive Devices in EU-led military operations

Detection includes all activities involved in the detection, identification and location of IEDs. The aim is to detect devices as early as possible. Technologies and standoff detection are key enablers, but the importance of good training and personnel with greater levels of experience must not be overlooked.

Mobility Support – Route and Area Clearance - Version 2

The discovery by any means of the presence of a person, object or phenomenon of potential military significance. In the context of demining, the term refers to the discovery by any means of the presence of mines or unexploded ordnance.

COMMENTS

The NATO term is adequate and covers the essential elements. The fact that confirmation of suspect IED is mentioned adds to the overall depth of the definition.

The other definitions are not so specific but closest is the Spanish Civil Guard.

Other source materials do not just define detection but expand it to include other EOD/IEDD actions, methods of detection or expand it outside the realm of C-IED into general warfare.

The UN infantry manual is incorrect to label IEDD as IED Defeat. The term is IED Disposal.

RECOMMENDATIONS

The definition of the concept of detect as regards C-IED is adequately covered in the NATO definition.

It may be useful to cross reference this basic definition with search related terms.

Electronic Countermeasures [NATO AJP 3.15 / AAP-6]

That division of electronic warfare involving actions taken to prevent or reduce an enemy's effective use of the electromagnetic spectrum through the use of electromagnetic energy. There are three subdivisions of electronic countermeasures: electronic jamming, electronic deception and electronic neutralization.

Inter-service Improvised Explosive Device Disposal Operations on Multinational Deployments – A Guide for Staff Officers

Closest Definition

Where there is an RC or influence-fusing threat, ECM as a form of Force Protection is to be considered¹⁰. This specialized area is the provenance of Electronic Warfare specialists and specific regulations.

Russia-NATO shared terminology

Inferred Definition: The Prevention of Electronic Warfare.

Mobility Support – Route and Area Clearance - Version 2

That division of electronic warfare involving actions taken to prevent or reduce an enemy's effective use of the electromagnetic spectrum through the use of electromagnetic energy. There are three subdivisions of electronic countermeasures: electronic jamming, electronic deception and electronic neutralization.

COMMENTS

There is general confusion here between the terms "electronic Countermeasures and electronic Warfare.

Electronic warfare is a more general term which would have application to AtN operations.

Electronic countermeasures are more applicable to defeating the IED.

RECOMMENDATIONS

There is a need here to define both these concepts in a more specific way.

The NATO definitions of both are the current best option.

Electronic Warfare [NATO AJP 3.15]

Military action to exploit the electromagnetic spectrum encompassing: the search for, interception and identification of electromagnetic emissions, the employment of electromagnetic energy, including directed energy, to reduce or prevent hostile use of the electromagnetic spectrum, and actions to ensure its effective use by friendly forces.

NATO AAP-6

Electromagnetic spectrum encompassing: the search for, interception and identification of electromagnetic emissions, the employment of electromagnetic energy, including directed energy, to reduce or prevent hostile use of the electromagnetic spectrum, and actions to ensure its effective use by friendly forces.

JIEDDO Attack the Network Lexicon (May 2011)

Electronic Warfare (EW) are those military actions involving the use of electromagnetic and directed energy to control the electromagnetic spectrum or to attack the enemy. Electronic warfare consists of three functions: electronic attack, electronic protection, and electronic warfare support. Some EW actions are successful in disrupting IEDs.

Russia-NATO shared terminology

Military action which intercepts and identifies electromagnetic emissions and seeks to reduce or prevent hostile use of the electromagnetic spectrum.

радиоэлектронная борьба (РЭБ)

Действия войск по перехвату и опознаванию источников электромагнитного излучения, а также снижению эффективности или предотвращению использования спектра электромагнитного

COMMENTS

There is general confusion here between the terms "electronic Countermeasures and electronic Warfare.

Electronic warfare is a more general term which would have application to AtN operations.

Electronic countermeasures are more applicable to defeating the IED.

RECOMMENDATIONS

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The NATO definitions of both are the current best option.

Explosive Ordnance [NATO AJP 3.15]

All munitions containing explosives, nuclear fission or fusion materials and biological and chemical agents. This includes bombs and warheads; guided and ballistic missiles; artillery, mortar, rocket and small arms ammunition; all mines, torpedoes and depth charges, demolition charges; pyrotechnics; clusters and dispensers; cartridge and propellant actuated devices; electro-explosive devices; clandestine and improvised explosive devices; and all similar or related items or components explosive in nature.

NATO AAP-6

All munitions containing explosives, nuclear fission or fusion materials and biological and chemical agents. This includes bombs and warheads; guided and ballistic missiles; artillery, mortar, rocket and small arms ammunition; all mines, torpedoes and depth charges, demolition charges; pyrotechnics; clusters and dispensers; cartridge and propellant actuated devices; electro-explosive devices; clandestine and improvised explosive devices; and all similar or related items or components explosive in nature.

NATO Route Clearance Study Draft 3

All munitions containing explosives, nuclear fission or fusion materials and biological and chemical agents. This includes bombs and warheads; guided and ballistic missiles; artillery, mortar, rocket and small arms ammunition; all mines, torpedoes and depth charges, demolition charges; pyrotechnics; clusters and dispensers; cartridge and propellant actuated devices; electro-explosive devices; clandestine and improvised explosive devices; and all similar or related items or components explosive in nature.

JIEDDO Weapons Technical Intelligence IED Lexicon (Oct 2012)

Closest Definition: Munition

A complete device charged with explosives, propellants, pyrotechnics, initiating composition or chemical, biological, radiological or nuclear material, for use in military operations, including demolitions.

UN International Ammunition Technical Guideline IATG 01.40 (May 13)

All munitions containing explosives, nuclear fission or fusion materials and biological and chemical agents. This includes bombs and warheads; guided and ballistic missiles; artillery, mortar, rocket and small arms ammunition; all mines, torpedoes and depth charges; pyrotechnics; clusters and dispensers; cartridge and propellant actuated devices; electro-explosive devices; clandestine and improvised explosive devices; and all similar or related items or components explosive in nature.

Enhancing civilian protection from use of explosive weapons in populated areas: Building a policy and research agenda. John Borrie and Maya Brehm

Nearest Definition: Explosive Weapons

By 'explosive weapons' we mean weapons that generally consist of a casing with a high-explosive filling and whose destructive effects result mainly from the blast wave and fragmentation produced by detonation. For example, mortar bombs, artillery shells, aircraft bombs, rocket and missile warheads, cluster submunitions, and many IEDs fall within this technological category, the boundaries of which are yet to be formally defined in international law and policy

Action on Armed Violence

Includes both air-dropped and ground-launched machine manufactured explosive weapons, such as aircraft bombs, artillery, mortars etc.

Mines Advisory Group

Ordnance means explosive weapons such as bombs, rockets, missiles, mortars and grenades.

Colombian Army

An item susceptible to explode. A body or substance with properties which allow for its use in war. Body or mixture which, under certain conditions, can rapidly produce a large amount of gasses by violent mechanical or thermal effects.

Lo susceptible de hacer explosión Cuerpo o substancia que con tal propiedad se emplea en la guerra. Cuerpo o mezcla que, en determinadas condiciones, puede producir rápidamente una gran cantidad de gases con violentos efectos mecánicos o térmicos.

US Joint IED Operations Device Operations

Munitions, ammunition or demolition charges containing explosives, propellants, pyrotechnics, initiating composition, or nuclear, biological, or chemical material for use in military operations.

Mobility Support – Route and Area Clearance - Version 2

All munitions containing explosives, nuclear fission or fusion materials and biological and chemical agents. This includes bombs and warheads; guided and ballistic missiles; artillery, mortar, rocket and small arms ammunition; all mines, torpedoes and depth charges, demolition charges; pyrotechnics; clusters and dispensers; cartridge and propellant actuated devices; electro-explosive devices; clandestine and improvised explosive devices; and all similar or related items or components explosive in nature.

COMMENTS

It is debatable if explosive ordnance should include IED. Generally explosive ordnance relates to items of a military manufacture nature and originally applied mainly to weapons and ammunition. The term IED was originally coined to differentiate IED from military explosive ordnance. However, with many IEDs using explosive ordnance as a main explosive charge, then it may be appropriate to include them in this definition.

Consideration may need to be given to linking this to a definition of the term, "military munition". Is there a difference between that and explosive ordnance? Where does the term UXO fit into this definition?

There is however a term for explosive ordnance disposal and for IED disposal intimating that they are different categories of problem.

The NATO and UN IATG both use the same definition.

Mine Advisory Group (MAG) and Action on Armed Violence limit their definitions to military explosive ordnance.

The Colombian definition is for explosives not necessarily explosive ordnance. No mention is made of generic types and it basically describes explosive effects.

RECOMMENDATIONS

Consider defining Explosive Ordnance (EO) without including IED but commenting that IED may incorporate EO.

Explosive Ordnance Disposal [NATO AJP 3.15]

The detection, identification, on-site evaluation, rendering safe, recovery and final disposal of unexploded explosive ordnance. It may also include explosive ordnance, which has become hazardous by damage or deterioration.

NATO AAP-6 The detection, identification, on-site evaluation, rendering safe, recovery and final disposal of unexploded explosive ordnance.
NATO Route Clearance Study Draft 3 The detection, identification, on-site evaluation, rendering safe, recovery and final disposal of unexploded explosive ordnance. It may also include explosive ordnance, which has become hazardous by damage or deterioration.
UN International Ammunition Technical Guideline IATG 01.40 (May 13) The detection, identification, evaluation, render safe, recovery and final disposal of unexploded explosive ordnance. EOD may also include the rendering safe and/or disposal of such explosive ordnance which have become hazardous by damage or deterioration, when the disposal of such explosive ordnance is beyond the capabilities of those personnel normally assigned the responsibility for routine disposal. The level of EOD response is dictated by the condition of the ammunition, its level of deterioration and the way that the local community handles it.
United Nations Infantry Battalion Manual Volume 2 (Aug 12) Keep EOD team centrally and employ, where there is a suspicion or actual existence of threat, to carry out reconnaissance, locate, disarm/neutralize and destroy any unexploded devices, booby traps or IEDs.
Russia-NATO shared terminology The process of rendering safe, neutralizing, recovering, removing or destroying mines. обезвреживание (утилизация) мин Процесс нейтрализации, приведения в безопасное состояние, сбора, перемещения или уничтожения мин.
Landmine & Cluster Munition Monitor The detection, identification, evaluation, render safe, recovery, and disposal of explosive ordnance.
Action on Armed Violence Explosive weapons have been defined elsewhere as including both explosive ordnance and improvised explosive devices, weapons that use blast and fragmentation to kill and injure people in the area around the point of detonation. Because they affect an area, and because they often need to be projected to a target (which produces risks of inaccuracy), it has been shown that explosive weapons are prone to causing high levels of civilian harm when used in populated areas. Such weapons have the capacity to harm multiple people within their area of affect, and have effects that are difficult to limit or apply with precision.
Mobility Support – Route and Area Clearance - Version 2 The detection, identification, on-site evaluation, rendering safe, recovery and final disposal of unexploded explosive ordnance. It may also include explosive ordnance which has become hazardous by damage or deterioration

COMMENTS

There is general agreement in this definition between the various documents. Overall, the NATO definition is appropriate.

The definitions that differ from the majority are concerned with mines or with the humanitarian aspects of armed conflict in general and not specifically the C-IED fight.

RECOMMENDATIONS

Use the current NATO definition as the definitive one.

Explosive Ordnance Disposal Procedures [NATO AJP 3.15]

Those particular courses or modes of action taken by explosive ordnance disposal personnel for access to, diagnosis, rendering safe, recovery and final disposal of explosive ordnance or any hazardous material associated with an explosive ordnance disposal incident.

NATO AAP-6

Those particular courses or modes of action taken by explosive ordnance disposal personnel for access to, diagnosis, rendering safe, recovery and final disposal of explosive ordnance or any hazardous material associated with an explosive ordnance disposal incident.

UN International Ammunition Technical Guideline IATG 01.40 (May 2013)

The detection, identification, evaluation, render safe, recovery and final disposal of unexploded explosive ordnance. Explosive Ordnance Disposal (EOD) may also include the rendering safe and/or disposal of such explosive ordnance which have become hazardous by damage or deterioration, when the disposal of such explosive ordnance is beyond the capabilities of those personnel normally assigned the responsibility for routine disposal. The level of EOD response is dictated by the condition of the ammunition, its level of deterioration and the way that the local community handles it.

Landmine & Cluster Munition Monitor

Related Information: EOD is the detection, identification, evaluation, render safe, recovery, and disposal of explosive ordnance.

COMMENTS

The NATO definition is comprehensive and covers the full range of EOD actions.

Other definitions are more vague, not directly related or related only to IED work.

RECOMMENDATIONS

Use the current NATO definition.

Access Procedures [NATO AJP 3.15 / AAP-6]

Those actions taken to locate exactly and to gain access to unexploded explosive ordnance.

UN International Ammunition Technical Guideline IATG 01.40 (May 2011)

Related Information: Explosive Ordnance Disposal

The detection, identification, evaluation, render safe, recovery and final disposal of unexploded explosive ordnance. EOD may also include the rendering safe and/or disposal of such explosive ordnance which have become hazardous by damage or deterioration, when the disposal of such explosive ordnance is beyond the capabilities of those personnel normally assigned the responsibility for routine disposal. The level of EOD response is dictated by the condition of the ammunition, its level of deterioration and the way that the local community handles it.

COMMENTS

Few identified sources provide definitions for this term.

The NATO definition is accurate but relates only to unexploded explosive ordnance. Access procedures are also part of IEDD and the definition should reflect this.

Access procedures in IEDD also apply to more than just locating and getting to the IED. In manual disposal procedures, where the whole IED is in a container, such as a briefcase. Access procedures also relate to actions taken to get through the skin of the container and open up access to the firing switch and circuitry.

RECOMMENDATIONS

Re-write and expand the NATO definition to include IED and IEDD.

Diagnostic Procedures [NATO AJP 3.15 – AAP-6]

Those actions taken to identify and evaluate unexploded explosive ordnance.

UN International Ammunition Technical Guideline IATG 01.40 (May 2013)

Related Information: Explosive Ordnance Disposal

The detection, identification, evaluation, render safe, recovery and final disposal of unexploded explosive ordnance. EOD may also include the rendering safe and/or disposal of such explosive ordnance which have become hazardous by damage or deterioration, when the disposal of such explosive ordnance is beyond the capabilities of those personnel normally assigned the responsibility for routine disposal. The level of EOD response is dictated by the condition of the ammunition, its level of deterioration and the way that the local community handles it.

Landmine & Cluster Munition Monitor

Related Information: EOD is the detection, identification, evaluation, render safe, recovery, and disposal of explosive ordnance.

US Joint IED Ops Device Operations

Diagnose the device to determine its components and how they function

COMMENTS

The NATO definition again only relates to UXO but diagnostic procedures are also part of IEDD.

The terms 'identify' and 'evaluate' within the NATO definition are appropriate but perhaps a bit too general.

The US Joint Operations document defines the purpose of diagnostics related to IED more precisely by stating the identification of components and how they function.

RECOMMENDATIONS

Combine the definitions from NATO and the US IED Operations manuals to incorporate IED and the specific purpose of diagnostics in IEDD.

A suggested definition is:

"Those actions taken to evaluate the risk and danger from UXO and IED by identifying their components (explosive and non-explosive) and their method of functioning"

Render Safe Procedures [NATO AJP 3.15]

A Render Safe Procedure (RSP) is an EOD action conducted by an appropriately trained operator, it means to apply special EOD methods and tools to provide for the interruption of functions or separation of essential components of UXO to prevent an unacceptable detonation. A RSP has a high level of assurance but requires time to conduct. It allows the best chance of explosive ordnance components to be recovered in a manner suitable for subsequent exploitation. Consequently it may provide opportunities to attack the networks

NATO AAP-6

The portion of the explosive ordnance disposal procedures involving the application of special explosive ordnance disposal methods and tools to provide for the interruption of functions or separation of essential components of unexploded explosive ordnance to prevent an unacceptable detonation.

UN International Ammunition Technical Guideline IATG 01.40 (May 2013)

The application of special explosive ordnance disposal methods and tools to provide for the interruption of functions or separation of essential components to prevent an unacceptable detonation

Landmine & Cluster Munition Monitor

Related Information: EOD is the detection, identification, evaluation, render safe, recovery, and disposal of explosive ordnance.

Colombian Army

Closest Definition: Disarm

Action to destroy, terminate or dismantle an object in order to prevent an activity from occurring.

Una acción para destruir, terminar o desarmar un objeto con el fin de prevenir que una actividad pase

US Joint IED Operations Device Operations

The portion of the explosive ordnance disposal procedures involving the application of special explosive ordnance disposal methods and tools to provide for the interruption of functions or separation of essential component of unexploded explosive ordnance to prevent an unacceptable detonation.

Mobility Support – Route and Area Clearance - Version 2

The application of special EOD methods and tools to provide for the interruption of functions or separation of essential components to prevent an unacceptable detonation

COMMENTS

The NATO definition is comprehensive and covers the essential elements of a Render Safe Procedure (RSP). However, it relates to UXO and not specifically IED. The procedure of RSP applies to both UXO and IED, and in a compendium of C-IED terms, then IED should be specified.

It is misleading to imply that an RSP, while having a high level of assurance, requires time to conduct. The implication here is that the time can be excessive. This is not always the case and an RSP for an IED can be just as quick as a Blow In Place (BIP) action.

The last sentence of the definition "*Consequently it may provide opportunities to attack the networks*" is superfluous.

Alternate definitions from other documents are largely compatible. Most mention trained personnel, special equipment and special procedures. All mention separation of function or components.

RECOMMENDATIONS

Reword the NATO definition to:

- Relate specifically to IED/IEDD.
- Remove the comment about time to complete an RSP but retain the high level of assurance comment.
- Remove the last sentence.

Recovery Procedures [NATO AJP 3.15 / AAP-6]

Those actions taken to recover unexploded explosive ordnance.

UN International Ammunition Technical Guideline IATG 01.40 (Oct 11)

Related Information: Explosive Ordnance Disposal

The detection, identification, evaluation, render safe, recovery and final disposal of unexploded explosive ordnance. EOD may also include the rendering safe and/or disposal of such explosive ordnance which have become hazardous by damage or deterioration, when the disposal of such explosive ordnance is beyond the capabilities of those personnel normally assigned the responsibility for routine disposal. The level of EOD response is dictated by the condition of the ammunition, its level of deterioration and the way that the local community handles it.

Russia-NATO shared terminology

The extraction or salvage of explosives as nearly intact as possible to permit further intelligence gathering.

подъем мины в состоянии максимальной сохранности для проведения последующего исследования в разведывательных целях и (или) оценки.

Landmine & Cluster Munition Monitor

Related Information: EOD is the detection, identification, evaluation, render safe, recovery, and disposal of explosive ordnance.

Mines Advisory Group

Related Information: Mines Advisory Group (MAG) uses the term 'remnants of conflict' to describe all items recovered and destroyed as part of its humanitarian disarmament activities, which include anti-personnel and anti-vehicle mines, explosive remnants of war (ie. any type of explosive weapons, including ammunition, but not including landmines), abandoned and unexploded ordnance, and Small and Light Weapons (SALW). This term has been developed to reflect more accurately the broad range of clearance activities undertaken by MAG

COMMENTS

This is not a common term in C-IED. In IEDD terms, generally an RSP followed by final disposal procedures, takes the place of recovery procedures.

RECOMMENDATIONS

This is probably an unnecessary term in the context of C-IED operations.

Field Exploitation [NATO AJP 3.15]

Field exploitation (level 1) is the collection, processing, speedy dissemination, and dynamic re-tasking of intelligence capability close to the point of capture. It records the details of an IED Event and preserves, describes and recovers physical, technical and forensic material. Where individuals are appropriately trained and equipped, forensic and biometric data such as fingerprints, saliva swabs and iris scans can be captured from suspects, detainees and volunteers. Outputs typically take hours or a few days to produce. Full exploitation may require more detailed investigation at theatre level. Of particular interest are digital devices, communications equipment⁴³ and IED components as well as identification documents. Field exploitation should normally be conducted by a WIT or, if one is not available, partial exploitation may be undertaken by Explosive Ordnance Disposal (EOD) teams or first responders to the IED Event. As part of the target development process, staffs should consider deliberate site collection from the target area during the finish⁴⁶ actions of the operating framework for executing the intelligence cycle. This may enable immediate follow-on activities in order to achieve tactical and operational surprise.

Military Committee Land Standardization Board STANAG 2298 C-IED Edition 1 NATO Weapons Intelligence Team Capabilities and Standards

Related Information: Level 1 (L1) conducted by WIT, is the on site, initial exploitation capability and the low level technical and tactical analysis support to the local commander on the ground.

Interservice IED Disposal Operations on Multinational Deployments - A Guide for Staff Officers

Related Information: Technical Exploitation and Forensics are a matter of expert assistance and may utilise a combination of in theatre, host nation or reach back assistance.

JIEDDO Attack the Network Lexicon (May 2011)

Related Information: Tactical Exploitation Teams deploy from the C-IED task forces on short-notice to provide site exploitation.

Site exploitation are those activities that recognize, collect, process, preserve, or analyze information, personnel, and materiel found during the conduct of C-IED operations.

EU - Concept for Countering Improvised Explosive Devices (C-IED) in EU-led military operations (Sep 2012)

Level 1 Exploitation. This involves the collection and first look analysis of information, evidence, remains of the IED etc at the incident site. The primary effort of Level 1 exploitation should be the detailed documentation of the incident and the incident site including pictures, measurements (crater, land marks, remnants of explosives etc), documentation of inflicted damage to equipment, personnel and immediate environment as well as the collection of Devices, Materials, Artifacts and Traces (DMAT) for subsequent forensic examination. The results can be partly fed immediately into new friendly TTPs but also as the primary input data for further exploitation at levels 2 and 3. All data not collected on site is lost to further analysis. Level 1 Exploitation usually takes place at unit level and is conducted by a WIT or their national equivalent, noting that all forensic material collected should be preserved for further analysis at higher levels.

COMMENTS

NATO AJP 3.15 gives a good comprehensive definition of Field (Level1) Exploitation. The first sentence of the definition is an excellent capture of the essential details. Subsequent explanation then outlines means, methods and sources.

The fact that outputs can be tailored to the depth of information required and its speed of delivery, thereby taking hours or days, is a useful addition to the definition.

It is arguable that biometric data collection sources should include victims as well as the three others mentioned (suspects, detainees and volunteers).

There is reference to the possibility of fuller exploitation and deeper investigation done at theatre level (Level 2).

The comment on the intelligence cycle and the possibility of follow on activities to create tactical and operational surprise is an effective contribution to the definition.

The EU Concept for Countering IED also contains an effective definition. In some ways it is a simpler definition but no less accurate. The reference to Devices, Materials, Artifacts and Traces (DMAT) is a useful acronym.

The EU definition also mentions deeper analysis being available at Level 2 and Level 3. It is weak however in that the definition does not specifically mention the intelligence cycle and subsequent targeting that can come from fast Level 1 exploitation.

RECOMMENDATIONS

Use the NATO AJP 3.15 as the primary definition but perhaps include reference to DMAT.

Final Disposal Procedures [NATO AJP 3.15 / AAP-6]

The final disposal of explosive ordnance which may include demolition or burning in place, removal to a disposal area or other appropriate means.

UN International Ammunition Technical Guideline IATG 01.40 (May 13)

Related Information: Explosive Ordnance Disposal

The detection, identification, evaluation, render safe, recovery and final disposal of unexploded explosive ordnance. EOD may also include the rendering safe and/or disposal of such explosive ordnance which have become hazardous by damage or deterioration, when the disposal of such explosive ordnance is beyond the capabilities of those personnel normally assigned the responsibility for routine disposal. The level of EOD response is dictated by the condition of the ammunition, its level of deterioration and the way that the local community handles it.

United Nations Infantry Battalion Manual Volume 2 (Aug 12)

Closest Definition: Weapons Destruction

Burning, shredding and cutting are the simpler methods, whereas industrial disposal and dumping at high seas are more resource consuming methods. Burning is a cheap destruction method for non-explosive items such as small arms, though it is not a recommended option since undamaged metal parts may remain useable.

Russia-NATO shared terminology

All organizational, technological, economic and environmental measures involved in reprocessing military equipment or converting it to civilian use. Also called disposal of matériel

утилизация вооружения и военной техники

Комплекс организационно-технических, экономических, технологических и экологических мероприятий, обеспечивающих переработку военной техники или придания ей других функций с целью использования в качестве гражданской техники.

Landmine & Cluster Munition Monitor

Related Information: EOD is the detection, identification, evaluation, render safe, recovery, and disposal of explosive ordnance.

Mines Advisory Group

Related Information: Mines Advisory Group (MAG) uses the term 'remnants of conflict' to describe all items recovered and destroyed as part of its humanitarian disarmament activities, which include anti-personnel and anti-vehicle mines, explosive remnants of war (ie. any type of explosive weapons, including ammunition, but not including landmines), abandoned and unexploded ordnance, and Small and Light Weapons (SALW). This term has been developed to reflect more accurately the broad range of clearance activities undertaken by MAG

COMMENTS

This definition needs to be expanded to include IED aspects of the final disposal. The current NATO definition relates accurately to UXO but is too simplistic for IEDD.

RECOMMENDATIONS

Rewrite the definition to better reflect IEDD final disposal procedures.

False [NATO AJP 3.15]

Within C-IED an improvised explosive device event that is incorrectly identified, though reported in good faith as an improvised explosive device subsequently categorised as a false alarm after positive action

JIEDDO Weapons Technical Intelligence IED Lexicon (Oct 2012)

An IED related incident that is incorrectly identified though reported in good faith as an IED, which is subsequently categorized as a false alarm after positive Explosive Ordnance Disposal (EOD) action.

Russia-NATO shared terminology

Closest Definition: False Information
Information containing reports of non-existent events or facts.

ложная информация, дезинформация
Информация, содержащая сведения о несуществующих событиях и фактах

US Joint IED Ops Device Operations

An incident incorrectly identified, though reported in good faith as an improvised explosive device subsequently categorized as a false alarm after positive action

Weapons Technical Intelligence Improvised Explosive Device Lexicon

IED related incident that is incorrectly identified though reported in good faith as an IED, which is subsequently categorized as a false alarm after positive Explosive Ordnance Disposal (EOD) action.

COMMENTS

All relevant definitions are consistent and accurate.

Some definitions refer to positive EOD actions. In a C-IED context, this should perhaps be altered to positive IEDD actions.

RECOMMENDATIONS

Retain the current NATO definition.

Some definitions refer to positive EOD actions. In a C-IED context, this should perhaps be altered to positive IEDD actions.

Find [NATO AJP 3.15]

An item of explosive ordnance, weapons or other terrorist / insurgent or military equipment / resources, found either during a planned search or during other operations. Hides, humans, intelligence materials and information may also constitute a find.

JIEDDO Weapons Technical Intelligence IED Lexicon (Oct 2012)

An IED related incident that involves the discovery and/or recovery of an IED not yet emplaced or employed, IED components, and/or IED paraphernalia.

Concept Interarmees De Fouille Operationnelle

The set of activities that can be conducted by the armed forces to find resources, information, material or people hidden by the adversary

US Joint IED Operations Device Operations

An IED incident that involves the discovery or turning in of devices or IED components in a temporary and/or transitory location.

Weapons Technical Intelligence Improvised Explosive Device Lexicon

An IED related incident that involves the discovery and/or recovery of an IED not yet emplaced or employed, IED components, and/or IED paraphernalia.

Allied Tactical Doctrine for Military Search

A Search find constitutes an item of explosives, weapons or other terrorist / insurgent or military equipment / resources, found either during a planned search or during other operations. Hides, humans, intelligence materials and information may also constitute a search find.

COMMENTS

The NATO definition should include some IED specific detail, along the lines of the WIT lexicon definitions but also retain its references to explosives and other items such as intelligence materials etc.

No definition makes reference to an unoccupied find and an occupied find. In C-IED terms, each presents a slightly different set of circumstances and a different threat assessment.

RECOMMENDATIONS

Refine the NATO definition to include more IED specific information.

Add definitions for occupied and an unoccupied finds.

Forensics [STANAG 2298]

The scientific data and procedures that pathologists, laboratory, technicians, and other scientists work with - in order to solve crimes.

NATO - Allied Tactical Doctrine for Military Search

Forensic Evidence. Those items of evidence that cannot be directly attributed to a suspect by possession must be attributed through forensics means; this is known as forensic evidence. Forensic evidence will require some form of specialised exploitation and assistance and may comprise the following: a. Explosives Residues. Explosives contain volatile compounds which are relatively easily detected. Residues can be recovered from surfaces that have been in contact with weapons, ammunition and explosives and may include skin and clothing. b. CBRN related materials. Such as chemical gases and nuclear radiation. c. Fibres. All clothing worn by individuals sheds fibres (some more than others). It is possible to recover fibres from a scene and link them to the clothing of an individual. d. Impressions. Items such as tools leave unique impressions when used, as do footwear, vehicle tyres etc. These impressions can be recovered and may be potential evidence.

NATO - Interservice IED Disposal Operations on Multinational Deployments - A Guide for Staff Officers

Related Information: Technical Exploitation and Forensics are a matter of expert assistance and may utilise a combination of in theatre, host nation or reach back assistance.

JIEDDO Attack the Network Lexicon (May 2011)

Forensics is the application of multidisciplinary science capabilities to establish facts.

Concept Interarmees De Fouille Operationnelle PIA 03.161

Forensic science is defined as the set of principles science and technology applied to the criminal investigation, to prove the existence of a crime and assist the court in determining the identity of the author and his procedure

COMMENTS

This term is not well defined in terms of C-IED operations.

Most of the definitions relate to the establishment of facts, attained by scientific means, to solve crime. This is obviously a part of C-IED but makes no reference to intelligence gathering, the intelligence cycle, effective targeting and follow-on operations.

The definitions are accurate in themselves but only relate to crime.

The definition most directed towards C-IED is given in the NATO Allied Tactical Doctrine for Military Search. This definition is more precise but is limiting in its description of what forensics is. It mentions Explosive residue, CBRN materials, Fibres and tool impressions as the primary sources of forensic evidence. This is not comprehensive. Again the use of the general term DMAT, may provide a better means of describing forensic sources.

RECOMMENDATIONS

In C-IED operations, Forensics is part of, and included in C-IED exploitation at all three levels. Any definition should include this fact.

The use of the term DMAT, as produced in definitions of C-IED exploitation, above, would help to establish this relationship between forensics and exploitation.

Hide [NATO AJP 3.15]

A space in which resources are concealed. It may be used before, during or after an incident and be static or mobile. For C-IED this means the same as cache.

JIEDDO Weapons Technical Intelligence IED Lexicon (Oct 2012)

Closest Definition: Find/Cache

An IED related incident that involves the discovery and/or recovery of an IED not yet emplaced or employed, IED components, and/or IED paraphernalia.

Russia-NATO shared terminology

See: Cache

ALLIED TACTICAL DOCTRINE FOR MILITARY SEARCH

A hide is a space in which resources are concealed. It may be used before, during or after an incident and be static or mobile.

COMMENTS

The NATO definition is accurate and sufficient. It could be expanded to include the fact that hides can also be long term or short term. In some circumstances, a short term hide can be described as a transit hide.

RECOMMENDATIONS

Consider expanding the definition to reflect different types of hide.

Hoax [NATO AJP 3.15]

Within C-IED an IED event that involves a device fabricated to look like an improvised explosive device, or a false warning of the presence of an improvised explosive device, intended to purposely and maliciously create fear or elicit a response.

JIEDDO Weapons Technical Intelligence IED Lexicon (Oct 2012)

An IED related incident that involves a device fabricated to look like an IED and that is intended to simulate one in order to elicit a response.

Russia-NATO shared terminology

Closest Definition: Fake IED
Fake ID
муляж СВУ

US Joint IED Operations Device Operations

An IED incident that involves a device fabricated to look like an IED and is intended to purposely simulate one in order to elicit a response

COMMENTS

The current NATO definition is too convoluted in its comment about a hoax being "intended to purposely and maliciously create fear and elicit a response."

Alternative definitions that just comment on ""to elicit a response" are more consistent.

RECOMMENDATIONS

Alter the NATO definition to remove the aspect of creating fear and just state that it is to elicit a response.

Improvised Explosive Device [NATO AJP 3.15]

A device placed or fabricated in an improvised manner incorporating destructive, lethal, noxious, pyrotechnic or incendiary chemicals and designed to destroy, incapacitate, harass or distract. It may incorporate military stores, but is normally devised from non-military components.

NATO AAP-6

A device placed or fabricated in an improvised manner incorporating destructive, lethal, noxious, pyrotechnic or incendiary chemicals and designed to destroy, incapacitate, harass or distract. Note: It may incorporate military stores, but is normally devised from non-military components.

NATO Route Clearance Study Draft 3

A device placed or fabricated in an improvised manner incorporating destructive, lethal, noxious, pyrotechnic or incendiary chemicals and designed to destroy, incapacitate, harass or distract. It may incorporate military stores, but is normally devised from non-military components.

Inter-service Improvised Explosive Device Disposal Operations on Multinational Deployments – A Guide for Staff Officers

Improvised Explosive Devices (IEDs) can be a component of terrorism, criminality, disorder and insurgency. They are an element of asymmetric warfare but exist across the spectrum of conflict and peacetime environments and are common in the Contemporary Operating Environment. IEDs create restrictions to movement and force protection, generate fear and uncertainty and have many other impacts; they hinder and may ultimately prevent the restoration of normality. IEDs allow an enemy to both kill and harass and they serve to wear down our own forces, the other institutions of law and order and the general population. IEDs can be simple or complex in their design. In some theatres the existence of Explosive Remnants of War can provide the IED builder with large quantities of explosive stores and the means to initiate them. Further components in the form of household electronics and telecommunications equipment are also readily available, and comparatively cheap. It is even possible that some hostile nations may engage their national scientific resources and explosives expertise in IED design and construction.

JIEDDO Weapons Technical Intelligence IED Lexicon (Oct 2012)

A device placed or fabricated in an improvised manner incorporating destructive, lethal, noxious, pyrotechnic or incendiary chemicals and designed to destroy, incapacitate, harass or distract. It may incorporate military stores, but is normally devised from non-military components. Refers to a type of IED incident that involves a complete functioning device.

UN International Ammunition Technical Guideline IATG 01.40 (May 13)

A device placed or fabricated in an improvised manner incorporating explosive material, destructive, lethal, noxious, incendiary, pyrotechnic materials or chemicals designed to destroy, disfigure, distract or harass. They may incorporate military stores, but are normally devised from non-military components.

UN Landmine and Explosive Remnants of War Safety Handbook

A manually placed explosive device, normally 'home-made' and adapted in some way to kill, injure, damage property or create terror.

United Nations Infantry Battalion Manual Volume 2 (Aug 12)

An IED is a device placed or fabricated in an improvised manner incorporating destructive, -lethal, noxious, pyrotechnic, or incendiary chemicals and designed to destroy, incapacitate, harass, or distract. It may incorporate military stores, but is normally devised from non-military components.

European Defence Agency - <http://www.eda.europa.eu/projects/projects-search/counter-ied>

Related Information: IEDs have become the weapon of choice of adversaries and this phenomenon is likely to continue for decades. IEDs are fabricated in an improvised manner and designed to destroy property or incapacitate people and vehicles. The design of IEDs and the trigger systems used range from the 'simple' to the technologically developed. The production costs in general are low, and the components used include military ammunition like mines or artillery shells as well as freely available chemical components that can be combined to make explosives.

Europol - <https://www.europol.europa.eu/>

No definition of IED is provided however the organization makes a distinction between IEDs and Improvised Incendiary Devices (IID). No Definition of an IID is provided.

Landmine & Cluster Munition Monitor

A device placed or produced in an improvised manner incorporating explosives or noxious chemicals. An IED may be victim-activated or command-detonated. Victim-activated IEDs are banned under the Mine Ban Treaty, but command-detonated IEDs are not.

Action on Armed Violence

Includes roadside bombs, car bombs, suicide bombs etc.

US Joint IED Operations Device Operations

A device placed or fabricated in a creative manner incorporating destructive, lethal, noxious, pyrotechnic, or incendiary chemicals and designed to destroy, incapacitate, harass, deny mobility, gather intelligence, or distract. It may incorporate military stores, but is normally devised from nonmilitary components. Refers to a complete functioning device.

Concept for Countering Improvised Explosive Devices in EU-led military operations

A device placed or fabricated in an improvised manner incorporating destructive, lethal, noxious, pyrotechnic or incendiary chemicals and designed to destroy, incapacitate, harass or distract. It may incorporate military stores, but is normally devised from non-military components.

Mobility Support – Route and Area Clearance - Version 2

A device placed or fabricated in an improvised manner incorporating destructive, lethal, noxious, pyrotechnic or incendiary chemicals and designed to destroy, incapacitate, harass or distract. It may incorporate military stores, but is normally devised from non-military components.

COMMENTS

Most definitions are consistent. Several definitions expand and incorporate more about how IEDs are used rather than just what they are. This is inappropriate in a definition.

The WIT lexicon allows for the term IED to be used as a reporting classification (as opposed to False, Find, and Hoax etc.)

Several definitions refer to the fact that an IED is normally devised from non-military components. This is perhaps rather historic and not necessarily reflective of modern IEDs. In regions where there has been general conflict involving military munitions, IEDs will often include military components. Mainly these are main charges using artillery shell, anti-tank mines, mortar bombs, hand grenades and demolition charges.

RECOMMENDATIONS

Maintain the current NATO definition. Drop the term "normally" as regards non-military components. Comment that an IED ...

"May incorporate non-military and military components according to availability."

Improvised Explosive Device Disposal [NATO AJP 3.15]

The location, identification, rendering safe and final disposal of improvised explosive devices.

JIEDDO Attack the Network Lexicon (May 2011)

Explosive Ordnance Disposal units are comprised of personnel with special training and equipment who render explosive ordnance safe (such as bombs, mines, projectiles, and booby traps), make intelligence reports on such ordnance, and supervise the safe removal thereof.

UN International Ammunition Technical Guideline IATG 01.40 (May 2013)

The detection, identification, evaluation, render safe, recovery and final disposal of unexploded explosive ordnance. EOD may also include the rendering safe and/or disposal of such explosive ordnance which have become hazardous by damage or deterioration, when the disposal of such explosive ordnance is beyond the capabilities of those personnel normally assigned the responsibility for routine disposal. The level of EOD response is dictated by the condition of the ammunition, its level of deterioration and the way that the local community handles it.

United Nations Infantry Battalion Manual Volume 2 (Aug 12)

IED Defeat should be considered a component of EOD. IED Defeat operators are by extension EOD operators who have undergone specific selection and certified training to deal with the requirements of an IED Defeat task. It involves positive EOD actions against the IED or IED components once placed or found. These actions may include, but are not limited to, placing a disruptive charge, the use of cutting equipment or moving to a safe area for further action.

Mines Advisory Group

Related Information: Mines Advisory Group (MAG) uses the term remnants of conflict to describe all items recovered and destroyed as part of its humanitarian disarmament activities, which include anti-personnel and anti-vehicle mines, explosive remnants of war (i.e. any type of explosive weapons, including ammunition, but not including landmines), abandoned and unexploded ordnance, and Small and Light Weapons (SALW). This term has been developed to reflect more accurately the broad range of clearance activities undertaken by MAG

Spanish Civil Guard

The specific mission of this service consists in organizing, managing and conducting operations aimed at searching for, detecting, neutralizing and making safe explosive devices. This overall mission comprises the following basic tasks: acting in the reestablishment of security after a bomb threat

Concept Interarmees De Fouille Operationnelle

Treatment of explosives

COMMENTS

The NATO definition is sufficient. It could be broken down further into more functions such as access, diagnostics and forensic exploitation but this is probably unnecessary.

In the same way as EOD procedures are defined, mention could be made of specially trained operators, equipment and procedures.

The term IED Defeat, should be dropped from C-IED terminology. It adds nothing to the debate and knowledge levels. In some ways it is historic. It is important that IEDD means IED disposal and not IED defeat.

The Spanish Civil Guard definition makes good reference to the concept that the main purpose of IEDD is to reestablish security after an IED threat, although this would be better described as an IED event.

RECOMMENDATIONS

Continue with the current NATO definition but consider expanding it.

Improvised Explosive Device Event [NATO AJP 3.15]

An event that involves one or more of the following types of actions or activities in relation to improvised explosive devices: an explosion; an attack; an attempted attack; a find; a hoax; a false; or, a turn-in.

JIEDDO Attack the Network Lexicon (May 2011)

All IED Events/Incidents regardless of damage or casualty. Includes detonations without casualties, detonations with casualties, found and cleared, turn-ins, and interdiction.

JIEDDO Weapons Technical Intelligence IED Lexicon (Oct 2012)

An event that involves one or more of the following IED-related actions / activities: IED, Explosion, Find / Cache, Turn-In, Hoax, or False.

United Nations Infantry Battalion Manual Volume 2 (Aug 12)

An attack or accident involving an IED functioning

Colombian Army

Closest Definition: Terrorist Act Explosives

The act committed by any enemy using explosives, car bombs, against facilities, vehicles, companies, organizations, etc.

Es el acto que comete cualquier tipo de enemigo mediante la utilización de explosivos, carros bomba, en contra de instalaciones, vehículos, empresas, entidades, etc.

Concept for Countering Improvised Explosive Devices in EU-led military operations

An event that involves one or more of the following types of actions or activities in relation to IEDs: an explosion, an attack, an attempted attack, a find, a hoax or a turn in.

COMMENTS

The NATO definition is adequate.

The alternate definitions given by the WIT/WTI documents relate an IED event to the reporting classifications used to describe such events. This too is adequate.

The definition provided by the UN Infantry Battalion Manual Vol 2 is poor and should be avoided.

RECOMMENDATIONS

Continue with the current definition or bring it in line with the various WIT/WTI versions.

Improvised Explosive Device System [NATO AJP 3.15]

A system that comprises personnel, resources and activities and the linkages between them that are necessary to resource, plan, execute and exploit an improvised explosive device event.

Concept for Countering Improvised Explosive Devices in EU-led military operations

A system that comprises personnel, resources and activities and the linkages between them that are necessary to resource, plan, execute and exploit an IED event.

COMMENTS

This term, IED system, has possibly been superseded by the use of "IED network".

The NATO definition is an accurate summation of the factors involved in an IED system but "network" is a better term to replace system.

RECOMMENDATIONS

Rewrite as IED Network.

Matériel and Personnel Exploitation [NATO AJP 3.15]

The systematic collection and processing of information and dissemination of intelligence obtained as a result of tactical questioning, interrogation and the extraction of data from recovered matériel.

JIEDDO Weapons Technical Intelligence IED Lexicon (Oct 2012)

Closest Definition: Intelligence derived from the processes and capabilities that collect, exploit and analyze asymmetric threat weapons systems to enable material sourcing, support to prosecution, force protection and targeting of threat networks.

United Nations Infantry Battalion Manual Volume 2 (Aug 12)

Closest Definition: Questioning

Questioning is governed by mission-specific ROE. In any case, on request for identity and address, detainee's responses shall be recorded including decline/refusal to answer and the identity of UN personnel present at that time.

Russia-NATO shared terminology

Closest Definition: Interrogation

An examination or request for data from an individual

1. допрос;
2. запрос данных

Colombian Army

Closest Definition: Annex Intelligence

It is made before the order of operations and its purpose is to disseminate information about the enemy to instruct subordinate commands regarding the acquisition of information needed to plan and conduct the operation, which must be obtained prior to the initiation of an operation.

Se elabora antes de la orden de operaciones y su propósito es el de diseminar información esencial sobre el enemigo para instruir a los Comandos subordinados en lo referente a la adquisición de información necesaria para planear y conducir la operación, la cual debe ser obtenida con anterioridad a la iniciación en su comienzo.

COMMENTS

This term may be better as two separate terms, one for matériel and one for personnel.

The NATO definition, while it is adequate, is awkward and clumsy.

The JIEDDO WTI Lexicon definition is more precise but relates to weapons intelligence exploitation rather than personnel.

Definitions of similar phrases from alternate documents do not really provide an accurate description.

RECOMMENDATIONS

Rewrite the NATO definition:

First define the term "exploit/exploitation" then put that in the context of matériel and then personnel.

Include the purposes of exploitation in terms of C-IED operations.

Military Search [NATO AJP 3.15]

The management and application of systematic procedures and appropriate equipment to locate specified targets in support of military operations. Specified targets may include people, information and material resources employed by an adversary.

JIEDDO Attack the Network Lexicon (May 2011)

Deployed Capabilities and Reach Back Capabilities

Deployed capabilities are the personnel, tools, services, and material that are resident in theater versus the personnel, tools, services, and material that are available by reach back to the continental US for support. Reach back capabilities are those experts, tools, equipment, services, or material that are provided by organizations that are not forward deployed

United Nations Infantry Battalion Manual Volume 2 (Aug 12)

Closest Definition: Search

UN personnel are authorized to search detained persons for arms, ammunition, explosives, drugs and any other item that may cause harm or damage persons or property. Search will be conducted with respect and consideration of gender, age, and sensitivity to race, religion, culture and disability.

European Defence Agency - <http://www.eda.europa.eu/projects/projects-search/counter-ied>

Relevant Information: In Military Search, a five-year programme under Italian leadership was started and so far three courses have taken place, each in different aspects, two more are planned. Under an Irish lead, a course in Ground Sign Awareness has run and a Combat Tracking course is planned. Again under an Irish lead, two specialist IEDD courses have been run and a multi-national exercise is being conducted in Austria in June 2012.

European Defence Agency - [http://www.eda.europa.eu/info-hub/events/2011/06/27/default-calendar/countering-improvised-explosives-devices-\(cied\)-basic-search-course](http://www.eda.europa.eu/info-hub/events/2011/06/27/default-calendar/countering-improvised-explosives-devices-(cied)-basic-search-course)

Relevant Information: Military Search is subcategorized as Advanced and Intermediate, which require a formal capability development process and training, and Basic. All military personnel should be prepared to conduct Basic Search in the performance of their assigned missions and duties on a continuing basis. Basic Search is a key building block of the overall search capability and an important force protection measure.

Russia-NATO shared terminology

Closest Definition: special surveillance and reconnaissance

Reconnaissance and surveillance activities conducted by special operations forces, which complement theatre intelligence assets and systems by obtaining strategic and/or operational information

специальное наблюдение и разведка

Разведка и наблюдение, проводимые силами специальных операций, которые дополняют разведывательные силы, средства и технические системы на театре военных действий посредством получения стратегической и (или) оперативной информации

Spanish Civil Guard

Closest Definition: Intelligence Command The Intelligence Command Office is in charge of organizing, conducting and managing how to gather, receive, process, analyze and disseminate the relevant information for law and order in the context of GC daily tasks

Colombian Army

Organization responsible for directing the search effort, processes the information, intelligence production and dissemination to other agencies.

Organización encargada de dirigir el esfuerzo de búsqueda, procesa la información, producción de inteligencia y difusión a otras agencias

Allied Tactical Doctrine for Military Search

Military Search is the management and application of systematic procedures and appropriate equipment to locate specified targets in support of military operations. Specified targets may include people, information and material resources employed by an adversary. Military search is subcategorized as Advanced and Intermediate, which require formal training, and Basic.

COMMENTS

The NATO primary definition is precise and accurate. The key facts are that military searches are planned and systematic with known objectives.

In C-IED operations, it is important to stress that searches are not just for IED and components but also other intelligence sources.

It may be beneficial to define different types of military search.

Several of the alternate definitions indicate the different levels of search and the need for specific training. They also make the link between search and gaining intelligence.

RECOMMENDATIONS

Maintain the current NATO definition but consider expanding it by commenting on different types or levels of search.

Mitigation [NATO AJP 3.15]

Within C-IED technical, tactical and information actions undertaken to minimize the effects of an improvised explosive device event.

NATO Route Clearance Study Draft 3

Mitigation may include render-safe, blow-in-place procedures, demining, or bypassing the hazard area.

United Nations Infantry Battalion Manual Volume 2 (Aug 12)

Mitigation consists of detonation defensive measures such as blast/ballistic protection and standoff distance. These measures provide protection against IEDs should a detonation occur near UN peacekeeping personnel and facilities. Implementation of physical mitigation measures lowers the impact of an IED incident with the use of blast and ballistic protection and standoff distance.

Concept for Countering Improvised Explosive Devices in EU-led military operations

Mitigation employs technical, tactical and information measures to minimize the effects of a detonation on personnel, equipment and installations

Mobility Support – Route and Area Clearance - Version 2

Reducing risk posed by explosive event

COMMENTS

There is a difference in perspective in the various definitions of this term.

The NATO definition relates to an IED event while most other definitions specifically focus just on an explosion /detonation.

Traditionally, mitigation meant reducing the risk from a detonation but in the modern context of C-IED and threat network engagement, perhaps it is best to open it up to any IED event.

RECOMMENDATIONS

Retain the current NATO definition.

Neutralization [NATO AJP 3.15]

Within C-IED an effect to render explosive ordnance either temporarily ineffective or permanently ineffective.

NATO AAP-6

Closest Definitions: Technical Neutralization and Self Neutralization

A technical operation to render equipment temporarily unusable.

The rendering of a device inoperable, but not necessarily safe to handle. This process may be reversible.

NATO Route Clearance Study Draft 3

Reduces the risk posed by threat by using any methods.

Inter-service Improvised Explosive Device Disposal Operations on Multinational Deployments – A Guide for Staff Officers

Closest Definition: Disruption to the device or explosive event

JIEDDO Attack the Network Lexicon (May 2011)

The removal of explosive hazards

UN International Ammunition Technical Guideline IATG 01.40 (May 13)

To alter the state of a piece of ammunition or munition so that it cannot explode, for example by replacing safety devices such as pins or rods into an explosive item to prevent the fuse or igniter from functioning.

The act of replacing safety devices such as pins or rods into an explosive item to prevent the fuse or igniter from functioning.

Note: It does not make an item completely safe as removal of the safety devices will immediately make the item active again (c.f. disarm).

Note: A mine is said to be neutralized when it has been rendered, by external means, incapable of firing on passage of a target, although it may remain dangerous to handle.

European Defence Agency - <http://www.eda.europa.eu/info-hub/news/2014/09/16/counter-ied-experts-complete-european-guardian-exercise-in-vienna>

Manual neutralization refers to situations where a trained operator has to manually defuse an improvised explosive device. This occurs when it is not possible to tackle the device remotely, for example when the device is attached to a hostage or with chemical or even radiological material. It is one of the most mentally and technically challenging jobs performed by anyone in the armed forces, requiring high-level skills and training.

Landmine & Cluster Munition Monitor

Related Information: EOD is the detection, identification, evaluation, render safe, recovery, and disposal of explosive ordnance.

Mines Advisory Group

Related Information: Mines Advisory Group (MAG) uses the term remnants of conflict to describe all items recovered and destroyed as part of its humanitarian disarmament activities, which include anti-personnel and anti-vehicle mines, explosive remnants of war (i.e. any type of explosive weapons, including ammunition, but not including landmines), abandoned and unexploded ordnance, and Small and Light Weapons (SALW). This term has been developed to reflect more accurately the broad range of clearance activities undertaken by MAG

Spanish Civil Guard

Rendering a device safe and re-establishing security

Concept Interarmees De Fouille Operationnelle

Removal and destruction of explosive

US Joint IED Ops Device Operations

Stop the device from detonating, or mitigate the effect of IED detonation at the point of attack

Concept for Countering Improvised Explosive Devices in EU-led military operations

Neutralization incorporates proactive and reactive capabilities to disrupt, disarm and render safe IEDs and their components

COMMENTS

This is a complex term and one that has acquired several meanings over the years. This can be seen by the various definitions that are listed, several of which are very different.

Generally, neutralization is not necessarily rendered safe. An IED could be neutralized, but not necessarily safe. For example, a Counter-Radio controlled IED Electronic Warfare (CREW) system neutralizes an RCIED but only for the time the CREW is in range and operating.

Certainly, neutralization cannot always be considered permanent and in some ways is a step before render safe.

Neutralization can refer to a chemical process where an HME is made non-explosive by the addition of another chemical.

Any definition must indicate that render safe is not the same as neutralized.

The definition in AAP-6 is perhaps the classic definition but relates to military ordnance and especially mines.

RECOMMENDATIONS

Maintain the current NATO definition under AJP-3.15(B)

OR

Rewrite in a more C-IED oriented way, perhaps mentioning some common neutralization methods. Reference must be made to the often temporary nature of neutralization.

Search Adviser [NATO AJP 3.15]

A unit officer who has received intermediate or advanced search training and can conduct the detailed planning, preparation, rehearsal and oversee the execution of search teams in search activities.

JIEDDO Attack the Network Lexicon (May 2011)

Closest Definition: Deployed Capabilities
subheading – ORSA Operational Research/ Statistical
Analysis is the analytical study of military problems undertaken to provide responsible commanders and staff agencies with a scientific basis for decision on action to improve military operations.

United Nations Infantry Battalion Manual Volume 2 (Aug 12)

Closest Definition: Situational Awareness Staff Section
The SA Staff Section consists of seven (07) personnel who are experts in information management and maintaining SA. Responsibilities include the provision of analysis based on all-source intel in support of command staff

Spanish Civil Guard

Closest Definition: Central Operations Unit EOD and CBRN nature.
Supporting units in the search, detection, neutralization and deactivation of these artifacts.

Colombian Army**Closest Definition: Agent**

In intelligence terminology, the person who has received authority or instructions to obtain or assist in obtaining information for intelligence or counterintelligence.

En terminología de inteligencia, la persona que ha recibido autoridad o instrucciones para obtener o para ayudar en la obtención de informaciones para propósitos de inteligencia o de Contrainteligencia.

Allied Tactical Doctrine for Military Search

Search activity should be planned and controlled by a SA with critical input from J2 and J3/5 Staff. A number of Search teams may be controlled by a single SA and careful consideration should be given as to where they are best suited in order to assert maximum influence on events. It is particularly important to maintain good communications between all groupings to ensure the control, co-ordination and efficient conduct of the operation.

COMMENTS

The NATO definition is accurate and suitable.

The definition in the Allied Tactical Doctrine for Military Search is more definitive and lengthy and is more of an explanation of role rather than a definition.

RECOMMENDATIONS

The current NATO definition should be retained.

Search Coordinator [NATO AJP 3.15]

A search coordinator is an embedded staff officer at formation / battle group level, who has received intermediate or advanced search training and can conduct the detailed planning and preparation of search activities. He provides advice to the commander, integrates search activity into other military activities and oversees subordinate search advisers.

United Nations Infantry Battalion Manual Volume 2 (Aug 12)

Closest Definition: Operations Staff Section

The Operations Staff Section is the commander's primary staff for planning, coordinating, prioritizing, and integrating all battalion operations. It consists of the Operations Officer and staff, the Operations Centre Staff, the Liaison Officers and Aviation Staff.

Colombian Army

Closest Definition: Intelligence Agency

Organization responsible for directing the search effort, processes the information, intelligence production and dissemination to other agencies.

Organización encargada de dirigir el esfuerzo de búsqueda, procesa la información, producción de inteligencia y difusión a otras agencias.

Allied Tactical Doctrine for Military Search

Responsible for providing Military Search advice to the Commander and the tasking of Search assets at either the Operational or Tactical level

COMMENTS

The NATO definition is accurate and suitable.

RECOMMENDATIONS

The current NATO definition should be retained.

Technical Intelligence [NATO AJP 3.15]

Intelligence concerning foreign technological developments, and the performance and operational capabilities of foreign materiel, which have or may eventually have a practical application for military purposes.

NATO AAP-6

Intelligence concerning foreign technological developments, and the performance and operational capabilities of foreign materiel, which have or may eventually have a practical application for military purposes.

JIEDDO Attack the Network Lexicon (May 2011)

Technical Intelligence is information derived from the collection, processing, analysis, and exploitation of data and information pertaining to foreign equipment and materiel for the purposes of preventing technological surprise, assessing foreign scientific and technical capabilities, and developing countermeasures designed to neutralize an adversary's technological advantages.

Colombian Army

The legal monitoring of the enemies means of communication, designed to understand a situation, location, safety measures and intentions.

Es la monitoría legal de los medios de comunicación enemigos, tendientes a conocer su situación actual, ubicación, medidas de seguridad e intenciones.

COMMENTS

The current NATO definition relates mainly to conventional warfare and the role of weapons intelligence in that style of warfare. It is an accurate definition in that context but is not a definition streamlined to C-IED operations.

No other a definition in the other documents really reflects the TI/WTI role in C-IED.

RECOMMENDATIONS

Consider rewriting the current NATO definition to make it more explicit and focused on C-IED.

Out of Theatre Exploitation [NATO AJP 3.15]

Out of theatre exploitation (level 3) provides further technical and forensic examination and analysis of IED related materiel by national specialist facilities. This provides information of greater depth, across multiple incidents, to support the further development of capability and provides input to wider all-source intelligence support to both deployed commanders and national-based agencies. Outputs can typically take weeks to produce. At present there is no dedicated NATO out of theatre exploitation facility but assistance can normally be arranged on a bi-lateral basis with those nations that possess such a capability. Procedures for out of theatre exploitation involve the full spectrum of exploitation techniques. The objectives are to provide comprehensive technical assessments on electronic IED components, and actionable intelligence for the in-theatre commander and relevant national and international law enforcement agencies. Analysis such as the chemical makeup of explosives and comparison of DNA materiel with databases can be undertaken, exploited.

NATO - Military Committee Land Standardization Board STANAG 2298 C-IED Edition 1 NATO Weapons Intelligence Team Capabilities and Standards

Level 3 (L3) is a reach-back capability, providing in depth technical and forensic examination and an analysis exploitation capability. This STANAG is principally concerned with describing Level 1 capabilities. Level 2 and 3 capabilities are not included in this STANAG.

NATO - Interservice IED Disposal Operations on Multinational Deployments - A Guide for Staff Officers

Related Information: Technical Exploitation and Forensics are a matter of expert assistance and may utilise a combination of in theatre, host nation or reach back assistance.

JIEDDO Attack the Network Lexicon (May 2011)

Related Information: Reach back Capability - Weapons Technical Intelligence is a category of intelligence derived from the technical and forensic collection and exploitation of IEDs, associated components, improvised weapons, and other weapon systems.

Concept for Countering Improvised Explosive Devices (C-IED) in EU-led military operations (Sep 2012)

Level 3 Exploitation. This involves further extraction and detailed analysis of intelligence and evidence in order to track the IED System, support the legal process and to provide actionable intelligence for relevant in-theatre CSDP actors. The main goal is to understand the IED threat, device capabilities and perpetrator relationships in detail in order to derive and implement efficient counter measures on all relevant CIED lines of development. Level 3 Exploitation takes place out of theatre in special facilities (technical and forensic science laboratories). Due to the very specific requirements such facilities and personnel should be pre-identified during the Force Generation phase of the CSDP engagement.

COMMENTS

The two primary definitions are from the NATO AJP 3.15 and the EU Concept of C-IED . The other definitions basically just refer to an exploitation reach back facility. This is too limiting.

The NATO definition is detailed and provides a description of what out of theatre exploitation is and what its objectives are. It mentions that there is no dedicated NATO facility.

Both primary definitions describe it as Level 3 Exploitation and emphasise the full spectrum of exploitation and forensic techniques and also the longer time factor from input to output.

Both definitions are specific to the organisations that produced them.

RECOMMENDATIONS

As a NATO sponsored C-IED COE, it is recommended that the primary definition remains as AJP3.15. It is comprehensive and understandable.

Theatre Exploitation [NATO AJP 3.15]

Theatre exploitation (level 2) is the collection, processing, speedy dissemination and dynamic re-tasking of intelligence capability away from the immediate point of capture, but still within the planning and operations cycle of the supported formation. Theatre exploitation is normally conducted at a laboratory, known as the Theatre Exploitation Laboratory. The laboratory can be deployed or may be an adapted location that is suitable. It contains the equipment and skilled staff to enable both technical and forensic examinations of IED artefacts and to conduct initial seized media analysis, document exploitation, FABINT and TECHINT. The laboratory is likely to be part of an intelligence exploitation facility which also provides the expertise for the handling and interrogation of detainees. The outputs from theatre exploitation include: technical assessment of device capabilities; the examination and comparison of design and construction similarities with other devices; and new technical developments. Outputs typically take days to produce. By comparison of forensic and technical material with databases, theatre exploitation can contribute to identifying, implicating and locating suppliers, bomb-makers, emplacements and other personnel nodes of the adversary's IED system. Where possible this process should be non-destructive in order that those IED artefacts that merit even more detailed examination can be transferred for out of theatre exploitation.

Military Committee Land Standardization Board STANAG 2298 C-IED Edition 1 NATO Weapons Intelligence Team Capabilities and Standards

Level 2 (L2) provides a laboratory based technical and forensic exploitation capability, for a more detailed examination of recovered evidence.

NATO - Interservice IED Disposal Operations on Multinational Deployments - A Guide for Staff Officers

Related Information: Technical Exploitation and Forensics are a matter of expert assistance and may utilise a combination of in theatre, host nation or reach back assistance.

EU - Concept for Countering Improvised Explosive Devices (C-IED) in EU-led military operations (Sep 2012)

Level 2 Exploitation. This is the further analysis of the Level 1 intelligence and data to ensure, firstly that any lessons learnt for protection, detection, neutralisation and mitigation are fed immediately into the EU system; secondly, that intelligence and evidence collected can be used to identify the human components of the system and device development and capabilities, thirdly to provide information for the following level 3 exploitation. Level 2 Exploitation usually takes place at theatre level and has to be conducted by expert personnel in suitable facilities / laboratories.

COMMENTS

Again the two primary definitions come from NATO and the EU.

Both definitions mention it as Level 2 exploitation. They focus on who, where and what is done during In-Theatre Exploitation. Both describe the desired objectives and outputs.

Overall, both are effective definitions, each suited to its parent organisation. Both mention an escalation to Level 3 or Out of Theatre exploitation. Only the NATO definition refers to non-destructive assessment at Level 2 so that items can be further and more expertly checked at Level 3.

RECOMMENDATIONS

Make use of the NATO definition in AJP 3.15.

Unexploded Explosive Ordnance [NATO AJP 3.15 / AAP-6]

Explosive ordnance which has been primed, fused, armed or otherwise prepared for action, and which has been fired, dropped, launched, projected or placed in such a manner as to constitute a hazard to operations, installations, personnel or material and remains unexploded either by malfunction or design or for any other cause.

NATO Route Clearance Study Draft 3

All munitions containing explosives, nuclear fission or fusion materials and biological and chemical agents. This includes bombs and warheads; guided and ballistic missiles; artillery, mortar, rocket and small arms ammunition; all mines, torpedoes and depth charges, demolition charges; pyrotechnics; clusters and dispensers; cartridge and propellant actuated devices; electro-explosive devices; clandestine and improvised explosive devices; and all similar or related items or components explosive in nature.

UN International Ammunition Technical Guideline IATG 01.40 (May 2013)

Explosive ordnance which has been primed, fused, armed or otherwise prepared for action, and which has been dropped, fired, launched, projected, or placed in such a manner as to constitute a hazard to operations, installations, personnel or material and remains unexploded either by malfunction or design or for any other cause.

UN Landmine and Explosive Remnants of War Safety Handbook

Unexploded ordnance (UXO) are explosive munitions that have been fired, thrown, dropped or launched but have failed to detonate as intended. UXO include artillery and tank shells, mortar bombs, fuses, grenades, large and small bombs including cluster-munitions, sub-munitions, rockets and missiles.

Landmine & Cluster Munition Monitor

Unexploded ordnance (UXO) refers to munitions that were designed to explode but for some reason failed to detonate; unexploded submunitions are known as "blinds" or "duds."

Medecins Sans Frontieres

UXOs include ammunition, bombs, mines, grenades, rockets and other explosives which were fired but failed to detonate and have not yet been found. They are often buried in the soil, leaving people in the area vulnerable, especially children playing.

Action on Armed Violence

Explosive ordnance that has failed to detonate as intended but explodes later.

Mines Advisory Group

Ordnance means explosive weapons such as bombs, rockets, missiles, mortars and grenades. Unexploded ordnance (often called UXO) refers to weapons that did not explode when they were used, and that still pose a risk of detonation, potentially many decades later.

Colombian Army

Explosive Ammunition even if it has been dropped or fired and has not detonated.

Municiones explosivas que aunque ya hayan sido lanzadas o disparadas no han detonado.

Mobility Support – Route and Area Clearance - Version 2

Explosive ordnance which has been primed, fused, armed or otherwise prepared for action, and which has been fired, dropped, launched, projected or placed in such a manner as to constitute a hazard to operations, installations, personnel or material and remains unexploded either by malfunction or design or for any other cause. Related term: demining.

COMMENTS

The term UXO generally means, simply, unexploded ordnance. The term "explosive" is implicit in the title.

The current NATO term is defined correctly. Alternate definitions expand on the basic definition depending on the role of the organization publishing the document. But all are largely consistent.

The exception is the NATO Route Clearance Study Draft 3 which also classifies clandestine and IEDs as UXO. This is considered inappropriate in the context of C-IED operations. It does not provide sufficient differentiation between route clearance and C-IED. The problems are different and are best separated.

RECOMMENDATIONS

The current NATO definition under AJP-3.15(B) is considered appropriate and should be maintained.

Abbreviations

<u>AOAV</u>	<u>Action on Armed Violence</u>
<u>AtN</u>	<u>Attack the Network</u>
<u>BiP</u>	<u>Blow in Place</u>
<u>Bn</u>	<u>Battalion</u>
<u>CBRN</u>	<u>Chemical Biological Radiological and Nuclear</u>
<u>CIED</u>	<u>Counter Improvised Explosive Device</u>
<u>CoE</u>	<u>Centre of Excellence</u>
<u>CREW</u>	<u>Counter-Radio Controlled Improvised Explosive Device Electronic Warfare</u>
<u>DNA</u>	<u>Deoxyribonucleic acid</u>
<u>ECM</u>	<u>Electronic Counter-Measures</u>
<u>EDA</u>	<u>European Defence Agency</u>
<u>EO</u>	<u>Explosive Ordnance</u>
<u>EOD</u>	<u>Explosive Ordnance Disposal</u>
<u>ERW</u>	<u>Explosive Remnants of War</u>
<u>EW</u>	<u>Electronic Warfare</u>
<u>ICRC</u>	<u>International Committee of the Red Cross</u>
<u>IED</u>	<u>Improvised Explosive Device</u>
<u>IEDD</u>	<u>Improvised Explosive Device Disposal</u>
<u>IID</u>	<u>Improvised Incendiary Device</u>
<u>IMAS</u>	<u>International Mine Action Standards</u>
<u>IPB</u>	<u>Intelligence Preparation of the Battlefield/Battlespace</u>
<u>MAG</u>	<u>Mines Advisory Group</u>
<u>MSF</u>	<u>Médecins Sans Frontières</u>
<u>NATO</u>	<u>North Atlantic Treaty Organisation</u>
<u>NORDEFCE</u>	<u>Nordic Defence Cooperation</u>
<u>Ops</u>	<u>Operations</u>
<u>SALW</u>	<u>Small and Light Weapons</u>
<u>TTP</u>	<u>Tactics Techniques and Procedures</u>
<u>UN</u>	<u>United Nations</u>
<u>UNMAS</u>	<u>United Nations Mine Action Service</u>
<u>UXO</u>	<u>Unexploded Ordnance</u>
<u>WIT</u>	<u>Weapons Intelligence Team</u>