

# United Nations Peacekeeping Missions Military Signals Unit Manual

May 2015

# Preface

We are delighted to introduce the United Nations Peacekeeping Missions Military Unit Manual on the Military Signals Unit—an essential guide for commanders and staff deployed in peacekeeping operations, and an important reference for Member States and the staff at United Nations Headquarters.

For several decades, United Nations peacekeeping has evolved significantly in its complexity. The spectrum of multi-dimensional UN peacekeeping includes challenging tasks such as helping to restore state authority, protecting civilians and disarming, demobilizing and reintegrating ex-combatants. In today's context, peacekeeping missions are deploying into environments where they can expect to confront asymmetric threats from armed groups over large swaths of territory. Consequently, the capabilities required for successful peacekeeping Missions demand ever-greater improvement.

UN peacekeeping operations are rarely limited to one type of activity. While deployed in the context of a political framework supporting a peace agreement, or in the context of creating the conditions for a return to stability, peacekeeping Missions may require military units to perform challenging tasks involving the judicious use of force, particularly in situations where the host state is unable to provide security and maintain public order. To meet these complex peacekeeping challenges, military components often play a pivotal role in providing and maintaining a secure environment. Under these circumstances, the deployment of UN Military Signals Units can contribute decisively towards successful achievement of the Mission's goals by assisting the Force Commander with the communications needed for the unhampered transmission of command and control information.

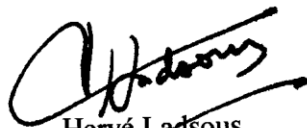
As the UN continues its efforts to broaden the base of Troop Contributing Countries, and in order to ensure the effective interoperability of all UN military units, there is a need to

formalize capability standards. Together with the seminal work of military experts from numerous Member States, the Department of Peacekeeping Operations and the Department of Field Support have produced this Manual as a means of enhancing the preparation, operational readiness and performance of UN Military Signals Units. In recognition of the work already done, and in anticipation of future improvements, we would like to express our sincere gratitude to the Member States who volunteered and devoted so much of their time, energy and expertise in the creation of this Manual. The result is a document that captures and consolidates the relevant dimensions of the UN Military Signals Unit into a single, convenient reference.

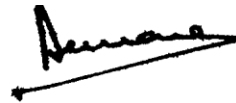


Military experts of the UN Peacekeeping Missions Military Signals Unit Manual Working Group, India 2014.

The Department of Peacekeeping Operations and the Department of Field Support will continue to refine and update this Manual ensuring its relevance in an ever-changing operational environment. In the meantime, we have every expectation that this document, especially with the concerted efforts of its intended readers, will contribute immensely to improving and enhancing our collective performance in the pursuit of peace.



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# Purpose and Scope

This first edition of the United Nations Signals Unit Manual provides field commanders and their staff with a guide for planning and conducting Military Signals Unit operations in support of United Nations peacekeeping Missions<sup>1</sup>. Troop Contributing Countries, United Nations Headquarters and Mission staff will find this Manual an essential reference as they plan for, generate and employ Military Signals Units for UN Missions.

The intent of this Manual is not to override the national military doctrine of individual Member States or Troop Contributing Countries, nor impose requirements on national training, operations or structures. This Manual does not prescribe any military tactics, techniques and procedures, nor is it the intent of this Manual to serve as an instrument for unit selection. Indeed, unit structures will be adapted, ultimately, in accordance with specific Mission requirements and any Memorandum of Understanding (MOU) negotiated between the UN and a Troop Contributing Country. Instead, this Manual serves as a complement to existing or emerging Troop Contributing Countries' military doctrine, and preparation for the *enhanced performance achieved through interoperability* with other Troop Contributing Countries participating in the peacekeeping operation.

This Manual is primarily written at the operational level. It is based on UN guidance reflecting lessons learned, feedback from field Missions and input from peacekeeping practitioners in UN Military Signals Unit peacekeeping. Workshops conducted by interested Member States and Troop Contributing Countries produced the original draft that was finalized after extensive coordination within the Department of Peacekeeping Operations (DPKO) and the Department of Field Support (DFS) at UN Headquarters. The result is a most comprehensive body of thought on UN Military Signals Unit operations that is especially designed to assist

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<sup>1</sup> Throughout this document, a capital M in the word "Mission," as in, "the UN Mission," is used to refer to a UN peacekeeping organization; as opposed to a small "m," as in, "a military mission" indicating a *task or operation*.

contingents in the re-orientation of their units from a national military focus to one in which they are an integral part of a unified UN peacekeeping operation.

This manual describes UN Military Signals Unit operations, focusing on Military Signals support to a UN Mission and its Force Headquarters. Always scalable in size, modular in function and Mission-tailored, the UN Military Signals Unit's size and composition depend on the size, composition and requirements of the UN Mission it supports and the physical characteristics of the Mission area. These requirements are specified in the Statement of Unit Requirement, an example of which is provided at Annex A, produced by the Office of the Military Adviser, DPKO.

The brief description of the integrated Mission support system described in this manual will be most enlightening for military personnel unfamiliar with this aspect of UN field operations. In the UN system, military enabling assets such as signals, logistics, construction engineers, aviation, transportation, medical and explosive ordnance disposal units function as part of a Mission-level support network tasked and coordinated by the civilian, not military component.

This manual should be read in conjunction with other UN manuals, especially the UN Infantry Battalion Manual, in order to gain a more comprehensive understanding of UN standards, policies and procedures related to peacekeeping operations.<sup>2</sup> Moreover, every detail of the Mission framework can be more thoroughly studied in the UN Capstone Doctrine which, along with other important UN policy documents, is available at the following UN links:

“Policy and Practice Database,” accessible only to UN staff on the UN network (including field Missions) at: [http://ppdb.un.org/Nav%20Pages/PolicyFramework\\_Default.aspx](http://ppdb.un.org/Nav%20Pages/PolicyFramework_Default.aspx) and,

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<sup>2</sup> The Infantry Battalion Manual, Volumes I and II, can be found at: <http://www.un.org/en/peacekeeping/documents/unibammanualvol1.pdf> and <http://www.un.org/en/peacekeeping/documents/unibammanualvol2.pdf>.

"Resource Hub," recently developed for Member States to access UN documents including the Military Unit Manuals (such as this one) at:

<http://research.un.org/en/peacekeeping-community>

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# Chapter 1

## Employment Concept for the UN Military Signals Unit

### 1.1 Role

The primary role of the UN Military Signals Unit is to serve as an integral part of the Mission's communications and information technology support effort. It provides robust military capacity and augmentation to the Mission's Communications and Information Technology Section<sup>3</sup> (CITS) serving the entire Mission, but focusing its main efforts on ensuring communications and information interoperability between key elements of the military and police headquarters at Force, Sector, Battalion, and Independent Unit Headquarters level. The UN Military Signals Unit supports the Force communications<sup>4</sup> links and information technology service requirements whenever military capability would be more appropriate than that available from UN civilians or contractors. For example, the UN Military Signals Unit is trained to perform its duties in the most challenging environments and may be better suited for providing communications and information technology support to already-deployed military units, urgently-deployed headquarters or newly-established camps.

### 1.2 Communications and Information Technology Support Provided

The Force and Mission receive communications and information technology support from the UN Military Signals Unit acting on behalf of CITS, including installation, configuration, operation and maintenance of UN-owned/CITS-provided communications and information technology equipment; as well as the required training of military and civilian personnel on that equipment. The UN Military Signals Unit also supports the configuration and

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<sup>3</sup> In some UN Missions, the Communications and Information Technology Section (CITS) is known as the Division of Geospatial Information and Telecommunications Technology, or may have an entirely different name.

<sup>4</sup> Including radio communications.

maintenance of UN-provided jammer systems in close cooperation with UN Counter-Improvised Explosive Device (IED) and Explosive Ordnance Disposal (EOD) experts. The UN Military Signals Unit supports permanent facilities and compounds, such as headquarters and offices, information nerve centres such as Joint Operations Centres, Situation Centres, Mission Support Centres,<sup>5</sup> Joint Mission Analysis Centres and planning and communication centres; but has only a limited mobile capacity to support temporary facilities and mobile tactical operations, such as command and observation posts.

### **1.3 Supported Headquarters**

#### **1.3.1 Span of Support**

As a rule CITS, augmented by UN Military Signals Units, supports the Force Headquarters and the highest headquarters of a given TCC's contingent.<sup>6</sup> A UN Military Signals Unit is deployed to each Mission Sector supporting the Force Headquarters and/or Sector Headquarters in that Sector, and all Sector-assigned Battalions and Independent Units. Each Sector-assigned UN Military Signals Unit is capable of supporting one Force or Sector Headquarters, comprising up to five Battalions and Independent Unit Headquarters and up to two temporary headquarters.<sup>7</sup> Communications and information technology support within a TCC's contingent, e.g., from Battalion down to Company and Platoon/Team/Detachment level is a TCC responsibility.

#### **1.3.2 Primary and Secondary Support Responsibilities**

As the following chart illustrates, CITS provides the primary communications and information technology support between the Force and higher UN authorities including the Mission, Regional UN Offices and UN Headquarters. CITS is also the primary provider between the Force Headquarters and the Sector Headquarters. However, as the dashed red lines on the

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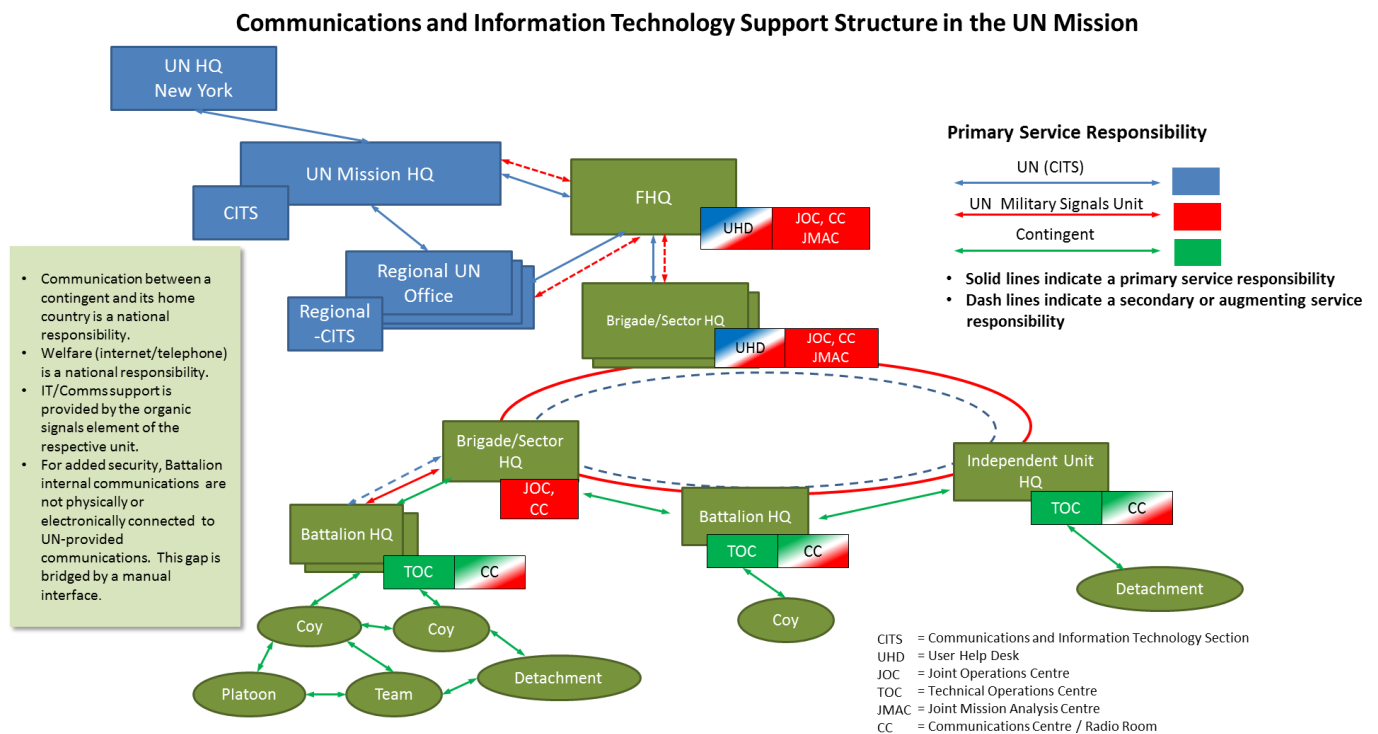
<sup>5</sup> Formerly known as Joint Logistics Operations Centres.

<sup>6</sup> Statements regarding TCCs and military contingents apply in the same spirit to formed UN Police Units and Police Contributing Countries (PCC).

<sup>7</sup> The actual structure for a specific UN field Mission depends on the operational requirements and geographic dispersal of troops.

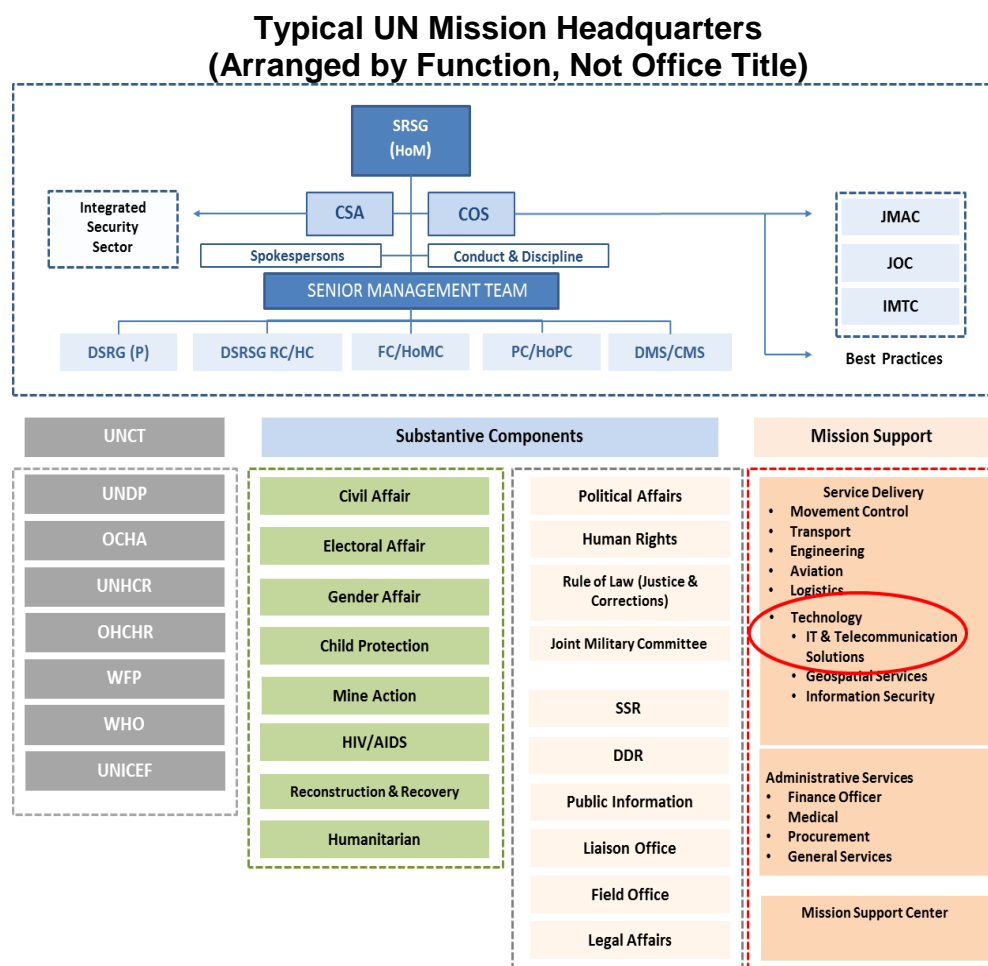
diagram below indicate, CITS may be augmented by elements of the UN Military Signals Unit as required. Between Sectors, separate Battalions (those not organic to the Sectors) and independent units in the Sector, the UN Military Signals Unit has primary service responsibility, but may be supported by CITS. Again, TCC contingents have primary responsibility for communications and information technology support between their organic elements, e.g., from Sector to Battalion to Company to Platoon, Team, Detachment or Independent Unit within that Sector if those units are all from the same TCC. In those cases where a Sector has subordinate Battalions/units that are not from the same TCC, the UN Military Signals Unit, working on behalf of CITS, will provide the primary support connecting those units from different TCCs.

### Support Provided by the UN Mission Communications and Information Technology Section and the UN Military Signals Unit



#### 1.4 The UN Military Signals Unit Within the Overall UN Mission Structure

The following diagrams<sup>8</sup> illustrate the overall UN Mission structure and the placement of the UN Military Signals Unit within that structure. A typical UN Mission Headquarters structure is depicted below. A UN peacekeeping Mission Headquarters is comprised of the senior management team, the integrated decision making and support structures, and the various substantive components. Note the red oval on the diagram below highlighting the fact that the Office of the Director/Chief of Mission Support provides consolidated guidance and tasking for the Mission's information technology and telecommunications systems' civilian *and* military units, equipment and capabilities—including those of the UN Military Signals Unit.



## 1.5 Command and Control

<sup>8</sup> These diagrams and structure are taken from the *Handbook on UN Multidimensional Peacekeeping Operations*, United Nations, 2003, Chapter V: Military.

### 1.5.1 Tasking Authority

With the exception of those military enabling units in direct support of military operations, military enabling units such as the UN Military Signals Unit fall under the specifically enumerated **tasking authority** of the Director/Chief of Mission Support, and his or duly designated representatives. This tasking authority, codified in sections E.5 and E.6, paragraphs 68 to 74 of DPKO/DFS's policy on *Authority, Command and Control in United Nations Peacekeeping Operations*, (Ref. 2008.4) (February 2008), allows the Mission to consolidate and employ its resources with maximum coordination and efficiency.<sup>9</sup> Nonetheless, military enabling assets remain OPCON to the Force Commander and their assigned tasks are coordinated through the military command and staff structure. UN Military Signals Unit tasking priorities are routinely determined by the Chief, Communications and Information Technology Section (CITS) under delegated tasking authority from the Director/Chief of Mission Support; in cooperation with and working through the Force U-6 and the UN Military Signals Unit Commander,<sup>10</sup> who determines how best to execute the tasking within the requested timeframe.

### 1.5.2 Chief, Communications and Information Technology Section

The Chief, Communications and Information Technology Section, has overall responsibility and oversight for the provision of communications and information technology services (including Internet access) to all appropriate Mission elements and sites. The Chief, Communications and Information Technology Section is part of the Mission Headquarters and reports to the Director or Chief of Mission Support. Note how the following diagram illustrates how the UN Military Signals Unit is OPCON to the Force Commander and subject to U-6

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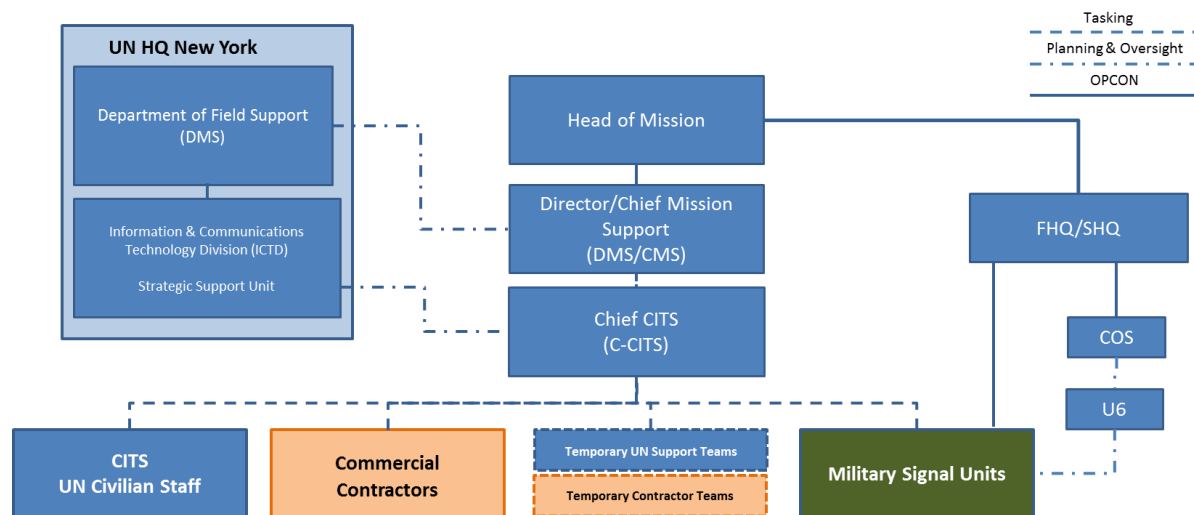
<sup>9</sup> The DPKO/DFS policy on authority, command and control, and many other invaluable peacekeeping-related documents, are available at:

<http://ppdb.un.org/SearchCenter/Results.aspx?s=PPDB%20Scope&k=2.%09SOP%20on%20Implementation%20of%20Amendments%20on%20Conduct%20and%20Discipline%20in%20the%20Model%20Memorandum%20of%20Understanding%20Between%20UN%20and%20TCCs>

<sup>10</sup> For further discussion of the chain of command authorized to sanction different Military Signals missions, refer to the *DPKO/DFS Policy on Authority, Command and Control in United Nations Peacekeeping Operations* (Ref. 2008.4, dated February 2008).

planning and oversight, but tasking authority over the Military Signals Unit resides with the Chief, Communications and Information Technology Section.

## Mission Command and Control Authority For UN Military Signals Units



Note: In some UN Missions, the Communications and Information Technology Section (CITS) is known as the Division of Geospatial Information and Telecommunications Technology.

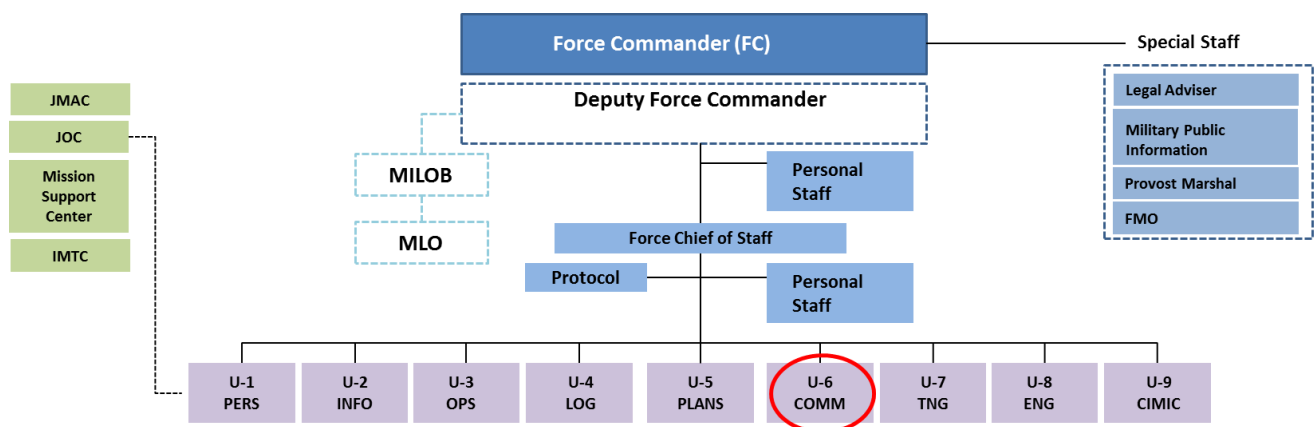
### 1.6 Force Headquarters Structure<sup>11</sup>

<sup>11</sup> See also the *UN Force Headquarters Handbook*, published jointly by DPKO-DFS, November 2014.



A typical organization for the Force Headquarters is depicted in the chart below. The fundamental role of the Force Headquarters is the command and control of the Mission's military operations in support of the Mission's mandate. Regardless of the nature of the Mission, every Force Headquarters has common functions executed by functional groups, including communications and information technology (note the red circle around the "U-6 COMM" staff section below). The U-6 staff plan the communications and information systems support for the Force.

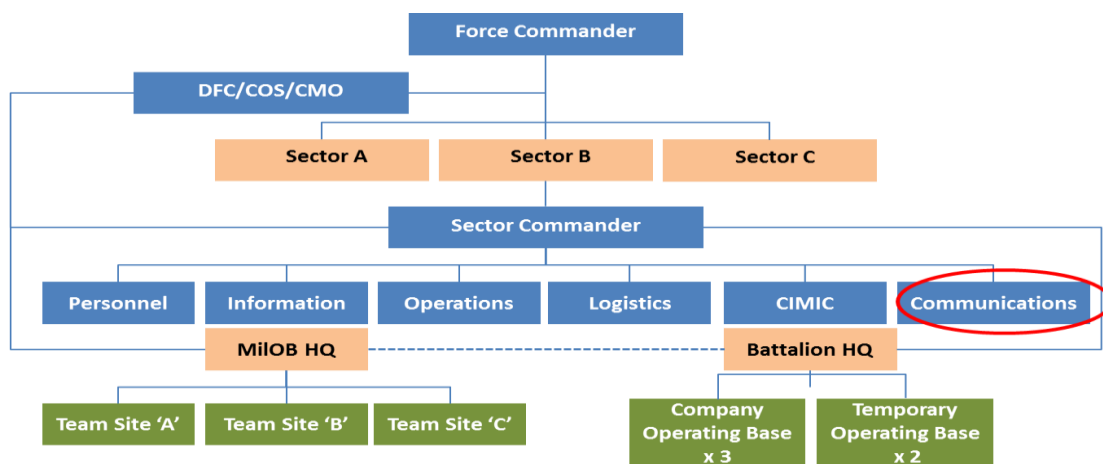
## Typical Organization of a UN Force Headquarters



### 1.7 Sector Headquarters Structure

The Force Headquarters has a number of Sector Headquarters responsible for mandate execution in specified operational areas under which subordinate Battalions execute their assigned tasks. A typical organization of the Sector Headquarters is shown below. Again, note the placement of the red circle around “Communications.”

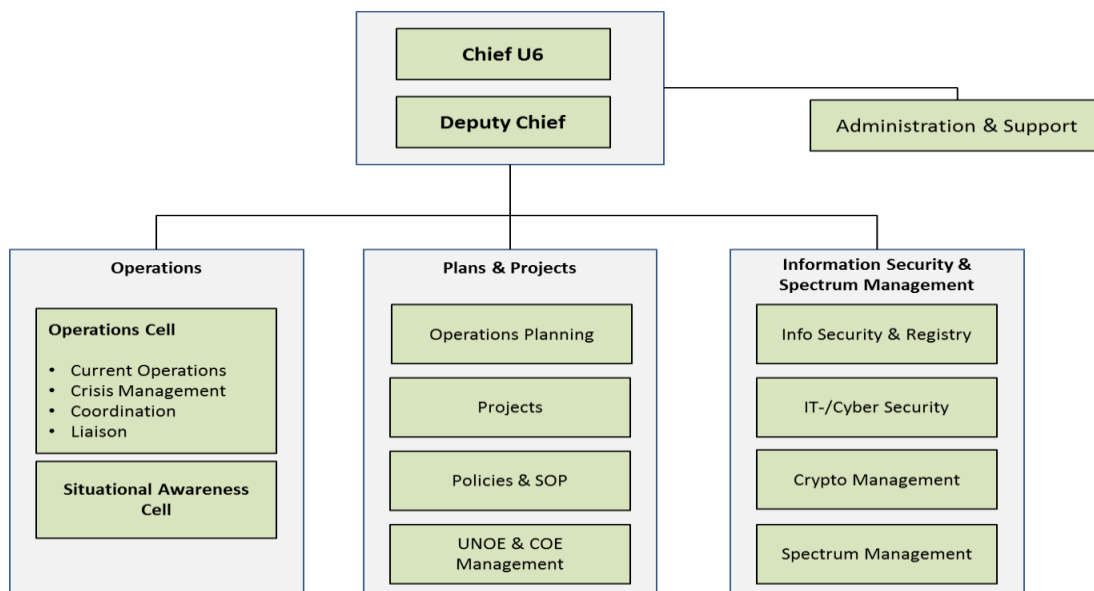
### Typical Organization of a UN Sector Headquarters



#### 1.8 The U-6 at Force or Sector Headquarters

The U-6 section is located within the Force Headquarters to support the commander's communications requirements across the area of operations. The Chief of the Force Headquarters U-6 Branch is the principal staff officer for all matters concerning military communications operations. At Force Headquarters level, the U-6 branch works for and reports to the Force Commander, while serving in direct support to the Chief, Communications and Information Technology Section. Similarly, the U-6 of a Sector Headquarters works for and reports to the Sector Commander and serves in direct support to the head of the Communications and Information Technology Section element in the affiliated local UN field headquarters. Therefore, one of the major tasks of the Chief, U-6 is to harmonize and balance these responsibilities. The U-6 exercises coordinating oversight and works closely with the Force's Military Signals Unit Commander. As shown in the following chart, the Force Headquarters U-6 branch is organized to address the tasks of operational planning, and to conduct oversight and guidance for its subordinate elements including Operations, Plans and Projects; and Information Security and Spectrum Management.

### U-6 at Force or Sector Headquarters



If the Force, Sector and Mission Headquarters are co-located, the U-6 branch should be co-located with the respective Communications and Information Technology Section at that headquarters. In the case of such co-location, it is recommended that the Chief, U-6 act as the Deputy Chief, Communications and Information Technology Section. The U-6 provides a liaison element that serves within the Communications and Information Technology Section to provide information sharing and integrated planning and decision making. Force Headquarters U-6 staff responsibilities include:

- Advise the commander, staff, and subordinate commanders on communications requirements, operations and network priorities.
- Prepare, maintain and update command, control, communications, and computer operations, operations estimates, plans, and orders.
- Coordinate, plan, and manage electro-magnetic spectrum within the area of responsibility.
- Develop, produce, change/update, and distribute signals operating instructions and SOPs for command posts.
- Establish communications policies and procedures for the use and management of information tools and resources.
- Plan and coordinate with higher and lower headquarters regarding information systems integration, upgrades, replacement and elimination.
- Coordinate, plan and direct all information architecture activities and communications operations vulnerability and risk assessments (in conjunction with CITS, and in coordination with other staff elements (U-1 to U-9)).
- In coordination with other staff, actively coordinate with a variety of external agencies to develop the information and communications plans, manage the information network, obtain required services, and support Mission requirements.

- Confirm and validate user information requirements in direct response to the Mission.
- Manage distribution of communications equipment (including mobile phones for staff) and collection of non-operational equipment.

#### **1.8.1 Operations Section, U-6**

The Operations Section is responsible for the day-to-day delivery of Force communications and information technology support. This includes coordination with the Mission's Communications and Information Technology Section and military subordinate elements, prioritizing tasks, reporting and oversight, crisis management and maintaining communications and information technology situational awareness. The Operations Section ensures that operational tasks assigned to the Communications and Information Technology Section/UN Military Signals Unit are conducted as required. The Chief, Operations Section is responsible for coordinating all aspects of Communications and Information Technology support with the needs of current operations, and is the focal point for all embedded and deployed liaison elements.

#### **1.8.2 Plans and Projects Section, U-6**

The Plans and Projects Section supports and advises all aspects of military operational planning from a communications and information technology support perspective. The Chief, Plans and Projects Section is an integral member of all joint planning sessions. The Plans and Projects Section is responsible for planning and coordinating frequencies, IP-addresses, tactical data links, and plans; and managing the distribution, maintenance, training and replacement of all UN-owned/CITS-provided communications and information technology equipment, in addition to contingent-owned equipment. The Plans and Projects Section is also responsible for developing, updating and implementing all communications and information technology-related guidelines, processes and SOPs specific to the operational needs of the Mission. This section acts as the planning and coordination authority for all communications and information

technology-related projects planned and implemented for the Force, and therefore works very closely with the Mission Communications and Information Technology Section. The Plans and Projects Section, U-6 has responsibility for ensuring operational resilience (i.e., system robustness and backup) is fully integrated into the Mission's information technology service management and communications structure.

### **1.8.3 Information Security and Spectrum Management Section, U-6**

- The Information Security and Spectrum Management Section, U-6 is responsible for ensuring information, data and communications security within the Force Headquarters and its subordinate elements. The Information Security and Spectrum Management Section also deconflicts spectrum and frequency management requests and enforces applicable policies and decisions.
- Information security policy should be well described in the Force SOP, fully aligned with the Mission's information security policy, and enforced. Full systems logging analysis must be applied, and all necessary technical and organizational information security means should be established. Information security personnel should be certified and a schedule of frequent training for Information Technology administrators should be established. Information Security and Spectrum Management audits should be frequently planned and conducted.
- The Information Security and Registry sub-section develops rules and procedures to ensure information security within strictly established policies and SOP. They define and regulate the Force's information security and grant staff members information access clearance in full alignment with the information security policy of the UN Mission Headquarters. All information is clearly labelled and restrictions regarding information access are enforced. The Information Security and Registry sub-section does not,

however, perform the responsibilities of the central UN Headquarters document and mail registry.

- The IT/Cyber Security sub-section promotes the integrity and safety of digital information and data transfer. The Communications Security (Comms Sec) sub-section plans and advises on all means for secure radio and telecommunications.
- The Crypto Management sub-section enforces procedures ensuring all devices that store classified data leaving or entering the Force or Sector Headquarters are registered and managed. Furthermore, this section manages all cryptological related tasks, such as the handling and distribution of encryption modules, keys and cards; issues code word lists to be used on non-secure communication channels; and manages cryptological incidents.
- The Spectrum Management sub-section collects, harmonizes and prioritises all frequency needs of military and formed police units, proposes new arrangements and policies, and enforces existing policies and plans. Spectrum Management shares information on common frequencies and assesses their possible use for Remote Controlled (RC)-IEDs with the Counter-IED and EOD-Cells. Spectrum Management conducts close liaison with and maintains information about local cell phone providers in case of an urgent switch off by RC-IED incidents, and approves and supervises the use of electronic countermeasures, like jammer systems, in close contact with applicable UN partners and experts.

# Chapter 2

## Capabilities and Tasks of the UN Military Signals Unit

### 2.1 Core Capabilities and Tasks

The UN Military Signals Unit's capabilities and tasks generally involve installing, maintaining, and operating *UN-owned/CITS-provided* communications and information technology equipment and services with an emphasis on Mission critical elements such as Mission Support Centres, Communications Centres, Radio Rooms, Situation Centres, Joint Operations Centres, Joint Mission Analysis Centres, Counter-Improvised Explosive Device (C-IED) and Explosive Ordnance Disposal (EOD) cells. UN Military Signals Units are required to respond in a timely manner with the appropriate resources to restore services and communications and information technology infrastructure after a loss of service due to electrical power outages, mechanical/technical failure, extreme weather or attack by hostile forces. More specifically, core UN Military Signals Unit capabilities and tasks can be categorized as:

- Establishing communications links between headquarters.<sup>12</sup>
- Enabling command and control and situational awareness.
- Supporting key military and police users.
- Supporting internal communications in larger camps.
- Quick-reaction capabilities/restoration of services.

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<sup>12</sup> From paragraph 1.3.2 of this Manual: CITS provides the primary communications and information technology support between the Force and higher UN authorities including the Mission, Regional UN Offices and UN Headquarters. CITS is also the primary provider between the Force Headquarters and the Sector Headquarters. However, CITS may be augmented by elements of the UN Military Signals Unit as required.



## **2.2 Establishing Communications Links Between Headquarters**

UN Military Signals Units must be capable of establishing, maintaining and operating communications and information technology links and networks between key entities of the Mission anywhere in the area of operations. Required capabilities and tasks of a single, company-size UN Military Signals Unit include:

- Interconnecting up to one Force or Sector Headquarters, five Battalion or Independent Unit Headquarters and up to two temporary deployed headquarters.
- Establishing communications links at distances of up to 500 km.
- Supporting the installation, operation and maintenance of satellite systems, microwave links, HF radio networks, commercial fibre optic links, telephone systems, switched UHF radio systems, and commercial services such as the Internet.
- Providing secure and reliable information exchange via email, video, files and voice communication.
- Providing service 24 hours a day/7 days a week/365 days a year.
- When tasked to augment CITS efforts, providing support to offices of the Mission's civilian component and assisting governmental or non-governmental agencies in their communications and information technology-related requirements.
- Installing and maintaining antenna masts and towers.
- Installing, operating and maintaining auxiliary equipment such as generators, containers, and uninterrupted power supplies.

## **2.3 Enabling Command and Control and Situational Awareness**

Enabling command and control and situational awareness is the essence of communications and information technology support. Providing the technological means to exercise effective and efficient command and control enables the Mission's civilian, police and military components to accomplish the Mission's mandate by facilitating the direction and

coordination of all actions. Situational awareness is also an imperative, enabling comprehensive analysis, threat assessment, deliberate planning and informed decision making. In addition to the aforementioned tasks associated with supporting key communications and information technology nodes/centers (paragraph 2.2 above), UN Military Signals Unit capabilities and tasks include:

- Hosting specialized command and control applications and situational awareness software, granting access to open information sources such as the Internet and operating information exchange systems and technologies for presentation and meeting support in close collaboration with UN Communications and Information Technology Section (CITS) experts.
- Staffing and operating the headquarters radio room/communications centre 24 hours a day/7 days a week (subject to the language skills available).
- Install and maintain UN-provided communications and information technology equipment for Technical Operations Centres (see the diagram in paragraph 1.3.2 above).
- Assist CITS in installing, configuring and maintaining radio, telephone and video tele-conference systems and networks.
- Assist in installing and maintaining computers, laptops, printers, copy machines, etc.
- Assist in installing, monitoring and maintaining network infrastructure (local area network or LAN).
- Assist in installing and maintaining email and file-servers.
- Install, operate and maintain auxiliary equipment (generators, containers, uninterrupted power supplies, etc.).

## **2.4 Supporting Key Headquarters**

Each headquarters relies on common administrative, logistics and office-related processes. A UN Military Signals Unit must provide communications and information technology services and infrastructure to support key headquarters by:

- Staffing and operating the integrated Force Headquarters user help desk service (subject to language skills available) in collaboration with the Communications and Information Technology Section.
- Providing on-site support to key users (software installation, resetting passwords, and resolving other technical issues).
- Supporting the Communications and Information Technology Section/U-6/U-7 staff in all training aspects.
- Assisting in installing, configuring and maintaining electronic countermeasure systems in close cooperation with the C-IED cell and other experts.
- Using office and administrative applications and hardware, personal computers, cellular phones, file and email servers, local area networks, telephone systems and networks, video-tele-conferencing (VTC) systems in close collaboration with UN Communications and Information Technology Section experts.

## **2.5 Supporting Internal Communications in Larger Camps**

Military and police camps that accommodate more than one contingent or major unit have an inherent need to coordinate with all units in the camp. Requirements include the need to coordinate internal logistics, synchronize responses to safety and security issues and task and exchange general information. To use local communications and information technology resources in the most economical and effective way, UN Military Signals Units are often required to support CITS efforts in large camps, providing communications and information

technology support to enable communication and information exchange between the camp's key entities. UN Military Signals Units must be capable of being tasked to support by:

- Providing technical and operational support to camp-based communications centres, radio rooms or Technical Operations Centres.
- Providing training and configuration support on communications equipment issued to camp troops.
- Installing, operating and maintaining encrypted microwave-based communications network links.
- Installing, operating and maintaining VHF and TETRA radio networks.
- Using short- and mid-range radio systems and repeaters, such as VHF, UHF and TETRA, mobile telephone systems, and systems for camp security, such as video surveillance, fire alarm systems and public announcements systems.
- Installing and maintaining ground-to-air radio systems.
- Installing and maintaining antenna masts and towers.
- Installing, configuring, operating and maintaining information technology systems, software and applications within the premises of the camp.
- Supporting the assigned units in their communications and information technology training.
- Installing and maintaining ground-to-air radio systems if there are UN airports and landing strips, in coordination with Air Traffic Control.
- Installing, operating and maintaining auxiliary equipment (generators, containers, uninterrupted power supplies, etc.).

## **2.6 Quick Reaction/Restoration of Service**

The UN Military Signals Unit must have a flexible capacity to respond to urgent demands for restoration of services. These requests can be for temporary communications and information technology capacity increases to meet operational requirements, relocation of camps, temporary expansion of camps, training support, reestablishment of disrupted communications lines, ensuring continuity of service during contingent rotations and fast response to other emergencies. A single, company-size UN Military Signals Unit should have the capability to respond with support for up to two urgent/temporary headquarters requirements in coordination with the CITS rapid reaction team. Quick reaction/restoration of service includes the ability to:

- Achieve a reaction time according to the Mission's need and the UN Military Signals Unit's capability.
- Be available 24 hours a day/7 days a week.
- Deploy and operate up to two temporarily deployed UN Military Signals Units to enable the temporary deployment of command groups.
- Operate satellite systems, microwave links, HF radio networks, commercial fibre optic links, telephone systems, switched UHF radio systems and commercial services such as the Internet.
- Provide secure and reliable information exchange facility via email, video, files and voice communication.
- Travel distances of up to 500 km.

# Chapter 3

## Organization and Equipment of the UN Military Signals Unit

### 3.1 Basic Organization

A Force and/or Sector Headquarters is normally supported by one company-size UN Military Signals unit comprising subordinate elements tailored to the Force and/or Sector's unique requirements. A generic Military Signals Unit supporting a Sector Headquarters and its subordinate units is comprised of five technical platoons, four of which serve organizations *external* to the UN Military Signals Unit: a Headquarters Support Platoon, a Communications Center Support Platoon, a Strategic Links Support Platoon, and a Communications and Information Technology Support Platoon. The fifth platoon, the Administration and Support Platoon, is focused on supporting the UN Military Signals Unit itself. These five platoons are further described later in this chapter.

### 3.2 Scalable and Modular Task Organization

A UN Military Signals Unit supporting both a Force and Sector Headquarters requires a more robust composition so that it is capable of satisfying the additional communications and information technology requirements at Force level. For example, additional personnel and specialized support will be needed to support the Joint Operations Center, Joint Mission Analysis Center, Communications Center and User Help Desk at Force Headquarters; and there will be more extensive communications and information technology links and services required. For the generic difference in staffing, see the personnel requirements charts at Annex B. UN Military Signals Unit support to Sector Battalions, Independent Units and temporarily deployed

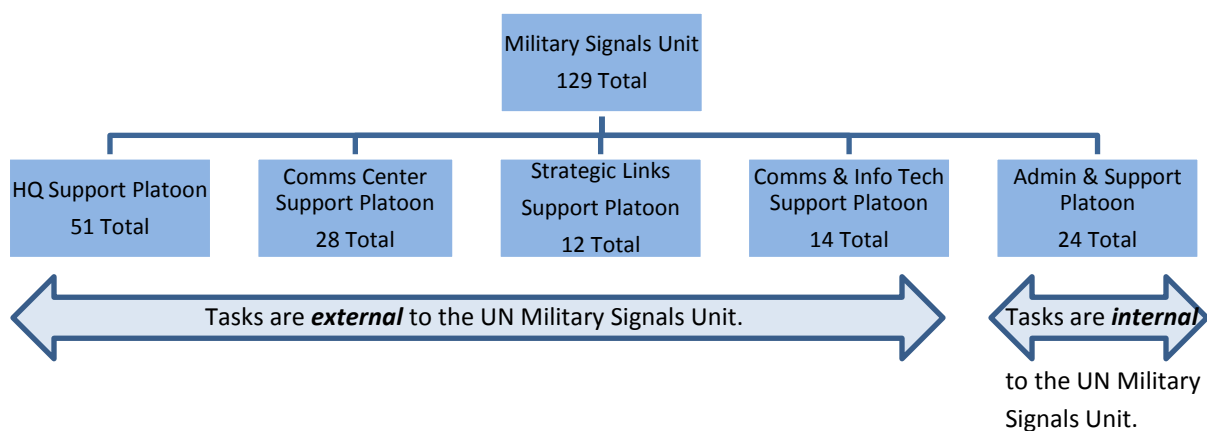
headquarters is provided by task-organized teams and detachments from the Military Signals Unit's technical platoons. A UN Military Signals Unit Quick Response Team often provides this kind of support, working in conjunction with the Rapid Reaction Team of the Communications and Information Technology Section. The Quick Response Team is pre-designated from the UN Military Signals Unit's existing structure, and only comes into existence on an as-required basis. The Military Signals Unit must also have the organic capacity to provide liaison elements to the U-6 and the Communications and Information Technology Section. Consequently, the Military Signals Unit should cross-train its personnel in a range of skills, enhancing unit and individual flexibility and versatility. TCCs are strongly encouraged to add cross-training to their pre-deployment and in-mission training programs.

### **3.3 Structure and Personnel of the Typical UN Military Signals Unit**

The following diagram illustrates a typical UN Military Signals Unit capable of detaching elements to provide scalable and modular task-organized support to a Force Headquarters and an entire Sector including Sector-assigned Battalions, Independent Units and temporary headquarters. If the UN Military Signals Unit will be required to support a Sector Headquarters instead of the Force Headquarters, then the UN Military Signals Unit will typically require fewer personnel, as described in Annex B, due to the reduced key communications node staffing requirements. In most cases, there will be both a Force and Sector Headquarters to support. Rather than deploy two UN Military Signals Units to serve this requirement, it is more efficient to increase the size and skills of the Unit to handle the increased workload. The size of that increase will be based on the unique requirements of each Mission. In order to maintain sufficient levels of personnel to meet technical requirements, not less than seventy per cent of UN Military Signals Unit personnel should be qualified communications and information technology experts. Approximately ten per cent of the UN Military Signals Unit's staff may account for leadership, including commissioned officers of all ranks from the officer

commanding and his/her second in command, down to platoon commanders and team leaders. The balance of up to twenty per cent may account for common tasks of self-sustainment, such as drivers, mechanics, logistics, and administrative support. These are, of course, planning figures that may vary to an extent, depending on specific Mission requirements.

### Typical UN Mission Military Signals Unit Supporting a Force Headquarters and Sector-Assigned Units (Company-Size)



## 3.4 Platoons of the Company-Size UN Military Signals Unit

### 3.4.1 Headquarters Platoon

Given the importance of the communications and information technology networks emanating from the Force and Sector Headquarters, the UN Military Signals Unit provides an entire platoon<sup>13</sup> dedicated to the needs of those headquarters. Called the Headquarters Support Platoon, it provides the Force or Sector Headquarters communications and information

<sup>13</sup> Of the 51 positions in the Headquarters Platoon, only 3 are provided for the Military Signals Unit's command and control: a commander, a senior non-commissioned officer and an administrative clerk. The additional administrative tasks needed for command and control are accomplished by the Administration and Support Platoon.



technology installation, configuration, operation and maintenance. Headquarters Support Platoon personnel:

- Staff radio rooms/communications centers for continuous communications 24/7.
- Configure, and maintain VHF and HF radios and antennas.
- Install and maintain telephone systems.
- Support installation, operate and maintain unit computers, printers, copy machines, VTC systems and projectors.
- Assist in configuring and maintaining jammer systems.
- Support installation, configuration and maintenance of passive and active network components.
- Support key users within the Service Desk structures of the headquarters.
- Support training of military and police personnel in application and use of communications equipment.

### **3.4.2 Communications Centre Platoon**

This platoon provides personnel to operate radio rooms and communications centres for continuous communications 24/7. These personnel must be prepared to work in shifts and to integrate with Signals personnel of the host unit. The Communications Centre Platoon:

- Configures, operates and trouble-shoots HF, VHF and TETRA radio systems.
- Operates and uses MS Windows-based personal computers and office software, telephones and satellite equipment.
- Reports and communicates over military radio networks using military alphabet and spelling, frequency and encryption changes, application of call signs and communications checks.
- Summarizes and submits written and verbal military messages and reports.

### **3.4.3 Strategic Links Platoon**

This platoon installs, configures and maintains strategic communication systems.

Strategic Links Platoon personnel:

- Install, configure, and maintain HF radios and antennas.
- Install, configure, and maintain microwave systems and antennas.
- Support installation and maintain satellite VSAT equipment.
- Deploy, set-up and operate deployable command posts for up to 60 days.

### **3.4.4 Communications and Information Technology Platoon**

The Communications and Information Technology Platoon installs, configures and operates and maintains communications and information technology systems. This platoon:

- Installs, configures, and maintains VHF and TETRA radios and antennas.
- Installs, configures, and maintains telephone systems.
- Supports installation, operates and maintains personal computers, printers, copy machines, VTC systems and projectors.
- Supports installation, configuration and maintenance of passive and active network components.
- Supports key users within the Service Desk structure of the headquarters.
- Supports training of military and police personnel in application and use of communications equipment.

### **3.4.5 Administration and Support Platoon**

This platoon supports the UN Military Signals Unit's internal needs, providing administrative support, logistics, installation and maintenance of basic infrastructure including power supply support. This platoon:

- Provides administrative support to the UN Military Signals Unit Commander and senior Non-Commissioned Officer.
- Installs networks, power cables and plugs inside and outside buildings.
- Installs and rigs masts and larger antennas.
- Installs, operates and maintains power generators and solar systems.
- Plans and provides all logistics support to the UN Military Signals Unit.

### 3.5 Equipment

#### Typical Major Items of Equipment for the UN Military Signals Unit

Ser	Item	Quantity	Remarks
1.	Generator 51-75 KVA	1	
2.	Generator 10-20 KVA	12	
3.	Water Treatment Plant	1	
4.	Rifles	125	
5.	Machinegun <10 mm	1	1 per Company
6.	Tents for deployable squad (8-10 men)	15	
7.	Binoculars	30	
8.	NVDs	10	
9.	Shelter/Tentage	6	As Command Posts and accommodation during temporary deployment
10.	Ambulance 4x4 (fully equipped)	1	
11.	4x4 Jeep (TCVs)	20	
12.	Truck, utility/(LOCAL OR HOST) go 2.5-5t	2	
13.	Truck utility/(LOCAL OR HOST) go 1.5-2.4t	2	
14.	Truck utility/(LOCAL OR HOST) go 6-10t	8	For containers/shelters. 2 if tentage for CPs are provided and to deploy the containerized Command Posts
15.	Truck Reefer (under 20 ft)	0	
16.	Water Trucks	2	
17.	Water Trailer	2	
18.	Ablutions	2	
19.	Water Storage	TBD	
20.	Fuel storage	TBD	
21.	Truck Maintenance (medium)	1	

# **Chapter 4**

## **Support for the UN Military Signals Unit**

### **4.1 Support Expectations**

The UN Military Signals Unit is expected to meet the standards of self-sustainment according to the terms of the Statement of Unit Requirement, UN-TCC Memorandum of Understanding (MOU) and Contingent-Owned Equipment (COE) Manual. The deploying UN Military Signals Unit is also required to have and maintain the necessary resources and personnel to support itself administratively and logistically for the duration of the Mission (apart from where supplemented by the UN). To avoid having troops arrive unprepared to sustain themselves or their operations, TCCs and their contingents must be clear on what support will be provided by the UN, and what support they must provide for themselves. See Annex A to this manual for an example of typical and specific initial provisioning and self-sufficiency support requirements. The specifics of what to expect are provided in key documents such as the Statement of Unit Requirement and any UN-TCC MOU or Letter of Assist. It cannot be over-emphasized that special attention must be given to the detailed requirements for rations, water, shelter, medical support and supplies.

### **4.2 The UN Military Signals Unit Commander's Role**

Before deploying to the UN Mission's operational theater, the UN Military Signals Unit commander must ensure that he or she can deploy, sustain and regenerate his or her force. He should consider the implications of casualties, consumption, materiel losses and resupply lead time; and then plan, allocate and balance resources accordingly. A UN Military Signals Unit commander should also evaluate the risks to, and security of, his or her sustainment equipment

and capabilities, communication nodes and links; and adapt his or her plan to reduce the impact of unavoidable constraints on the resources readily available. The commander should carefully consider UN and TCC guidelines for determining further sustainment requirements.

#### **4.3 Major Engineering Support**

Before deployment, UN-TCC negotiations should include any UN Military Signals Unit requirement for major military engineering such as antenna parks and physical barriers for force protection. Early identification of major engineer requirements is essential to reach full operational capability as soon as possible, especially when UN Military Signals Units are establishing their facilities in new locations. Major military engineering tasks are a Mission responsibility and included in the Mission's master engineer plan.

#### **4.4 Self-Sustainment of the UN Military Signals Unit**

When the UN Military Signals Unit arrives in the Mission area it is responsible for meeting all its own needs for rations, water, petrol, oil, etc. for the first 30 to 90 days, depending on the terms of the MOU and Statement of Unit Requirement. Typically, equipment is deployed for the duration of the Mission and troop rotations occur every 12 months. Subject to MOU negotiations, the UN Military Signals Unit may be required to self-sustain in the following areas:

- Catering
- Communications<sup>14</sup>
- Office
- Electrical
- Minor engineering

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<sup>14</sup> Internal communications within a contingent are a TCC responsibility. Contingents should come with suitable equipment for their internal communications establishing contact from their highest contingent headquarters to their respective countries and each of their subordinate Sections, Teams, Detachments, Companies and Battalions. TCCs are also responsible for providing email and Internet access for personal or welfare purposes. The UN provides only strategic communications support between the Mission, Force and Sector Headquarters; and subordinate units of the Sector that are not organic to that Sector Headquarters, such as Battalions provided by another TCC and independently deployed units.

- Explosive Ordnance Disposal<sup>15</sup>
- Laundry and cleaning
- Tentage (see immediately below and paragraph 5.c. of the sample SUR at Annex A)
- Accommodation
  - **Initial Accommodation:** The UN Mission will prepare green field sites under austere conditions at the deployment location. The contingent will need to deploy with sufficient tentage for all accommodation, storage, offices, ablutions and workshops, etc. Water sources will be arranged by the UN Mission; the contingent will deploy sufficient water purification units to produce and consume its own purified water. The Mission will provide Field Defense Stores (FDS) and additional FDS kits for use in mobile operations.
  - **Permanent Accommodation:** The UN Mission will strive to provide hard wall accommodation after the initial six-month period in Contingent-Owned Equipment tentage; failing which the UN Mission will pay a penalty rate of reimbursement until pre-fabricated accommodation can be provided.
  - **Deployable Accommodation:** The contingent must deploy with a sufficient quantity of tentage necessary for short-term operational and tactical deployments.
  - **Tentage Structure:** Tentage must include flooring and the ability to heat and cool as appropriate; and netting at doors, windows and the inner/outer fly of tents. Double-layered tents with metal pipe frames are recommended due to conditions in the field. It is also recommended to mount the tents on cement or wooden foundations to ensure their stability. Deployable accommodation noted in the paragraph above are excluded from this requirement.

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<sup>15</sup> For the UN military unit camp's internal area only. Does not apply to mine clearance activities.

- Basic fire-fighting equipment
- Fire detection and alarms
- Medical: observation and treatment identification
- Defense against Chemical, Biological, Radiological and Nuclear Weapons<sup>16</sup>
- Field defense stores
- Miscellaneous general stores
- Internet access
- Unique equipment
- Welfare items

#### **4.5 Sustainment Support for the UN Military Signals Unit**

4.5.1 Sustainment support for UN Military Signals Units is coordinated through the Sector and Force Headquarters. The UN Military Signals Unit must therefore liaise with both the Sector and Force Headquarters logistics structure (DCOS Operations Support, U-4 LOG, U-1 PER), the Office of the Chief, Service Delivery and the Mission Support Center (formerly the Joint Logistics Operations Centre (JLOC)). Operations planning will determine the specific logistics requirements and the associated logistics command and control structures for each operation when the UN Military Signals Unit is committed. Following the initial period of self-sufficiency and in addition to TCC support obligations to their deployed contingent, all other UN Military Signals Unit life support and operational requirements are satisfied by the Mission's Director or Chief of Mission Support through the Office of the Chief, Service Delivery.

4.5.2 The UN provides the following items and services:

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<sup>16</sup>To date, UN peacekeepers have not been subjected to a nuclear or biological warfare environment. However, they have had to work in a chemical warfare environment. It is therefore important that some elements of the CBRN threat be covered in training to include the characteristics, symptoms, precautions and use of protective clothing and detection monitoring equipment for all types of CBRN threats. If time is constrained, military units should concentrate on detection of and protection from chemical weapons. –*United Nations Peacekeeping Training Manual, Training Guidelines for National or Regional Training Programmes*, undated, page 28, published by DPKO:  
[http://ppdb.un.org/Policy%20%20Guidance%20Database/MAN\\_UN\\_PEAKEKEEPING\\_TRAINING.pdf](http://ppdb.un.org/Policy%20%20Guidance%20Database/MAN_UN_PEAKEKEEPING_TRAINING.pdf)

- Food rations (storage, cooking and sometimes transportation are a contingent responsibility)
- Bulk raw water (or access to bulk raw water). TCCs are responsible for purification, storage and transport)
- Bulk fuel
- Strategic movement of Contingent-Owned Equipment and personnel from the home country to the Mission area of operations
- Main supply route, road/other infrastructure upkeep and mine clearing. Minor engineering and routine upkeep is a TCC responsibility. Readers should consult the applicable MOU
- Blood and blood products
- Casualty Evacuation/Medical Evacuation (CASEVAC/MEDEVAC)<sup>17</sup> transportation and support for in-theater movement of sick and wounded personnel to appropriate medical facilities.<sup>18</sup>

## 4.6 Medical and CASEVAC/MEDEVAC Support

### 4.6.1 Medical Capability

UN Military Signals Units do not typically deploy with their own integral medical teams.

They normally receive Medical Level 1 and higher medical support from other co-located

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<sup>17</sup> CASEVAC is the emergency transportation of any injured or sick person, whose condition is life-threatening, to Initial or Medical Treatment Facilities. Rapid evacuation of casualties is vital to operational effectiveness. MEDEVAC is the movement and en route care by medical personnel of wounded, injured or ill persons, whose condition is not life-threatening, from the area of operations or other locations to a medical treatment facility.

<sup>18</sup> For comprehensive guidance on medical operational, logistical and administrative guidelines for Member States, UN Headquarters and field Missions, consult the Medical Support Manual for United Nations Peacekeeping Operations, which will be available at: [http://ppdb.un.org/Nav%20Pages/PolicyFramework\\_Default.aspx](http://ppdb.un.org/Nav%20Pages/PolicyFramework_Default.aspx)



military units with the required capacity that are also capable of stabilizing casualties while awaiting CASEVAC/MEDEVAC (see paragraph 5.p. of the sample SUR at Annex A). Each UN Military Signals Unit (company equivalent) may deploy elements within the Mission area with an attached medical element provided by another unit, if required. The ability to evacuate UN Military Signals Unit casualties to Level 1, 2 or 3 hospitals must be pre-arranged and verified before each UN Military Signals Unit mission.

#### **4.6.1 UN Military Signals Unit CASEVAC/MEDEVAC**

UN Military Signals Unit elements may operate in small teams (2-3 persons) throughout the area of operations making CASEVAC/MEDEVAC operations both critical and challenging. To mitigate these concerns, the UN Military Signals Unit prepares for CASEVAC/MEDEVAC through detailed planning, training and pre-arranged evacuation resources.

#### **4.6.2 CASEVAC/MEDEVAC Planning and Training**

During the planning phase of each operation, special attention must be given to available CASEVAC/MEDEVAC capabilities, procedures and timing with the appropriate staff officers at Sector or Force Headquarters. UN Force/Mission MEDEVAC/CASEVAC assets and Level 1/2/3 Hospitals will provide medical support and should train with the Mission's Military Signals Unit. CASEVAC/MEDEVAC training is aimed at interoperability with enablers, such as air assets, and other Force elements such as the Quick Reaction Force. When aerial CASEVAC/MEDEVAC assets are not available or appropriate, alternate CASEVAC/MEDEVAC is arranged using Force or Mission assets and procedures. UN Military Signals Unit CASEVAC/MEDEVAC typically involves UN Military Signals Units making use of all available Sector, Force and Mission capabilities.

#### **4.7 UN Headquarters Staff Support to the UN Military Signals Unit**

4.7.1 The Department of Field Support (DFS) at UN Headquarters provides dedicated support to peacekeeping field Missions in the areas of financial reimbursements, logistical support services,

communications and information technology, human resources and general administration to help field Missions. Support is delivered to field Missions and TCC contingents through DFS and its Mission Directors/Chiefs of Mission Support and their subordinate staff.

4.7.2 Equipment for communications between the Mission, Force or Sector Headquarters and the UN Military Signals Unit is provided as UN-Owned Equipment (UNOE). UNOE ensures that the UN Military Signals Unit has integral, secure, military-grade communications within the Force or Mission's communications network. The UN Military Signals Unit's internal communications and information systems are provided by the respective TCC as Contingent-Owned Equipment.

4.7.3 The determination of financial reimbursement to UN Member States for Contingent-Owned Equipment (COE) is established through the COE Working Group and UN legislative bodies. The details of this reimbursement at the contingent-specific level are included in the MOU, which is the primary reference for contingent logistics support (including support for the UN Military Signals Unit) for each specific peacekeeping Mission. Major equipment (if not in the COE Manual) will be treated as a "special case" if the situation requires. Maintenance of this special case equipment is a TCC responsibility if the equipment is under wet lease. See paragraph 4.8 below for an explanation of wet and dry leases. In accordance with the COE Manual, any special minor equipment or consumables not covered by the standard self-sustainment rates may be categorized as "unique equipment." These items will be reimbursed according to bilateral special case arrangements between the troop/police contributor and the UN.

4.7.4 The DFS logistics plan is the basis for identifying resources that may be re-deployed from other locations (e.g., UN Logistics Base Brindisi or other field Missions) to support Mission deployment. Additionally, the DFS logistics plan forms a basis for negotiations with potential

TCCs on their provision of COE that each individual troop contributor is required to bring to the Mission along with applicable self-sustainment services.

#### **4.7.5 Force Generation and Logistics Planning**

**It is essential to coordinate the force generation process with logistics planning.**

This coordination occurs once troop contributors have been identified. Problems that troop contributors may face in equipping or supporting their contingents are identified and staffed for resolution at UN Headquarters. Problems are assessed based on a combination of the data given by the TCC and inspections carried out by DPKO personnel. The UN Department of Field Support recognizes that many Member States do not possess all of the equipment needed for a particular UN Mission and have therefore put in place mitigating arrangements.

#### **4.8 Wet and Dry Lease**

In order to ensure that units being offered by Member States come with the required capability, there are a number of options for the provision of major equipment and its support. These options come under the headings of “wet and dry lease” and the option chosen is directly linked to the rate of reimbursement.

##### **4.8.1 Wet Lease**

Under wet lease arrangements, a contingent deploys with its COE and is responsible for its maintenance and support. Typically, in the interest of standardization and interoperability, the preference for all parties is for the straight wet lease arrangement. This arrangement can be achieved in one of two ways:

- Accommodation, workshops and utilities (e.g., electrical generators) are typically a troop contributor responsibility under the MOU. The troop contributor also provides the equipment, related minor equipment, workshop support, spares, and maintenance personnel. The troop contributor is reimbursed at set rates.

- One troop contributor provides the major equipment and a second party, under a bilateral arrangement, provides the support. In this case, the troop contributor deployed to the Mission area and operating the equipment is reimbursed by the UN. The second party is reimbursed, if at all, by bilateral arrangement without UN involvement or responsibility.

#### **4.8.2 Dry Lease**

Under dry lease arrangements, a contingent deploys with its COE but the UN arranges for its support. This arrangement can be achieved in a number of ways:

- Under the first, the troop contributor provides the equipment and the UN takes responsibility for the support, spares and maintenance. The troop contributor receives reimbursement, but at the dry lease rate.
- The troop contributor provides the equipment and the UN arranges for another Member State to provide the support. The former receives reimbursement at the dry lease rate and the latter on scales laid down for maintenance and support.
- The troop contributor provides the equipment, receives reimbursement at the dry lease rate and the UN provides the support via commercial contractor.

#### **4.9 Letter of Assist**

Primary logistics support for a contingent comes from national military logistics sources under TCC control. Civilian contractors may also provide support. Major items of equipment may accompany deploying units, or the UN may provide them in the Mission area. The UN may also satisfy specific support requirements not already included under an MOU or available through commercial contract. These support requirements may be met by a contracting method known as a Letter of Assist (LOA), by which the UN acquires special supplies or services from a Member State. LOAs are used when:

- A TCC deploys, rotates or repatriates its personnel and equipment using its own capacities.

- A special need arises for essential equipment or services that are not available through normal sources of supply.
- The items or services required by the Mission are not covered by an MOU.
- A TCC contributes aircraft or vessels to a mission.

#### **4.10 Pre-Deployment Visits**

In view of the financial and operational significance of ensuring that contingents are correctly equipped, DPKO arranges to conduct Pre-Deployment Visits (PDVs)/inspections before deployment. PDV's are usually conducted once the troop contributor and UN Headquarters reach an MOU agreement. This MOU covers personnel, major equipment, self-sustainment and Mission factors, and is a contractual statement of what each of the respective parties will provide.

#### **4.11 Status of Forces Agreement**

4.11.1 From a logistical perspective, the Status-of-Forces Agreement (SOFA) specifies the terms of support provided by the host state to the UN Mission, as well as the legal rights of the UN Mission's personnel and operations. The Department of Field Support at UN Headquarters is responsible for negotiating SOFAs with the host state.

4.11.2 SOFAs also codify relations between the UN Mission and host state describing "the rights, privileges and immunities of the mission and its personnel and the mission's obligations to the host government."<sup>19</sup> SOFAs govern the legal status of troops and civilian personnel deployed to the Mission in the host state, and specify the legal immunity for UN personnel with regard to the settlement of claims, the modalities for the exercise of civil and criminal jurisdiction over military and civilian Mission members, as well as provisions relating to freedom of movement, taxes, customs, immigration controls, radio frequencies, flight clearances

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<sup>19</sup> *Handbook on United Nations Multidimensional Peacekeeping Operations*, published by DPKO Peacekeeping Best Practices Unit, December 2003, p.13, available at: <http://www.peacekeepingbestpractices.unlb.org/Pbbs/library/Handbook%20on%20UN%20PKOs.pdf>

and permission to wear uniforms and carry weapons. Under the typical terms of a SOFA, “military personnel are immune from criminal prosecution by the host state for crimes committed on its territory, but may still be subject to the criminal jurisdiction of their national authorities.”<sup>20</sup>

#### **4.12 National Support Elements**

4.12.1 With prior UN approval, Member States providing military and/or police personnel to UN Missions may augment those personnel with a National Support Element. Member States may choose to organize National Support Elements to provide their deployed contingents administrative and logistical services with national standards of support that may exceed or differ from the stated UN requirement. A National Support Element includes personnel and equipment *in addition* to those agreed to by the UN and Member State under the terms of the applicable MOU, and/or as described in the Statement of Unit or Force Requirement for the specific field Mission.

4.12.2 As this augmentation is over and above UN requirements, the UN offers no reimbursement or financial liability for National Support Element costs, rotation or self-sustainment. Nonetheless, for purposes of legal status, National Support Element personnel are considered part of the Member State’s military or police unit contingent. The total personnel strength of the National Support Element will be specified in the applicable MOU between the UN and Member State, and shall be reasonably proportionate to the strength of the contingent or Formed Police Unit concerned. The National Support Element strength should not exceed 50 personnel without significant justification by the Member State, and approval by the Under-Secretary-General, Department of Peacekeeping Operations.

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<sup>20</sup> Office for the Coordination of Humanitarian Affairs (OCHA) *Glossary of Humanitarian Terms in Relation to the Protection of Civilians in Armed Conflict*, 2003, available at: <http://ppdb.un.org/Policy%20%20Guidance%20Database/Glossary2004.pdf>



# **Chapter 5**

## **Training for the UN Military Signals Unit**

### **5.1 Intent**

This Chapter is intended to assist UN Military Signals Unit commanders and leaders in their professional obligation to achieve the training and operational readiness of the personnel under their supervision. The following paragraphs contain brief explanations of UN training responsibilities and expectations, training requirements and professional military training recommended for emphasis. The UN fully recognizes TCC sovereignty and prerogatives when it comes to the military training of their personnel and units. TCC military training is the foundation upon which UN Military Signals Units can then add and adapt to the UN peacekeeping context. The training requirements mentioned in this Chapter are task-oriented and not necessarily UN peacekeeping unique. The intent is to provide contingent commanders and subordinate leaders a consolidated list of important topics as they prepare their units for UN deployment and post-deployment. Commanders and subordinate leaders should develop these training topics in greater detail to suit the needs of their units. To meet the need for greater detail in UN Mission-specific training, specialized training materials (STMs) are being developed by the Department of Peacekeeping Operations to provide peacekeeping training goals for TCCs participating in UN operations.

### **5.2 Training Responsibilities and Expectations**

Training, regardless of subject, is a military command responsibility at every organizational level. Military commanders and supervisors have a professional, legal and moral obligation to ensure their personnel and units are properly trained to accomplish their missions. UN Military Signals Units are normally composed of personnel from a single TCC, but may



occasionally include elements from other TCCs. National military training is ideally within the parameters set by the UN as articulated in this Manual (to promote effectiveness and interoperability), and therefore may only require a deploying unit to undergo some additional training to gain greater familiarity with UN peacekeeping and the specific requirements of a particular Mission. DPKO's Integrated Training Service (ITS), part of the Policy, Evaluation and Training Division of DPKO at UN Headquarters, provides this type of UN Mission orientation training material. ITS has developed Mission-specific training modules that, when applied, help transform and re-align UN military units to the tasks and challenges of peacekeeping operations. ITS is responsible for providing peacekeeping training standards for all phases of training, based on departmental priorities and policies, lessons learned and best practices. ITS disseminates required standards to all peacekeeping training partners, including Member States and field Missions. Planners should take into consideration training requirements as they develop timelines for deployment and troop rotation so that units can receive the necessary training before they deploy. Upon arrival in the Mission area, the Force Headquarters is responsible for producing training-of-trainers courses for induction training conducted under contingent arrangements. Individual and especially collective UN Military Signals Unit training should also focus on interaction with different Mission elements (particularly CITS), Mission partners and other actors present in the area of operations.

### **5.3 Training Requirements**

5.3.1 UN Military Signals Unit training should be based on Mission requirements contained in the Statement of Unit Requirement and the communications and information technology training given by DFS's Integrated Training Service (see the example at Annex C). These requirements should include intensive system and technology-specific training on UN-provided equipment. The Information, Communications and Technology Division of the Department of Field Support sets the framework for this part of the required training and unit preparation. The

communications and information technology training described in Annex C is useful for TCCs and unit commanders as they design their national training programs, conduct Signals Unit training and evaluate their unit performance. Annex C also provides topics TCCs may wish to discuss with the Integrated Training Service for additional support.

5.3.2 The UN Infantry Battalion Manual (UNIBAM) discusses common UN military unit training at length and should be studied by all units deploying for peacekeeping Missions.<sup>21</sup> Key professional qualities worthy of TCC training emphasis include military planning, the ability to integrate and orchestrate diverse sources of specialist personnel and equipment, communications skills (both oral and written), the development of a versatile and flexible mind-set, cultural awareness and sensitivity, language skills, and knowledge of the UN communications and information technology system. Descriptions of generic UN peacekeeping training, including the various training phases such as Pre-Deployment Training, Induction Training, Ongoing or In-Mission Training (a command responsibility vital to ensuring the maintenance of operational effectiveness) and on-the-job training are covered in the UN Infantry Battalion Manual. The overarching principles of UN peacekeeping described therein are applicable to all military units regardless of specialty.

5.3.3 While military training may vary according to national goals and resources, there are fundamental training requirements that should be observed when preparing to deploy to a peacekeeping Mission. Training requirements of particular note for UN Military Signals Units include:

- Mission Rules of Engagement.
- Protection of Civilians.

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<sup>21</sup>The Infantry Battalion Manual, Volumes I and II, can be found at:  
<http://www.un.org/en/peacekeeping/documents/unibammanualvol1.pdf> and  
<http://www.un.org/en/peacekeeping/documents/unibammanualvol2.pdf>.

- Mission-specific geographic and environmental conditions whose unique physical and operational characteristics present certain operating challenges for effective communications.
- Mission-specific guidance obtained from documents issued by DPKO's Office of Military Affairs, such as the Statement of Unit Requirement and Guidelines to TCCs; the Integrated Training Service's Pre-Deployment Information Packages; and field Mission documents such as the Force Commander's Training Directive.
- Observations resulting from reconnaissance by the incoming UN Military Signals Unit commander and staff to the Mission area.
- Lessons learned from the outgoing UN Military Signals Unit.
- Awareness training on asymmetric threats, particularly the use of IEDs.
- *UN/CITS-certified training (either in a specialized training facility or in the Mission area) on the installation, configuration, operation and maintenance of UN-issued communications and information technology equipment and services is mandatory as a prerequisite to performing assigned UN Military Signals Unit tasks* (See Annex C).

#### **5.4 Professional Military Training Recommended for Emphasis**

There are a number of professional military training subjects TCCs should emphasize as they prepare their personnel and units for UN peacekeeping operations. Knowledge of the UN command and control and logistics systems (particularly as explained in this Manual's 1<sup>st</sup> and 4<sup>th</sup> Chapters) is essential for contingents to operate effectively within the integrated UN field Mission. TCCs are encouraged to develop leaders who are capable of working within a civilian-managed Mission support structure while remaining responsive to supported military units and the Mission's military chain of command. Beyond mastering specific technical subjects, UN Military Signals Unit leaders should be capable of orchestrating all military unit functions to achieve a coordinated application of unit assets. The ability to work with other nationalities is a

fundamental requirement in UN operations. Language training and Mission-specific cultural familiarization could be incorporated into the TCC's long-term professional military curriculum, not just its pre-deployment training. Since English and French are the two languages most frequently required in UN Missions, it is highly desirable for UN Military Signals Unit personnel to be proficient in English and/or French languages for at least basic communications needs. Preparing key contingent members to communicate in the English and/or French languages allows them to integrate their unit into the overall Mission. Moreover, it would be invaluable to assign at least two bi-lingual UN Military Signals Unit persons to radio rooms. TCCs are encouraged to work with DPKO's Integrated Training Service to develop classroom instruction and command post exercises that will provide UN peacekeeping orientation that can then be added to TCC-specific military professional training.

# **Chapter 6**

## **Evaluation of the UN Military Signals Unit**

### **6.1 Evaluation Criteria**

6.1.1 Evaluations are extremely useful to TCCs, their contingent commanders and UN planners and Mission leadership to organize, train, equip, deploy and employ military personnel. TCCs conduct their evaluations (reinforced by Force and Sector Headquarters evaluations) to assess and monitor the state of individual and collective training, and to check the maintenance and performance of equipment. Above all, the purpose of formal evaluations is to assist TCCs and military contingents in meeting national and UN standards of performance and interoperability.

6.1.2 A military contingent's operational readiness is evaluated based on distinct criteria such as Mission requirements, organizational structure, operational standards, the capability to perform mission essential tasks, standards achieved in training, as well as administrative and logistics standards. This evaluation should analyse task-oriented activities at each level within the military contingent to include individuals, task-oriented groups and commanders. The evaluation checklists at Annex D include broad peacekeeping evaluation criteria, as well as those that are more UN Military Signals Unit specific. For a comprehensive set of UN commander's evaluation checklists, see the Chapter on Peacekeeper Capability Standards in the UN Infantry Battalion Manual.

### **6.2 Independent Evaluation Support**

TCCs can authoritatively determine how well their personnel, units and equipment are prepared for peacekeeping duties by conducting independent evaluations using special evaluation experts from national training centres and personnel with previous peacekeeping experience. Adequate resources in terms of training areas, ammunition for live firing, classrooms and

equipment oriented to the Mission environment will all significantly improve preparation and evaluation exercises. Any gaps in capability can be corrected by TCC-appropriate action to make the necessary improvements. Additionally, the UN Force Headquarters conducts its own assessment of Force units when they deploy. In this way, multiple evaluations contribute to higher states of operational readiness and performance.

### **6.3 Conducting Evaluations**

Formal evaluations during mission rehearsals and exercises are highly encouraged. Evaluation criteria should be based on measurable and quantifiable standards that are specific, achievable, realistic and time-bound in nature. Evaluations may be conducted in a graduated manner by level (from individual soldiers to commanders) and activity (crew, section, platoon, company or Battalion) in a task-oriented manner to systematically build expertise and integrate capabilities for collective application. In addition to national training standards, further guidance on conducting evaluations is available in the sample evaluation checklists at Annex D, and the links and references provided throughout this manual regarding UN policies, directives, SOPs and guidelines.

### **6.4 Pre-Deployment Evaluations**

6.4.1 A military contingent is expected to be well trained and qualified in basic military skills and conventional defensive tactics, techniques and procedures according to specific national military standards prior to concentration for peacekeeping training. DPKO-organized pre-deployment visits (PDV) offer a level of independent evaluation prior to a contingent's deployment to the Mission area. Pre-deployment evaluations by the TCC and DPKO may include validation of the contingent's ability to:

- Ensure timely assembly, grouping, and equipping of the military unit in accordance with the SUR and MOU.
- Conduct Mission-specific, task-oriented, individual and collective tasks/capabilities.

- Identify shortcomings and take corrective measures for capability enhancement.

6.4.2 Prior to UN DPKO's PDV, a well-prepared UN Military Signals Unit may undertake the following activities:

- Raising and establishing a Military Signals Unit in accordance with the Mission-specific UN Statement of Unit Requirement.
- Training in accordance with standard UN Military Signals Unit tasks and operational demands. See Chapter 2 for a detailed discussion of UN Military Signals Unit tasks.
- Developing *Mission-specific*, task-oriented, individual and collective expertise and capabilities.
- Identifying shortcomings and taking remedial action to improve capabilities.
- Making timely adjustments and mid-course corrections.
- Utilizing experienced trainers from other Military Signals Units to train the new Military Signals Unit awaiting deployment.
- Final pre-deployment inspection and rehearsal of the Military Signals Unit by national peacekeeping experts under troop contributing country arrangements.

## 6.5 In-Mission Evaluations

In-Mission evaluations should include:

- Conducting the first in-Mission evaluation in the second month of deployment to validate and match the standards achieved prior to deployment. This can be followed by quarterly/half yearly evaluations in accordance with Mission norms.
- Continuously and simultaneously monitoring and reviewing performance in-Mission by the military contingent command element and Mission leadership.
- Identifying potential weak areas and instituting periodic selective evaluations to administer corrective actions.

- Reassessing capabilities and skills when the Mission's operational situation changes, or when there is a gap between requirements and performance.
- Taking note of clearly visible performance capability gaps during critical times and adverse situations, and addressing them expeditiously.
- Validating key appointments in command and staff channels to verify ability and responsibility, and providing guidance and support where required.
- Hosting visiting TCC teams of military officials and peacekeeping experts who monitor and validate unit performance.

## 6.6 UN Assistance

DPKO/DFS and the Mission leadership play a key role in guiding and facilitating TCC achievement of evaluation and operational readiness. The nature of UN assistance is described below:

### 6.6.1 DPKO/DFS Assistance

DPKO/DFS promote evaluation, operational readiness and commitment to UN standards with a flexible and accommodative approach by:

- Guiding, assisting, facilitating or supplementing TCC efforts in evaluation.
- Providing training assistance through the Integrated Training Service.
- Providing the Mission and TCC strategic guidance and oversight by:
  - Conducting a pre-deployment visit (for initial deployments only) to verify that provisions of the SUR/MOU are met.
  - Guiding and assisting emerging TCCs (and other TCCs on request), focussing on basic military training and technology-related issues.
- Providing an Operational Advisory Team from the Military Planning Service/Office of Military Affairs, DPKO to guide and assist emerging TCCs (assistance on request for other TCCs).



## **6.6.2 Mission Leadership Assistance**

The Mission leadership supports evaluation by coordinating and providing the following assistance:

- Informs TCCs of performance goals for the Military Signals Unit, pre-deployment preparation requirements and Mission-oriented task requirements.
- Coordinates pre-deployment reconnaissance, organizes in-Mission induction training through IMTCs, provides the training of trainer courses (a Force Headquarters responsibility), provides Mission Military Signals support and defines unambiguous operational tasks, roles and responsibilities for the Military Signals Unit that provide a basis for evaluation.
- Carries out in-Mission operational performance and capability evaluation of the contingent as and when required. Provides and coordinates the required resources and staff to conduct evaluations and centralized, technical on-the-job training to strengthen evaluated shortfalls.
- Guides and supports TCCs and Military Signals Units to improve shortfalls, adopt midcourse corrections and take action with the Mission command and staff on evaluation findings. Develops a Mission-specific Military Signals training plan and oversees the required training to improve the evaluated operational readiness.
- Performance Evaluation Forms (PEFs) for commanders.

## **6.7 Evaluation References**

In addition to this manual, numerous documents offer guidelines and standards by which UN Military Signals Units can evaluate their operational readiness. See Annex E.

## **6.8 Collective Responsibilities**

TCCs are encouraged to modify and formalize the evaluation methodology, criteria and procedures presented herein to suit their needs in conducting their evaluations. For TCC

contingents deploying to UN Missions, the development and use of detailed standards and checklists, focusing on peacekeeping and UN Military Signals preparedness, will yield great benefits in terms of operational readiness and early identification of unit capabilities that need improvement. Early identification allows performance or equipment shortfalls to be addressed before they cause problems. TCCs that lack the financial or technical ability to support their deploying units with the resources needed to meet national or UN standards should discuss their needs with DPKO/DFS at UN Headquarters. Every effort will be made to assist the TCC with its requirements, either by expert assistance from UN Headquarters or through third party support.

## **Extract of a Sample Statement of Unit Requirement**

**Important Note:**

This extract of an actual Statement of Unit Requirement (SUR) is provided for illustrative purposes only.

The unit composition and strength described in this SUR are unique to the Mission for which it was created. Generic planning strength figures and organizational structure for a UN Military Signals Unit in other Missions should be based on Mission requirements and the guidance in this Manual, not necessarily the SUR in this annex.

Sample  
Statement of Unit Requirement  
(Sanitized Original)



**United Nations XXXX**

**The Statement of Unit Requirement for the  
Force and Sector Signals Company**

**Department of Peacekeeping Operations  
Office of Military Affairs  
Military Planning Service**

Approved by

XXXXXX

Military Adviser for Peacekeeping Operations  
(DATE)

Review Date: (DATE)  
Drafted by: (ORG)  
Service Contact: Tel: (TBD)

*This document details the capabilities that are required for optimizing the unit's efficiency in the conduct of operations as mandated for the Mission. The Concepts of Operations [CONOPS] and any future adjustments to the CONOPS may place additional and more specific requirements on the unit. This should be noted in relations to the MOUs that will be negotiated based on the capabilities provided in this document. The provisions in such MOUs shall by no means supersede the capabilities sought in this document.*

*The attached document herein, with its notes and Annexures constitutes the requirements for the Force Signals Company. If discrepancy or disagreement on interpretation of the document arises among concerned parties, the interpretation solely by the Office of Military Affairs (OMA), Department of Peacekeeping Operations (DPKO) is deemed valid, and any other interpretation is preempted.*

### **References :**

- A. Military Strategic Concept of Operations (CONOPS) of (UN ORG) dated June 2014.
- B. Rules of Engagement (ROE) for the Military Component of (UN ORG) dated June 2014.
- C. UN Security Council Resolution 2149 dated 10 Apr 2014.
- D. Manual on Policies and Procedures Concerning the Reimbursement and Control of Contingent-Owned Equipment of Troop/Police Contributors Participating in Peacekeeping Missions (COE Manual), 2011.
- E. Stand-by Arrangements in the service of Peace-Tables of Organization and Equipment, 2009.
- F. Military Planning Process for Peacekeeping Operations, 2009.
- G. Authority, Command and Control in UN Peacekeeping Operations dated 15 February 2008.
- H. Generic Guidelines for Troop Contributing Countries deploying military units to the United Nations peacekeeping missions, 2008.

### **Overview of Strength and Deployment Locations**

Unit Type	Strength	Structure	Location	Remarks
FHQ/SHQ Signals Company	TBD	<ul style="list-style-type: none"> <li>• FHQ/SHQ Platoon.</li> <li>• Communications Centre (COMMCEN) Platoon</li> <li>• Strategic Links Platoon</li> <li>• IT &amp; Telecommunications Platoon</li> <li>• Administration and Support Platoon</li> </ul>	<p>Located within the FHQ/SHQ compound in XXXX.</p> <p>Up to (NUMBER TO BE DETERMINED) elements will be deployed in</p>	At least 70% manning for technical personnel; 20% manning for leadership, logistics and administrative tasks; and 10% manning for self-defense, guarding and

			Battalions and independent unit locations.	welfare. (NOTE: CAN CHANGE)
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## 1. **BACKGROUND**

### a. **Situation.**

(1) BACKGROUND INFO – (HERE IS FOR VARIOUS BACKGROUND INFORMATION SO THE LEADERSHIP KNOWS THE SITUATION AND CAN DETERMINE HOW IT MAY IMPACT OPERATIONS AND TO ENSURE TO REPORT ANY CHANGES TO HIGHER HEADQUARTERS)

(2) BACKGROUND INFO

(3) BACKGROUND INFO

(4) BACKGROUND INFO

(5) BACKGROUND INFO

(6) BACKGROUND INFO

(7) BACKGROUND INFO

### b. **Force Concept. NOTE: THIS IS A SAMPLE ONLY AND WILL BE DIFFERENT FOR DIFFERENT MISSIONS**

(UN ORG) will establish its FHQ in XXXX with (NUMBER REQUIRED) multinational sectors / brigade areas. Each sector will cover the western, central and eastern part of the area with headquarters in XXXX, XXXX XXXX, and XXXX respectively. There are two reserve Battalions under the FHQ located in XXXX and XXXX, to respond to contingencies throughout the (MISSION AREA). The reserve Battalions will deploy with light armoured vehicles to permit air transportation. The (UN ORG) military component is to deploy to the main centres of population to provide protection of civilians, prevent the resurgence of armed conflict, support the stabilisation of the (LOCAL OR HOST) and support the extension of state authority. This will allow the (LOCAL OR HOST) authorities to fulfill and develop capacities for their national responsibilities for the population and the State. The main capability will be the flexibility to respond to evolving threat which characterized the (LOCAL OR HOST) security situation, while maintaining operational depth, flexibility and agility throughout the conduct of operations. Although, units will be deployed in permanent locations at the

commencement of operations, they could be re-deployed by the mission to other parts of the country to address the changing security and humanitarian situations in (LOCAL OR HOST).

c. **End State.** A secured environment in (LOCAL OR HOST) is restored, with the threats from rebel groups contained. Security is maintained by an operationally capable (LOCAL OR HOST) security forces for the consolidation of State authority throughout the country, the protection of the population, and the return of displaced persons, and the restoration of basic services throughout the country.

2. **MISSION.** The FHQ / SHQ Signal Company will provide the Force / Sector HQ XXXX with telecommunications and information technology service to enable command and control within the Mission AOR, and to support administrative and logistic tasks of military and police units.

### 3. **EXECUTION**

a. The signal company's main tasks are to provide IT and telecommunication support to the Force and Sector headquarters with an emphasis on mission critical elements, such as communication centres (CC), radio rooms (RR), joint operations centres (JOC), joint mission analysis centres (JMAC), and joint logistic operations centres (JLOC) in an integrated, multidimensional and multilingual mission environment. The signal company shall be able to install, operate and maintain common radio systems, micro-wave equipment, power generators, and telephone systems, and be able to install IT-infrastructure, such as cabling, rigging and masts. However, the installation, programming, and configuration of systems, such as servers, telephone systems, routers, etc. will rely heavily on UN civilian technicians. Signal company personnel need to be capable to support such efforts and to operate and maintain these systems once set-up.

b. The signal company must be able to support any sub-deployments of elements of the HQs and be able to respond timely and with appropriate resources to challenging situations, such as restoring services and IT infrastructure after black-outs or attacks by armed groups.

c. In addition, signal units have to provide user support military and police staff and to combine efforts with the local Communications and Information Technology Section in providing common IT services.

d. **Organization** (Refer APPENDIX A)

(1) **HQ Platoon.** The FHQ/SHQ platoon will be in charge of supporting installation, configuration and of operation internal communications and IT systems of the FHQ/SHQ. They must be trained to:

- (a) Provide personnel to man radio rooms/ communication centres for continuous communications 24/7.
- (b) Configure, and maintain digital VHF and HF radios and antennas, Install and maintain telephone systems.
- (c) Support installation, operate and maintain unit computers, printers, copy machines, VTC systems and projectors.
- (d) Support installation, configuration and maintenance of passive and active network components.
- (e) Support key military and police staff within the Service Desk structures of the headquarters.
- (f) Support training of military and police personnel in application and use of communications equipment.

(2) **COMMCEN Platoon.** The COMMCEN platoon will provide personnel as detachments to set-up radio rooms and communication centres, and to train the dedicated signal personnel of the host unit. They must be trained to:

- (a) Configure, operate and trouble-shoot HF and digital VHF radio systems and to train military personnel in this regard.
- (b) Operate and use personal MS Windows-based computers and office software, telephones and satellite equipment and to train military personnel in this regard.
- (c) Apply SOP for reporting and communication over military radio networks, including military alphabet and spelling, frequency and encryption changes, application of call signs, conduct of communication checks and to train military personnel in this regard.
- (d) Train military personnel to summarize and submit written and verbal military messages and reports.

(3) **Strategic Links Platoon.** The strategic links platoon will install, configure and maintain strategic communication systems. They must be trained to:

- (a) Install, configure, and maintain HF radios and antennas.
- (b) Install, configure, and maintain microwave systems and antennas.



- (c) Support installation and maintain satellite VSAT equipment.
- (d) Support configuration and maintenance of IED electronic counter measure systems (e.g., C-IED jammers) and support to train military personnel in this regard.
- (e) Deploy, set-up and operate deployable command post solutions for up to 60 days.

(4) **IT and Telecommunications Platoon.** The IT and telecommunications platoon will be in charge of installation, configuration and operation internal communications and IT systems. They must be trained to:

- (a) Install, configure, and maintain digital VHF and HF radios and antennas and train radio operators of the units.
- (b) Install, configure, and maintain telephone systems.
- (c) Support installation, operate and maintain personal computers, printers, copy machines, VTC systems and projectors.
- (d) Support installation, configuration and maintenance of passive and active network components.
- (e) Support key military and police staff within the service desk structures of the headquarters.
- (f) Support training of military and police personnel in application and use of communications equipment.

(5) **Administration and Support Platoon.** The administration and support platoon will be in charge to support the installation and maintenance of basic infrastructure, power supply and internal logistical support. They must be trained to:

- (a) Install network and power cables and plugs inside and outside of buildings.
- (b) Install the rigging and installation of masts and larger antennas.
- (c) Install, operate and maintain power generators and solar systems.
- (d) Plan and execute all internal logistic tasks, mobility requests, and asset management functions.

e. **Tasks.**

- (1) Install, operate and maintain encrypted HF and microwave-based communication networks links.

- (2) Install, operate and maintain information technology systems, including computers, printers, network infrastructure, and support the operation of email- and file-servers.
- (3) Install, operate and maintain VHF and digital VHF radio networks in support of operations and support CIT training.
- (4) Support Communications and Information Technology Section in the installation, operation and maintenance in SitCen, CC, JOC, JLOC and JMAC.
- (5) In collaboration with mission Communications and Information Technology Section, provide service desk support for key military and police staff.
- (6) Install, operate and maintain telephone systems.
- (7) Deploy and operate deployable command posts (provided by the UN) to enable temporarily deployment of small command groups.
- (8) Be prepared to provide support for the provision of the Mission communications services to offices of the civilian component in the locations considered at elevated risk.
- (9) In addition to an extensive pre-deployment raining, the technical personnel of the Signals Unit will be trained on the installation, operation and maintenance of UNOE at the designated mission training centre where UN CIT equipment before they are deployed to their final destinations, followed by on-the-job training when deployed to their final locations.

f. **Capabilities:**

- (1) The operators will require technical knowledge and skills; they will require specific UNOE training once deployed.
- (2) Self defence capability.
- (3) Self transportation.
- (4) Language skills in (LANGUAGE) and (LANGUAGE) for the personnel of the CC and the Service Desk.<sup>22</sup>

g. **Major Equipment requirements.** See APPENDIX B for details.

#### 4. **ADMINISTRATIVE REQUIREMENTS**

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<sup>22</sup>There must be sufficient French and English speaking personnel to operate radios 24/7.

a. **Administration and Discipline.** Administration and discipline are a national responsibility.

b. **Language.** The official language of (UN ORG) will be (LANGUAGE). The operational radio communications will be in (LANGUAGE), although some communications may be in (LANGUAGE). The presence of (LANGUAGE) speakers in the company is recommended to enable effective communications with the local population.

5. **LOGISTICS.** Arrangements for logistic support are laid down in “Generic Guidelines for TCCs Deploying Military Units to the UN Peacekeeping Missions” and the “COE Manual.” The contingent is required to be self-sustained, with integral support and maintenance elements, to sustain its operations at the permanent and temporary deployment locations. A full description of the requirements and standards for all self-sustainment categories are contained in Chapter 3, APPENDIX B of the “COE Manual.” The company must be self-sustaining in the areas listed below, which is not an exhaustive list. The company will need to support logistically permanent and temporary detachment (e.g. deployed liaison officers from international forces operating in (LOCAL OR HOST)).

a. **Logistics and Support.** Beyond the ability of being self-sufficient and requirements of self-sustainment, all deployed detachments of this company will receive full support from the respective host unit.

b. **Initial Provisioning and Self Sufficiency.**

(1) **Water.** The company must deploy with bottled water for a duration discussed and agreed during MOU negotiations. Within the first seven days, the company is expected to install its own water purification plant to produce bulk treated water from a UN-provided water source.

(2) **Rations.** The company must deploy with rations for a duration discussed and agreed during MOU negotiations. The Mission will provide rations thereafter. The company must have the capacity of establishing storage (e.g. reefer trucks, reefer containers etc.) for 14 days of rations and 14 days of CRPs or for a duration discussed and agreed during MOU negotiations.

(3) **Supply.** The company is required to deploy with fully self-sufficient stocks of supply items and spare parts for maintenance of its major and minor equipment. The company is to deploy with minimum six months stock levels of spare parts, supplies and consumables with initial deployment. Resupply of consumables and spare parts is a national responsibility.

(4) **Petroleum, Oil and Lubricants (POL).** The company must deploy only diesel fuelled vehicles, equipment and machines as diesel is the only type of fuel available in the Mission area. The company must deploy all vehicles with fuel-tanks half (1/2) full. The Mission will provide fuel from the first day after

deployment. The company must have the capacity of establishing bulk storage (e.g. fuel trucks, bladders, storage tanks, trailers equipped with fuel pumps and flow meters) for 14 days of diesel supply or for a duration discussed and agreed during MOU negotiations. The company should also have the capacity of distributing diesel to vehicles and generators. Oil and lubricants will also be provided by the Mission.

c. **Accommodation.**

(1) **Initial Accommodation.** The Mission will prepare green field sites under austere conditions at the deployment location. The company will need to deploy with sufficient tentage for all accommodation, storage, offices, ablutions, and workshop etc. needs. The Mission will provide Field Defence Stores (FDS), and additional FDS kits for use in mobile operations.

(2) **Permanent Accommodation.** The Mission will strive to provide prefab accommodation after the initial six month period, subject to procurement and deployment delays, failing which the Mission will pay a penalty rate of reimbursement until prefab accommodation can be provided. The company is encouraged to deploy with its own prefab accommodation and erect those in the camp site using its own engineering personnel, for which the Mission will pay the higher (accommodation) rate of reimbursement.

(3) **Tentage Structure.** Tentage must include flooring and the ability to heat and cool as appropriate, netting at doors' windows' and inner and outer fly for tents. Double layered tents with metal pipe frames are recommended due to the conditions in the field. It is also recommended to mount the tents on cement or wooden bases to ensure their stability.

d. **Ablution.** The company must deploy with own field ablutions (field latrines and showers) and sufficient reserve to use for subsequent operational/tactical deployments. The company is encouraged to deploy with their own permanent ablution units.

e. **Catering.** The company must be self-sustained in catering. The Mission will not provide hard wall structure for the kitchen upon deployment and the company should preferably deploy with fully mobile kitchen (e.g., kitchen trailers). The company should also have clean and healthy kitchen facilities and equipment such as, but not limited to, deep freeze storage, e.g. freezer containers (14 days), cold food storage (7 days), dry food storage (28 days), hot dishwashing capabilities, cooks, mobile cold storage devices (e.g. freezer trucks), dishes and cutlery, and a dining facility. The company must be able to support all its organic units and personnel, including augmented personnel, operating in the field with deployable kitchen equipment. The kitchen cookers must be only electric or diesel operated; gas cookers are not permissible.

f. **Communications.** The company must provide mobile integral communications within the unit.

(1) **HF.** High Frequency (HF) communications is mandatory and must have a range of up to 250 km. The company command post must install HF base stations and antennae with at least 2 sets of HF radios (primary and backup) manned by its own qualified operators for effective radio communication with the Sector HQ, other contingents and its own elements operating outside of the Very High Frequency (VHF) and/or the Ultra High Frequency (UHF) coverage.<sup>23</sup>

(2) **VHF/UHF.** VHF communication is mandatory and must have a range of up to 30 to 35 kilometers. There is no requirement for UHF communications.

(3) **Telephone.** The company must provide, install and operate switchboard and telephone network down to the sections within its AOR.

g. **Office.**

(1) **Space.** The office working space must be inside the hard-wall structure or at least inside the tentage.

(2) **Furniture and Equipment.** The company must be self-sustained in terms of office furniture, equipment and supplies, including computers (electronic data processing and reproduction capability including necessary software) to all required personnel.

h. **Electrical.** The company must be self-sustained electrically, and must supply stable power supply to section level, including observation posts and/or other elements. As a rule of thumb, main generators should have capacity of generating 2.5 Kilo Volt Ampere (KVA) per person. Main generators should be employed in pairs to work 12 hour shifts with auto-switching and synchronization panels. Generators below 20 KVA are known as self-sustainment generators, to be used for cooking, Level 1 clinic, operations room and security lighting purposes.

i. **Laundry & Cleaning.** The company must have sufficient laundry facilities for all military and personal clothing, including dry-cleaning of operationally-required specialist clothing and a cleaning unit. All laundry and cleaning equipment must be kept hygienic and serviced along with spare parts. The company must provide cleaning of facilities for all personnel, ensure all facilities have hygienic equipment that allows a clean and healthy environment, and provide all cleaning equipment, supplies and maintenance of camps and facilities.

j. **Fire Detection and Alarm.** The company must have the capacity for automatic fire detection and alarm in all its accommodation, ablution and office space area, e.g. smoke detectors and fire alarm systems.

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<sup>23</sup> The company must maintain all times, 24 hours and 7 days, its own radio operators capable of radio equipment operations in French and English.

k. **Basic Fire Fighting.** The company must have the capability to undertake basic fire-fighting equipment, e.g. buckets, beaters and fire extinguishers in own accommodation and working areas.

l. **Field Defence Stores, Identification, and NBC protection.** The Mission will provide field defence stores. There is no requirement for Identification or Nuclear, Biological and Chemical (NBC) protection equipment.

m. **Observation** (for deployed detachments only).

(1) **General Observation.** The company must have the capacity to provide handheld binoculars for general observation use.

(2) **Night Observation.** Provide the capability for passive or active infrared (IR), thermal or image intensification night-time line of sight visual observation. Night vision goggles/equipment must be capable of detecting, identifying, and categorizing persons or items within a range of 1,000 meters or more.

(n) **Positioning.** The company must be able to determine the exact geographical location of a position or item within the area of operations through the combined use of global positioning systems (GPS) and laser range finders.

(o) **Miscellaneous General Stores.** The company must be self-sustained in terms of bedding, furniture, welfare equipment and amenity requirements.

(1) **Bedding.** The company must provide bed linen, blankets, mattress covers, pillows and towels to all personnel. Sleeping bags may be an acceptable substitute for bed linen and blankets. Sufficient quantities must be provided to allow for rotation and cleaning.

(2) **Furniture.** The company must provide a bed, a mattress, a night stand, a table light and a locker to all personnel.

(3) **Welfare.** The company must provide appropriate levels of equipment and amenities across the spectrum of welfare to include entertainment, fitness, sport, games, and communications must be provided in quantities appropriate to the number of troops at their respective locations in the mission area.<sup>24</sup>

(p) **Medical.**

(1) Level 1: Level 1 medical cover will be provided by other co-located units.

(2) Level 2: Level 2 military hospitals will be deployed in the mission area.

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<sup>24</sup> The internet for the purpose of welfare must be contracted to an internet service provider (ISP) by the Contingent. The usage of the UN provided network is solely for the purpose of the Mission, and is NOT to be used for welfare.

(3) Level 3 and 4: Level 3 and 4 military hospitals will be located outside the Mission Area.

(q) **Equipment Capability Requirements.**

(1) **General Capability.** The number and type of equipment in APPENDIX B (List of Major Equipment) is indicative only to guide TCC's preparation in terms of national procurement and equipment mobilization, and is not exhaustive. The equipment requirements may change in the course of the deployment process. Specific types and quantities of equipment required will be shown in the first draft of the MOU, and be subject to negotiation with each TCC.

(2) All containers, including but not limited to general storage, refrigeration, ammunition, medical and workshops are to be no larger than the International Organization for Standardization (ISO) standard 20 feet containers.

6. **COMMAND AND CONTROL**

(a) The Force Commander exercises Operational Control (OPCON) over all military personnel. The Force Commander may delegate OPCON to subordinate levels.

(b) On behalf of the Director/Chief Mission Support, the Chief Information and Communications Technology Section will exercise tasking authority over military enablers (including the signal company). Tasking authority applies for the routine day to day employment of enabling units; it does not extend to OPCON or Tactical Control (TACON) of assigned military forces, which remains the responsibility of the Force Commander, as stated above.

(c) The contributing member state retains 'administrative control' over non-operational administrative issues over deployed military personnel and units. Administrative control is exercised by a senior national officer of a contributed military contingent within a mission area. This authority is limited to administrative matters such as personnel management, supply and services. Military personnel assigned to serve under UN operational control shall not act on national direction or instructions if those instructions may result in actions contrary to UN policies or adversely affect implementation of the mission's mandate.

**Annex B**

**Sample Military Signals Unit Personnel Requirements**

**Force Headquarters-Level Military Signals Unit**  
(Where a Sector HQ Does Not Exist)

	Headquarters	Comcen	Strategic	Comms	Admin &	Total
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	<b>Support Platoon</b>	<b>Support Platoon</b>	<b>Links Support Platoon</b>	<b>&amp; Info Tech Support Platoon</b>	<b>Support Platoon<sup>25</sup></b>	
<b>1 x Force Headquarters<sup>26</sup></b>	47				10	57
<b>5 x Battalion/Independent Unit Headquarters</b>		5 x 4	5 x 2	5 x 2	5 x 2	5 x 10 = 50
<b>2 x Temporary Headquarters</b>	2 x 2	2 x 4	2 x 1	2 x 2	2 x 2	2 x 11 = 22
<b>Total</b>	51	28	12	14	24	<b>129</b>

### **Sector-Level Military Signals Unit Personnel Requirements** (Including Sector HQ, Battalions and Temporary HQs)

	<b>Headquarters Platoon</b>	<b>Comcen Platoon</b>	<b>Strategic Links Plt</b>	<b>IT &amp;Tele Comms Platoon</b>	<b>Admin &amp; Support Platoon<sup>27</sup></b>	<b>Total</b>
<b>1 x Sector Headquarters</b>	19				10	29
<b>5 x Battalion/Independent Unit Headquarters</b>		(5 x) 4	(5 x) 2	(5 x) 2	(5 x) 2	(5 x) 10 = 50
<b>2 x Temporary Headquarters</b>	(2 x) 2	(2 x) 4	(2 x) 1	(2 x) 2	(2 x) 2	(2 x) 11 = 22
<b>Total</b>	23	28	12	14	24	<b>101</b>

### **Force Headquarters Military Signals Unit Personnel Requirements**

Functional Areas	HQ Platoon	Admin & Support Platoon	Total
Leadership, Admin & National Tasks	5	10 <sup>28</sup>	15
Strategic Comms Links	9	0	9
C2 and Situational Awareness	15 <sup>29</sup>	0	15
Support to Key Users	9 <sup>30</sup>	0	9

<sup>25</sup> Provides administration, leadership and support to all elements within the UN Military Signals Unit.

<sup>26</sup> May also serve as a Sector Headquarters.

<sup>27</sup> Administration, leadership and support to all elements within the UN Military Signals Unit

<sup>28</sup> Includes liaison officers with U-6 and CITS

<sup>29</sup> to work in shifts

<sup>30</sup> Cross-trained on all systems



Support to Internal Camp Comms	9	0	9
Total	47	10	57

## Sector Headquarters Military Signals Unit Personnel Requirements

Functional Areas	HQ Platoon	Admin & Support Platoon	Total
Leadership, Admin & National Tasks	3	10 <sup>31</sup>	13
Strategic Comms Links	2	0	2
C2 and Situational Awareness	9 <sup>32</sup>	0	9
Support to Key Users	3 <sup>33</sup>	0	3
Support to Internal Camp Comms	2	0	2
Total	19	10	29

## Battalion/Independent Unit Headquarters Military Signals Unit Personnel Requirements

Functional Areas	Comcen Platoon	Strategic Links Platoon	IT & Comms Platoon	Admin & Support Platoon	Total
Leadership, Admin & National Tasks	0	0	0	2 <sup>34</sup>	2
Strategic Communications Links	0	2 <sup>35</sup>	0	0	2
C2 and Sit Awareness	3 <sup>36</sup>	0	0	0	4

<sup>31</sup> Includes liaison officers with U-6 and CITS

<sup>32</sup> Capable of working in shifts

<sup>33</sup> Cross-trained on all systems

<sup>34</sup> Leadership provided by the most senior NCO

<sup>35</sup> For two different systems as required for redundancy

Support to Key Users	0	0	2	0	2
Support to Internal Camp Comms	1	0	0	0	0
Total	4	2	2	2	10

### Temporary Headquarters Military Signals Unit Personnel Requirements

Functional Areas	HQ Platoon	Comcen Platoon	Strategic Links Platoon	IT & Comms Platoon	Admin & Support Platoon	Total
Leadership, Admin & National Tasks	2+2				2+2	8
Strategic Comms Links			1+1 <sup>37</sup>			2
C2 and Situational Awareness		3+3 <sup>38</sup>				6
Support to Key Users				2+2 <sup>39</sup>		4
Support to Internal Camp Comms		1+1				2
Total	4	8	42	4	4	22

## Annex C

### *Sample* *Integrated Training Service* *(MISSION NAME)*

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<sup>36</sup> Cble to work in shifts

<sup>37</sup> For two different systems as required for back-up capability

<sup>38</sup> Available to participate in working shifts

<sup>39</sup> Cross-trained on all systems

***Information and Communications Technology  
Training & Enabling Plan  
(Signal Forces)***

## Contents

<u>References</u> .....	X
<u>Executive Summary</u> .....	X
<u>Background</u> .....	X
<u>Overall approach</u> .....	X
<input type="checkbox"/> <u>Pre-Deployment Training</u> .....	X
<input type="checkbox"/> <u>In-Mission Training</u> .....	X
<input type="checkbox"/> <u>On-the-Job Training</u> .....	X

Annex A : Online Courses(Partial)

Annex B : Summary of Courses (Partial)

Annex C : Course Descriptions(Partial)

## References

- A Mission support plan for (MISSION NAME) Annex C DATE
- B Statement of unit requirement for sector signal company DATE
- C Statement of unit requirement for FHQ signal company DATE
- D CIT training concept (MISSION NAME)DATE
- E (MISSION NAME) mandate resolution number of DATE
- F Strategic guidance ICTD fiscal year YEAR
- G Global Peacekeeping Training Needs Assessment Final Report DATE
- H ICTD Staff development Catalogue
- I ICT Regional Program for (REGION)

Revision Date: DATE

## Executive Summary

(MISSION NAME)'s mission support plan requires that the installation, configuration, operation and maintenance of significant amounts of UN owned CIT equipment to be deployed in regions which are not always accessible to UN civilian staff for security reasons.

This equipment will mainly be deployed and operated by military communications personnel who must be trained on UNOE, to enable them to perform their assigned tasks.

In (MISSION NAME)'s unique position and the necessity to maintain a small civilian footprint, we have a mandated responsibility to provide training in the use of UNOE, in the field, at a mandated training facility and in the sector headquarters. Maintaining this small footprint will necessitate the use of UN contractors who will also need training.

According to the SUR's, Signal Troops will be required to deploy personnel and equipment to almost all of the sites in XXXX, especially in those areas where the security situation prevents the involvement of Civilian Staff.

Proper, centralized and dedicated training on several levels of expertise will be required. At times regional and 'on-site' training and/or revision will be required. As new technologies are introduced and/or the mission extends the capabilities of existing equipment there will also be a need for retraining.

This training support plan assumes that it will augment and continue the training undertaken by the signal units of TCC's at the *Pre-Deployment Training* stage.

(MISSION NAME)'s Mission Support Plan stipulates that all CIT training within the mission area will be the responsibility of Communications and Information Technology Section's Training and Enabling Unit. This is true for all the Military Signals Units, UN staff and UN contracted personnel.

*In Mission Training* will primarily aim to ensure that Signal Troops can deploy, operate, maintain, and troubleshoot the majority of UN equipment and systems. The SUR's stipulate this should happen in a centralized, specialist facility. This training also targets military and UN contractors who require more advanced skills to be able to configure and program more advanced features of UNOE. Training at this level will focus on the 'Train the Trainer' model.

Lastly, *On the Job Training* will be used as necessary. This type of training not only provides revision and further support to troops/contractors, but also it will provide valuable feedback about the effectiveness of training programs. Such experience gathered in these field trainings will ensure existing training programs are adapted or new courses are created to better meet the 'field needs' of the mission.

The immediate challenge that the mission faces is to ensure we are adequately prepared and resourced to meet both the obligations of the mission and the needs of the soon to be inducted signal companies. CITS is responsible for the provision of all UN owned technical equipment. The most pressing need is the establishment of a centralized, specialized Training Facility

equipped with all of the appropriate resources. Such a venue will need to cater for both small (12) and large (20-30) groups. Secure outdoor training space will be a necessity for practical training in all outdoor field equipment.

With adequate resourcing the mission will be guaranteed well trained military personnel who can professionally and reliably fulfill the following outcomes:

- Speed-up the roll out of communications and data across the mission area.
- Ensure the enabling of communications and data transference in areas where the security situation prevents the involvement of civilian staff and UN contractors.
- Increase operational capabilities by the military units and police forces in the region.
- Provide the force commander with a greater range of capabilities and means to achieve mission directed mandates.
- Build national capacity for TCC's and increase the overall technical capabilities of their troops.

## **Background**

The Security Council (SC) Resolution XXXXX authorized an XXXXXXXX Support Mission in (MISSION LOCATION) as well as the presence of a UN office in (MISSION LOCATION)(XXXX). The SC vide Resolution X/XXX/XXX (XXX) adopted on (DATE), the establishment of a United Nations Multidimensional Stabilization Mission in (MISSION LOCATION)((MISSION NAME)). In this Resolution, the Security Council decided that (MISSION NAME) will comprise up to XXXX military personnel and XXXX police personnel. The transfer of authority between (MISSION ORG) and (MISSION NAME) took place on (DATE).

In the future the UN also plans to extend this training opportunity to locals with a view to stimulating the local labor market and building greater national capacity.

According to the SUR's, Signal Units are required to:

1. Install, operate and maintain back bone networks based on satellite and line of site (Loss) links;
2. Install, operate and maintain Information Technology Systems, including server farms and remote servers;
3. Install, operate and maintain radio networks for the strategic and operational level communications.
4. Support CITS in the installation, operation and maintenance in JOC and JMAC;
5. Support FHQ/SHQ staff with a 24/7 helpdesk service in collaboration with mission CITS;
6. Install, operate and maintain communications equipment and systems for the provision of all operational communications capabilities at Battalion and detached company level;

7. Be prepared to provide support for the provision of the Mission communications services to Offices of the civilian component in locations considered at elevated risk.

The UN CIT training priorities are as follows:

1. Train IT/Commas experts of the (MISSION NAME) forces from different TCCs/PCCs.
2. Train UN civilian CIS staff and Contractors.
3. Train host country Forces & Police (upon request).
4. Offer occupational training to potential local employees.
5. Offer occupational training to the local community.

The main plan is to have Military Signals Units assigned to support Command and Control (CA) capability over the (MISSION NAME) troops and to enable all administrative and logistical tasks within the forces headquarters. Hence, the signal units and deployed signal detachments are specialized military CIT providers in Headquarters and command centers, which provide strategic and operational CIT support on behalf of the UN to military Headquarters, deployed units and command centers.

To do this the ICT Training & Enabling Unit will ensure the personnel of the signals units will be trained on the installation, operation and maintenance of UNOE at the designated mission training center where the UN CIT equipment will be initially prepositioned before they are deployed to their final destination.

CITS and U-6 estimate the number of needed trainees in each field of expertise and on what level of expertise below:

- XX Network installation Technicians
- XX Network installation assistants
- XX Telephone Technicians
- XX Telephone assistants
- XX LAN/WAN Technician
- XX LAN/WAN Assistants
- XX IT User Support (Outlook, MS Office and Windows, FSS and other 'in house' applications)
- XX CommsUser Support (Sat Phones/ Radio/ Telephone/BGAN)
- XX Radio Operators VHF,HF and Tetra
- XX Radio Programmers/Installers VHF,HF and Tetra
- XX Server Assistants
- XX Satellite/Microwave Installers Assistants
- XX Satellite/Microwave Installers Technicians
- XX PC and printer Repair and Maintenance Assistant
- XX PC and printer Repair and Maintenance Technician
- XX VTC Technician
- XX VTC Assistant
- XX Deployment Technician (Dish/LoS Links, Rapidly Deployable Solutions (MTDS, RTDS))

- XX Deployment Assistants. (Dish/LoS Links, Rapidly Deployable Solutions (MTDS, RTDS))

We expect the pool of Military IT/ Comms technicians will be limited in number. Therefore, there will be a real need for cross-training or training in more than one aspect of Comms and IT.(MISSION NAME) will need ‘experts’ that can do several things, especially in locations where there will be limited Signal Troops stationed, ‘embedded’, or when deploying equipment to new locations.

After such training, the Signal Company’s main tasks will be to provide IT and Telecommunication support to the assigned Force or Sector HQ, to deployed Battalions and to independent units in the AOR. In addition, the signal unit will provide user support to the Force/Sector HQ staff and combine efforts with the local CITS in providing common IT services.

However, there is still a need to support quickly deployed HQs-equivalents as an option, i.e. when new camps are implemented or units are forced into new sites. At times, the signals unit has to take over, install, configure, operate and maintain/troubleshoot to fix both UNOE and COE, focusing on both stationary and deployable CIT.

## Overall Approach

This training plan focuses primarily on enabling the force’s signal units to exercise their tasks in (MISSION NAME). Therefore, the majority of the CIT training addresses the specific requirement of the (MISSION NAME) military IT and Comms experts based on their structured deployment of XXXX Signal Companies of XXX staff per company. It is planned that XXX signal company will support the FHQ/SHQ in XXXX.

The training shall be conducted in three phases:

- (1) *Pre-Deployment Training.*
- (2) *In-Mission Training.*
- (3) *On-the-Job Training.*

- ***Pre-Deployment Training***

Pre-deployment training happens before deployment and serves as the starting point of the *In-Mission Training* wherein the Signal unit will be oriented to UN Peacekeeping concepts and certain specific technical training to upgrade their skills. This training is the responsibility of the TCC. It is desirable that the Military Signals Unit is trained effectively on UN Peacekeeping concepts and CIT aspects in order to seamlessly get absorbed in the mission area and with minimal in-mission training requirement.

The *Pre-Deployment Training* also aims for the personnel of the Signal unit to achieve a solid theoretical background and awareness of the basic fundamentals of the UNOE provided in (MISSION NAME). To this effect, the TCC will be required to name and to



enroll selected personnel into online-training courses, provided by the main vendors of the UN CIT equipment or training similar in order to achieve ITS knowledge (Reference to SUR). The TCC will be required to monitor and report the learning progress of their personnel. They will be expected to submit acquired certificates. The list of online courses is given at Appendix A.

The TCCs will however, be strongly encouraged to use national training programs and existing expertise available within the national military forces to achieve a high level of awareness and readiness towards the UN provided technology. In addition, the pre-deployment training shall address common IT and Comms related tasks, such as end-user support, maintaining printers and computers, installing network cables in and outdoors, maintaining satellite dishes and generators, and installing antennas and masts.

- ***Centralized/In-Mission Training***

This training will focus on the principle of ‘Train the Trainer’ and therefore, shall address personnel who will later train personnel in their individual site or camp. The required training will be conducted either in mission or in a regional/centralized training center. The training will be provided by contracted trainers and equipment suppliers as well as dedicated “Training & Enabling” unit of the (MISSION NAME) CITS. The core team consists of one UN training coordinator and two teams of specialized trainers: one for Networks & IT, and one for Comms systems. The Training & Enabling Unit is responsible to develop, plan, conduct, and optimize the CIT training on all necessary levels of training.

(MISSION NAME)’s SUR’s guarantee that “the personnel of the signals unit will be trained on the installation, operation and maintenance of UNOE at the designated mission training centre where the UN CIT equipment will be initially prepositioned before they are deployed to their final destination.” In addition, “Hands on training will be provided to key military and police personnel, to new CIT staff and contracted military signals personnel, as well as other essential UN personnel.”

The training will be conducted in a centralized facility in XXX or on site in XXX, XXX and XXX by contracted trainers and equipment suppliers, augmented by XXX and UN staff. It will be planned, supervised and managed by the UN CIT staff. If possible, military and police personnel shall be encouraged to contribute trainers and other resources. The Summary of Courses (Partial) is given at Appendix B along with the details of the Courses at Appendix C.

An assessment of the current training needs will be performed as the troops arrive. The preliminary training plan will be regularly reviewed by (MISSION NAME) CITS and U-6 to ensure it meets the needs of the Signal Companies. Therefore, this training plan is necessary to quickly establish a mutually agreed framework for the training support with the U-6 in FHQ/SHQ and the company commanders of this signals unit. The goal is to

establish long-term but still flexible arrangements to enable CITS respond to all different CIT training demands and requests.

The CITS budget will take the training into account as a permanent task. Other staff from CITS may also be assigned to support the training effort temporarily. In addition, CITS shall contract whenever feasible training capacities of the main vendors of UN CIT equipment to support the local training effort first-hand, especially during peak-times and to ‘Train the Trainers’ on the UN side (e.g. Staff of the “Training & Enabling Unit”). However, due to the considerable costs of these technical experts, it will be limited to the most urgent demands and for a limited time.

- ***On-the-Job Training***

Based on the in-mission training, it is anticipated that there will be a constant need of direct additional training, advice and personal coaching. This includes all levels of responsibilities and tasks, beginning with UN staff, over the U-6 personnel to the signal companies at any time of the mission. This kind of training shall be offered pro-actively, based on a continual assessment of indicators related to the required skills levels and training.

Prioritizing and fulfilling these requests are the task of the leader of the training & enabling unit and requires an up-to date situational awareness of the quality and training related issues of CIT support in all major sites and camps. Besides the immediate positive impact on the CIT support quality in the respective site, this approach provides valuable feedback to adjust and improve the in-mission training.

## *Appendix B to ICT Training & Enabling Plan (Signal Forces)*

### **Summary of Courses(Partial)**

<b><u>SYSTEMS</u></b>				
<b><u>TITLE</u></b>	<b><u>LOCATION</u></b>	<b><u>DURATION</u></b>	<b><u>TRAINING APPROACH</u></b>	<b><u>SCHEDULE</u></b>
RPA – BICSI ITS INSTALLER 2, OPTICAL FIBER	XXX, Regional HQ's, Onsite	5 – 10 days	Instructor led, Blended	To be advised, on request
RPA - BICSI ITS INSTALLER 2, COPPER	XXX, Regional HQ's, Onsite	5 – 10 days	Instructor led, Blended	To be advised, on request
CONFIGURING & TROUBLESHOOTING WINDOWS 2008 SERVER ACTIVE DIRECTORY DOMAIN SERVICES	XXX, Regional HQ's, Onsite	5 – 10 days	Instructor led, Blended	To be advised, on request
<b><u>NETWORK</u></b>				
<b><u>TITLE</u></b>	<b><u>LOCATION</u></b>	<b><u>DURATION</u></b>	<b><u>TRAINING APPROACH</u></b>	<b><u>SCHEDULE</u></b>
CISCO WIDE AREA APPLICATION SERVICE (CWAAS)	XXX, Regional HQ's, Onsite	5 – 10 days	Instructor led, Blended	To be advised, on request
CIPT1 8 IMPLEMENTING CISCO UNIFIED COMMUNICATIONS MANAGER Part 1 & 2	XXX, Regional HQ's, Onsite	5 – 10 days	Instructor led, Blended	To be advised, on request
IUWMS IMPLEMENTING CISCO UNIFIED WIRELESS MOBILITY SERVICES	XXX, Regional HQ's, Onsite	5 – 10 days	Instructor led, Blended	To be advised, on request
IUWVN IMPLEMENTING CISCO UNIFIED WIRELESS VOICE NETWORKS	XXX, Regional HQ's, Onsite	5 – 10 days	Instructor led, Blended	To be advised, on request
<b><u>RADIO</u></b>				
<b><u>TITLE</u></b>	<b><u>LOCATION</u></b>	<b><u>DURATION</u></b>	<b><u>TRAINING APPROACH</u></b>	<b><u>SCHEDULE</u></b>
RPA – CODAN HF RADIO EQUIPMENT	XXX, Regional HQ's, Onsite	5- 10 days	Instructor led, Blended	To be advised, once per rotation

RPA – RE-CERTIFICATION RIGGING REFRESHER	XXX, Regional HQ's, Onsite	2 - 4 days	Instructor led	To be advised, on request
RPA - HEIGHT SAFETY AND TELECOMMUNICATIONS RIGGING	XXX, Regional HQ's, Onsite	10- 15 days	Instructor led	To be advised, on request
MOTOROLA- DIMETRA IP R8.X SYSTEM OVERVIEW (TSYS01R8X)	XXX, Regional HQ's, Onsite	3 – 5 days	Instructor led, Blended	To be advised, on request, once per rotation
MOTOROLA- TETRA TERMINAL END USER OPERATION (TTER08)	XXX, Regional HQ's, Onsite	2 – 4 days	Instructor led, Blended	To be advised, on request, once per rotation
MOTOROLA- TETRA TERMINALS PROGRAMMING WORKSHOP (TTER01PLUS)	XXX, Regional HQ's, Onsite	2- 4 days	Instructor led, Blended	To be advised, on request, once per rotation
APRISA XE – BASICS	XXX, Regional HQ's, Onsite	5-8 days	Instructor led, Blended	To be advised, on request, once per rotation
APRISA XE – ADVANCED	XXX, Regional HQ's, Onsite	5-8 days	Instructor led, Blended	To be advised, on request, once per rotation

## **SATELLITE**

<b><u>TITLE</u></b>	<b><u>LOCATION</u></b>	<b><u>DURATION</u></b>	<b><u>TRAINING APPROACH</u></b>	<b><u>SCHEDULE</u></b>
VSAT INSTALLATION CERTIFICATION PROGRAM	XXX, Regional HQ's, Onsite	2-4 Days	Online, Blended, and Hands-on	To be advised, on request, once per rotation
GVF 510: CORE SKILLS FOR VSAT INSTALLERS:	XXX, Regional HQ's, Onsite	3 -5 Days	Online, Blended, and Hands-on	To be advised, on request, once per rotation
GVF520: SATCOM FUNDAMENTALS:	XXX, Regional HQ's, Onsite	3 – 5 Days	Online, Blended, and Hands-on	To be advised, on request, once per rotation
GVF521: PRACTICAL TECHNIQUE FOR VSAT INSTALLERS:	XXX, Regional HQ's, Onsite	3 – 5 Days	Online, Blended, and Hands-on	To be advised, on request, once per rotation
GVF503I: IDIRECT REMOTE TERMINAL INSTALLATION:	XXX, Regional HQ's, Onsite	2- 4 Days	Instructor led, Blended	To be advised, on request, once per rotation

## **VIDEO CONFERENCE**

<b><u>TITLE</u></b>	<b><u>LOCATION</u></b>	<b><u>DURATION</u></b>	<b><u>TRAINING APPROACH</u></b>	<b><u>SCHEDULE</u></b>
VIDEO CONFERENCE ESSENTIALS	XXX, Regional HQ's, Onsite	5 - 10 days	Instructor led, Blended	To be advised, on request

<b><u>SERVICE MANAGEMENT</u></b>				
<b><u>TITLE</u></b>	<b><u>LOCATION</u></b>	<b><u>DURATION</u></b>	<b><u>TRAINING APPROACH</u></b>	<b><u>SCHEDULE</u></b>
HELP DESK SUPPORT AND STRUCTURED PROBLEM SOLVING	XXX, Regional HQ's, Onsite	5-10 days	Instructor led, Blended	To be advised, on request, once per rotation.
<b><u>APPLICATIONS</u></b>				
<b><u>TITLE</u></b>	<b><u>LOCATION</u></b>	<b><u>DURATION</u></b>	<b><u>TRAINING APPROACH</u></b>	<b><u>SCHEDULE</u></b>
MICROSOFT OFFICE SUITE (WORD, EXCEL, ACCESS, POWERPOINT, PUBLISHER, SHAREPOINT, OUTLOOK)	XXX, Regional HQ's, Onsite	10 - 15 days	Instructor led, Blended	To be advised, on request, once per rotation
FIELD SUPPORT SUITE	XXX, Regional HQ's, Onsite	10 - 15 days	Instructor led, Blended	To be advised, on request, once per rotation
UMOJA	XXX, Regional HQ's	15-21 days	Instructor led, Blended	To be advised, on request, once per rotation
UN ENTERPRISE APPLICATIONS & TOOLS (COMET, COSMOS, LOTUS NOTES, UNIT...)	XXX, Regional HQ's	5-10 days	Instructor led, Blended	To be advised, on request

## Course Descriptions ( Partial)

### RPA – BICSI ITS INSTALLER 2, OPTICAL FIBER

#### Objectives:

This course focuses on setting the groundwork for optical fiber-based structured cabling system installation. The course will open with an overview of fiber transmission principles, professionalism, life safety and industry best practices, as related to fiber. A significant amount of course time will then be spent on installation, splicing, termination, testing and retrofitting of optical fiber cable. Additional topics covered will include pathways and spaces, fire stopping and an introduction to field coordination. This training course will provide students with the knowledge and skills to take the *ITS Installer 2, Optical Fiber certification exam*.

<b>Course Content:</b> <ul style="list-style-type: none"><li>• Codes and standards/industry best practices</li><li>• Optical fiber transmission principles</li><li>• Safety</li><li>• Professionalism</li><li>• Telecommunication pathways</li><li>• Telecommunication spaces</li><li>• Fire stopping</li><li>• Installation/pulling optical fiber cable</li><li>• Termination of optical fiber cable</li><li>• Testing/troubleshooting of optical fiber cable</li><li>• Retrofitting</li><li>• Field coordination</li></ul>	<b>Duration:</b> 5 - 8 days  <b>Delivery Method:</b> Instructor led  <b>Number of participants:</b> TBD  <b>Location:</b> XXX, Regional HQ's, Onsite  <b>Trainers:</b> 1 Expert and 2 Assistant Trainers
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### BICSI ITS INSTALLER 2, COPPER

#### Objectives:

This course sets the foundation of a copper-based structured cabling system installation. The course begins with an overview of copper transmission principles, professionalism, life safety and general industry best practices, as related to copper. A significant amount of course time will then be spent on BICSI best practices for the installation, termination, testing and retrofitting of copper cable. Additional topics covered will include BICSI best practices for pathways and spaces; grounding, bonding and protection; and fire stopping. This training course will provide students with the knowledge and skills to take the *ITS Installer2, Copper certification exam*.

<b>Course Content:</b> <ul style="list-style-type: none"><li>• Codes and standards/BICSI best practices</li><li>• Copper transmission principles</li><li>• Safety</li><li>• Professionalism</li><li>• Telecommunication pathways</li><li>• Telecommunication spaces</li><li>• Bonding, grounding and protection</li><li>• Fire stopping</li><li>• Installation/pulling copper cable</li><li>• Termination of copper cable</li><li>• Testing/troubleshooting of copper cable</li><li>• Retrofitting</li><li>• Field coordination</li></ul>	<b>Duration:</b> 5 - 8 days  <b>Delivery Method:</b> Instructor led  <b>Number of Participants:</b> TBD  <b>Location:</b> XXX, Regional HQ's, Onsite  <b>Trainers:</b> 1 Expert and 2 Assistant Trainers
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## CODAN HF RADIO EQUIPMENT

### Objectives:

The focus of the event will be preliminary on operation and programming of NGT and 2110 HF transceivers.

<b>Course Content:</b> <ul style="list-style-type: none"> <li>• Understand the different HF transceivers and their components and accessories</li> <li>• Have a clear understanding of the concepts and terminology used in Codan transceivers</li> <li>• Understand how to program a Codan transceivers</li> <li>• Understand how to operate a Codan transceivers</li> <li>• Show interoperability between Codan and OEM transceivers</li> <li>• Give practical hand on operation of the NGT and 2110 HF transceivers</li> <li>• Have a clear understanding of what features the accessory products supply</li> <li>• Show competency in operation and programming of Codan NGT and 2110 transceivers</li> </ul>	<b>Duration:</b> 5 - 8 days  <b>Delivery Method:</b> Instructor led  <b>Number of Participants:</b> 12  <b>Location:</b> XXX, Regional HQ's, Onsite  <b>Trainers:</b> 1 Expert and 2 Assistant Trainers
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## HEIGHT SAFETY AND TELECOMMUNICATIONS RIGGING

### Objectives:

At the end of this course and upon successful completion of the exam, participants will become Certified Riggers and will receive an ID card. This course will introduce participants to the equipment, tools and safety techniques required to climb a tower and will provide an overview of the issues of constructing and maintaining wireless communications sites.

<b>Course Content:</b> <ul style="list-style-type: none"> <li>• Relevant law and regulations pertaining work at height</li> <li>• Assessment and management of risk for work at height</li> <li>• Selection and correct usage of safe systems and suitable Personal Protective Equipment</li> <li>• Tower climbing</li> <li>• Fixed and temporary fall arrest systems</li> <li>• Lanyard and work positioning systems</li> <li>• Rescue from height</li> <li>• RF hazards and its effects on people</li> <li>• Regulations governing lifting and lowering activities</li> <li>• Selection of suitable equipment</li> <li>• Safe systems for raising and lowering loads</li> <li>• Use of load directional control systems</li> <li>• Principles and practice on tower building</li> <li>• Principles and practice on feeders installation</li> <li>• Lifting of antennas</li> <li>• Correct installation orientation of common antennas</li> <li>• Grounding principles</li> <li>• Earthing fundamentals and theory</li> <li>• Practical systems for structures and communication equipment and testing</li> </ul>	<b>Duration:</b> 10 – 15 days  <b>Delivery Method:</b> Instructor led  <b>Number of Participants:</b> 10  <b>Location:</b> XXX, Regional HQ's, Onsite  <b>Trainers:</b> 1 Expert and 2 Assistant Trainers
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## RE-CERTIFICATION RIGGING REFRESHER

### Objectives:

This training needs to be completed by all certified riggers every 3 years.

<b>Major Course Content:</b> <ul style="list-style-type: none"><li>• Personal Protective Equipment for telecommunications rigging update</li><li>• Risk assessment and method statements for rigging update</li><li>• Inspection of PPE refresher</li><li>• High structure rescue and self-evacuation reassessment</li></ul>	<b>Duration:</b> 2 – 4 days <b>Delivery Method:</b> Instructor led <b>Number of Participants:</b> TBD <b>Location:</b> XXX, Regional HQ's, Onsite <b>Trainers:</b> 1 Expert and 2 Assistant Trainers
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## DIMETRA IP R8.X SYSTEM OVERVIEW (TSYS01R8X)

### Course Summary:

This course provides an overview of the features and functions of a Dimetra IP R8.x system. The course is divided into five modules and includes descriptions of the various call types and system hardware functionality. An application overview describes the purpose of the software used to manage and administer the system. Each module includes an assessment designed to test learning.

<b>Major Course Content:</b> <ul style="list-style-type: none"><li>• Basic and Trunked Radio Concepts.</li><li>• The features and functions of the Dimetra IP System.</li><li>• The Dimetra IP System Components.</li><li>• The PRNM and Transport Applications.</li><li>• Call Processing.</li></ul>	<b>Duration:</b> 3 - 4 days <b>Delivery Method:</b> Instructor led <b>Number of Participants:</b> TBD <b>Location:</b> XXX, Regional HQ's, Onsite <b>Trainers:</b> 1 Expert and 2 Assistant Trainers
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## TETRA TERMINAL END USER OPERATION (TTER08)

### Course Summary:

This course provides details of the features and functions of the Tetra Subscriber terminals. It includes an introduction to the terminal and how it operates and builds on theoretical instruction with practical exercises designed to reinforce the topics covered and confirm the delegates understanding of the terminal. All delegates will perform practical activities and exercises designed to reinforce learning.

<b>Major Course Content:</b> <ul style="list-style-type: none"><li>• Tetra Terminal controls operation.</li><li>• Trunked Mode Call operations.</li><li>• Direct Mode Group Call operations.</li><li>• User configuration of the terminals.</li><li>• Basic Tetra Terminal user level troubleshooting.</li></ul>	<b>Duration:</b> 2 - 3 days <b>Delivery Method:</b> Instructor led <b>Number of Participants:</b> TBD <b>Location:</b> XXX, Regional HQ's, Onsite <b>Trainers:</b> 1 Expert and 2 Assistant Trainers
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## TETRA TERMINALS PROGRAMMING WORKSHOP (TTER01PLUS)

### Course Summary:

This practical course will enable Tetra terminal users to diagnose terminal problems both locally and remotely, programme the terminal for end-user operations and provide first-line maintenance filter for suspected faulty Tetra terminals.

<b>Major Course Content:</b> <ul style="list-style-type: none"><li>• Program features identification and location.</li><li>• Functions of major CPS, features and tools.</li><li>• Basic radio programming using CPS Plus.</li><li>• Basic CPS Plus troubleshooting procedures</li></ul>	<b>Duration:</b> 2 - 3 days  <b>Delivery Method:</b> Instructor led  <b>Number of Participants:</b> TBD  <b>Location:</b> XXX, Regional HQ's, Onsite  <b>Trainers:</b> 1 Expert and 2 Assistant Trainers
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## APRISA XE TRAINING – BASICS

### Course Summary:

The Aprisa XE basic training course covers the basic fundamentals of the Aprisa XE radio equipment, its configuration options and interface card options and also basic set up and fault diagnosis. It is assumed that all participants have some radio link experience and their applications. This course is restricted to 10 trainees maximum.

<b>Major Course Content:</b> <ul style="list-style-type: none"><li>• Introduction and basic description of all options</li><li>• Site requirements, path planning and basic connectivity</li><li>• Configuration and set up</li><li>• Testing and troubleshooting</li><li>• Duplexer tuning, SNMP overview and practical exercises.</li></ul>	<b>Duration:</b> 5 - 8 days  <b>Delivery Method:</b> Instructor led  <b>Number of Participants:</b> TBD  <b>Location:</b> XXX, Regional HQ's, Onsite  <b>Trainers:</b> 1 Expert and 2 Assistant Trainers
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## APRISA XE TRAINING – ADVANCED

### Course Summary:

The Aprisa XE advanced training course covers RF engineering, network engineering, including advanced cross connections, NMS, fault diagnosis, module and interface card replacement and terminal upgrades as outlined below. It is assumed that all participants have previously attended the Aprisa XE Introduction course and have a good basic understanding of the Aprisa XE products. This course is restricted to 10 trainees maximum.

<b>Major Course Content:</b> <ul style="list-style-type: none"><li>• Aprisa Refresher</li><li>• RF Engineering</li><li>• Network engineering and advanced cross connections</li><li>• NMS</li><li>• Terminal diagnostics and upgrades</li></ul>	<b>Duration:</b> 5- 8 days  <b>Delivery Method:</b> Instructor led  <b>Number of Participants:</b> TBD  <b>Location:</b> XXX, Regional HQ's, Onsite  <b>Trainers:</b> 1 Expert and 2 Assistant Trainers
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## TETRA TERMINALS PROGRAMMING WORKSHOP (TTER01PLUS)

### Course Summary:

This practical course will enable Tetra terminal users to diagnose terminal problems both locally and remotely, programme the terminal for end-user operations and provide first-line maintenance filter for suspected faulty Tetra terminals.

<b>Major Course Content:</b> <ul style="list-style-type: none"><li>• Program features identification and location.</li><li>• Functions of major CPS, features and tools.</li><li>• Basic radio programming using CPS Plus.</li><li>• Basic CPS Plus troubleshooting procedures</li></ul>	<b>Duration:</b> 2 - 3 days <b>Delivery Method:</b> Instructor led <b>Number of Participants:</b> TBD <b>Location:</b> XXX, Regional HQ's, Onsite <b>Trainers:</b> 1 Expert and 2 Assistant Trainers
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## INTRODUCTION TO SATELLITE COMMUNICATIONS - GVF 500

### Course Summary:

This course provides information about history of satellite communications and applications of satellite communication. It also introduces concepts and technologies of wireless, network, space craft, and satellite links.

<b>Course Content:</b> <ul style="list-style-type: none"><li>• Introduction</li><li>• Applications</li><li>• Wireless Concepts</li><li>• Orbits and Launches</li><li>• Space Craft Technology</li><li>• Satellite Links</li><li>• Network Technologies</li><li>• Ground Equipment to GEO Satcom</li><li>• Satellite Industry Structure</li><li>• Horizontal Markets</li><li>• Regulatory Issues</li><li>• Comparing Satellite</li></ul>	<b>Duration:</b> 2- 4 Days <b>Delivery Method:</b> Self-Paced <b>Number of Participants:</b> TBD <b>Location:</b> XXX, Regional HQ's, Onsite <b>Trainers:</b> 1 Trainer/Facilitator
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## CORE SKILLS FOR VSAT INSTALLERS- GVF 510

### Course Summary:

Core skills required by all fixed VSAT installers for accurate antenna alignment and prevention of major sources of uplink interference.

<b>Course Content:</b> <ol style="list-style-type: none"><li>1. Learning system orientation</li><li>2. Course introduction</li><li>3. VSAT Hardware</li><li>4. Cables and connectors</li><li>5. Selecting a site</li><li>6. Polarization theory</li><li>7. Finding the satellite</li><li>8. Accurate peaking</li><li>9. Cross-pol alignment</li><li>10. Decommissioning and equipment faults</li></ol>	<b>Duration:</b> 3-5 Days <b>Delivery Method:</b> Self-Paced <b>Number of Participants:</b> TBD <b>Location:</b> XXX, Regional HQ's, Onsite <b>Trainers:</b> 1 Trainer/Facilitator
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## SATCOM FUNDAMENTALS- GVF 520

### Course Summary:

The course provides student with a thorough understanding of the fundamental theories of VSAT communications.

<b>Course Content:</b> <ul style="list-style-type: none"><li>1. Learning system orientation</li><li>2. Course introduction</li><li>3. Satellite communications overview</li><li>5. Footprints, explaining EIRP, G/T, contours, and their relationships to dish size.</li><li>6. Waves</li><li>7. Gains, losses, and levels</li><li>8. Signals, noise, and spectrums</li><li>9. Modulation</li><li>10. Antennas</li><li>11. Propagation</li><li>12. Satellite links</li><li>13. Polarization</li><li>14. Earth station and VSAT equipment</li><li>15. Access methods</li><li>16. Mobile VSAT overview</li><li>17. Considering VSAT networks</li><li>18. Comparing satellites</li></ul>	<b>Duration:</b> 3- 5 Days <b>Delivery Method:</b> Self-Paced <b>Number of Participants:</b> TBD <b>Location:</b> XXX, Regional HQ's, Onsite <b>Trainers:</b> 1 Trainer/Facilitator
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## PRACTICAL TECHNIQUE FOR VSAT INSTALLERS- GVF 521

### Course Summary:

The course covers practical topics using a compass, calculating levels in dB, voltage drops, cable lengths, using a spectrum analyzer, grounding, basic IP networking, safety issues, and troubleshooting.

<b>Course Content:</b> <ul style="list-style-type: none"><li>1. Learning system orientation.</li><li>2. Course introduction</li><li>3. Site survey and planning</li><li>4. IFL planning</li><li>5. Tools and test equipment</li><li>6. Outdoor equipment assembly</li><li>7. IFL installation</li><li>8. Grounding</li><li>9. Peak and pol review</li><li>10. Carrier lineup and link test</li><li>11. Data networking</li><li>12. Safety</li><li>13. Troubleshooting and maintenance</li><li>14. Finishing the job</li></ul>	<b>Duration:</b> 3-5 Days <b>Delivery Method:</b> Self-Paced and Hands-on <b>Number of Participants:</b> TBD <b>Location:</b> XXX, Regional HQ's, Onsite <b>Trainers:</b> 1 Trainer/Facilitator
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## IDIRECT REMOTE TERMINAL INSTALLATION- GVF 503i

### Course Summary:

Detailed iDirect theory and step-by-step procedures. Factory-authorized training in the detailed knowledge and skills required for installation of iDirectiNFINITI series remote VSAT terminals. Animation and simulator-based interactivity are used throughout the course to explain critical skills and concepts.

<b>Course Content:</b> <ol style="list-style-type: none"> <li>1. Introduction.</li> <li>2. Working with customers and iDirect.</li> <li>3. iDirect Network Architecture.</li> <li>4. iDirect Remote Equipment Overview.</li> <li>5. Files and Parameter Downloads.</li> <li>6. iSite;</li> <li>7. Transmitter Distortion Concepts.</li> <li>8. Installation Procedure overview.</li> <li>9. Installation Step 1 (Preparation</li> <li>10. Installation Step 2 (Outdoor eqpt assembly)</li> <li>11. Installation Step 3 (Installing the IFL).</li> <li>12. Installation Step 4 (Installing the IDU).</li> <li>14. Installation Step 6 (Uplink alignment).</li> <li>15. Installation Step 7 (Joining the network).</li> <li>16. Installation Step 8 (Finishing the job).</li> <li>17. Grounding and Safety.</li> <li>18. Troubleshooting.</li> <li>19. Advanced topics.</li> <li>20. Final test.</li> </ol>	<b>Duration:</b> 3-5 Days  <b>Delivery Method:</b> Self-Paced and Hands-on  <b>Number of Participants:</b> TBD  <b>Location:</b> XXX, Regional HQ's, Onsite  <b>Trainers:</b> 1 Trainer/Facilitator
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## HELP DESK SUPPORT & STRUCTURED PROBLEM SOLVING

### Objectives

During this course students will learn methods for effective customer service, procedures for efficient handling of calls, incident management, communication skills, basic components of ITIL processes as well as problem-solving and troubleshooting techniques. Course will also cover concepts of critical thinking and listening skills and will help students to understand core help desk processes and best practices in service and support centers.

<b>Course Content:</b> <ul style="list-style-type: none"> <li>• Role of a Support Centre and of the Help Desk Support Analyst</li> <li>• Understanding the strategic perspective</li> <li>• Service Level Agreements</li> <li>• Standard Operating Procedures</li> <li>• Service delivery methods and technologies</li> <li>• Service management systems</li> <li>• Best practices in IT service management</li> <li>• ITIL Service Support</li> <li>• Security management</li> <li>• Quality assurance</li> <li>• Handling of calls</li> <li>• Communication aspects</li> <li>• Systematic Problem solving</li> <li>• Structured troubleshooting</li> <li>• Root cause analysis</li> <li>• Understanding customer's needs</li> <li>• Open- and close-ended questions</li> <li>• Appropriate selection of information</li> <li>• Handling difficult customers</li> <li>• Documentation</li> </ul>	<b>Duration:</b> 4 – 6 days  <b>Delivery Method:</b> Instructor led, Self-Paced and Hands-on  <b>Number of Participants:</b> TBD  <b>Location:</b> XXX, Regional HQ's, Onsite  <b>Trainers:</b> TBD
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## NETWORK

- CIPT1 IMPLEMENTING CISCO UNIFIED COMMUNICATIONS MANAGER- 1 & 2
- IUWMS IMPLEMENTING CISCO UNIFIED WIRELESS MOBILITY SERVICES

- IUWVN IMPLEMENTING CISCO UNIFIED WIRELESS VOICE NETWORKS
- VIDEO CONFERENCE ESSENTIALS

<b>Course Objectives and Content:</b>  <a href="http://www.cits-training.unlb.org/show_training.asp?id_cat1=47">http://www.cits-training.unlb.org/show_training.asp?id_cat1=47</a>	<b>Duration:</b> 5-8 days  <b>Delivery Method:</b> Instructor led & Self-Paced  <b>Number of Participants:</b> TBD  <b>Location:</b> XXX, Regional HQ's, Onsite  <b>Trainers:</b> TBD
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## MICROSOFT OFFICE SUITE

### Objectives:

The wide variety of Microsoft Office courses enables trainees to make efficient and effective use of computers, networks, and information systems at their day to day work related activities.

<b>Content:</b> <ul style="list-style-type: none"> <li>• Windows Operating System</li> <li>• Outlook – Beginner and Intermediate</li> <li>• Word Processing – Beginner and Intermediate</li> <li>• Spread sheet – Beginner and Intermediate</li> <li>• Database – Beginner and Intermediate</li> <li>• PowerPoint – Beginner and Intermediate</li> <li>• Publisher – Beginner and Intermediate</li> <li>• Project – Beginner and Intermediate</li> <li>• SharePoint – Beginner and Intermediate</li> </ul>	<b>Duration:</b> 3-7 Days  <b>Delivery Method:</b> Instructor led & Self-Paced  <b>Number of Participants:</b> TBD  <b>Location:</b> XXX, Regional HQ's, Onsite  <b>Trainers:</b> TBD
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## (MISSION NAME) DEPLOYMENT TRAINING – COURSE 1

### Objectives:

The objective of this training is to enable trainees to operate, maintain, and troubleshoot UNOE.

<b>Content:</b> <ul style="list-style-type: none"> <li>• MDTs</li> <li>• RTDS</li> <li>• Rapid Deploy Command Post</li> <li>• VTC</li> <li>• iDirect</li> <li>• Basic Cisco Troubleshooting</li> <li>• BGAN</li> <li>• Codan</li> <li>• Tetra</li> <li>• HF/VHF</li> <li>• Generators, solar panel and other equipment likely to be used in mission area.</li> </ul>	<b>Duration:</b> 20-28 Days  <b>Delivery Method:</b> Instructor led, Self-Paced and Hands-on  <b>Number of Participants:</b> TBD  <b>Location:</b> XXX  <b>Trainers:</b> TBD
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## (MISSION NAME) DEPLOYMENT TRAINING – COURSE 2 – FOLLOW UP

### Objectives:

The objective of this training is to enable trainees to operate, maintain, and troubleshoot UNOE.

**Required Resources:** All the courses mentioned require adequate UNOE in the respective training. Furthermore the training facility is expected to have all the necessary equipment (projectors, dedicated PCs, high speed wired/wireless internet, audio/video equipment, scanners, printers, whiteboards, flipcharts, testing equipment, device monitoring tools, office supply, routers, switches, radios, tools, ...)

<b>Content:</b> <ul style="list-style-type: none"><li>• MDTs</li><li>• RTDS</li><li>• Rapid Deploy Command Post</li><li>• VTC</li><li>• iDirect</li><li>• Basic Cisco Troubleshooting</li><li>• BGAN</li><li>• Codan</li><li>• Tetra</li><li>• HF/VHF</li><li>• Generators, solar panel and other equipment likely to be used in mission area.</li></ul>	<b>Duration:</b> 3-7 days <b>Delivery Method:</b> Instructor led, and Hands-on <b>Number of Participants:</b> TBD <b>Location:</b> Regional HQ's and Onsite <b>Trainers:</b> TBD
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## Evaluation Checklists

### Pre-Deployment Evaluation

Serial	Evaluation Criteria	Evaluation	Remarks
a	<b>Generic Peacekeeping Skills.</b> Are all personnel of the Military Signals Unit trained on and sensitized to the generic UN policy guidelines and directives for conducting peacekeeping operations? Do they demonstrate a clear understanding of these guidelines and directives?		
b	<b>Mission-Specific Peacekeeping Skills.</b> Are all personnel of the Military Signals Unit trained, equipped and organized to perform mission essential tasks as per peacekeeping norms? Is the unit capable of performing in line with Mission mandate(s)?		
c	<b>Basic/Conventional Skills.</b> Is the unit trained in basic infantry skills like firing personal weapons and minor tactics in accordance with national standards?		
d	<b>Physical and Mental Robustness.</b> Is the Military Signals Unit physically and mentally robust enough to be deployed to the harsh conditions of the field Mission?		
e	<p><b>Core-Specific Capabilities.</b> Is the Military Signals Unit able to perform core-specific tasks based on unit organization, tasks assigned and type of Mission (refer to Chapter 2 for specific capabilities and tasks) including:</p> <ul style="list-style-type: none"> <li>• Provide all Computers, Information and Technology (CIT) support to military units and operational elements.</li> <li>• Configure, operate and maintain UN-Owned Equipment.</li> <li>• Provide technical and user support for UN-provided information technology and telecommunications services for military and police staff members, and for internal military/police systems and applications.</li> <li>• Exercise CIT-related operational planning, oversight and guidance to subordinate elements.</li> </ul>		

	<ul style="list-style-type: none"> <li>• Support static facilities and compounds, such as headquarters and offices.</li> <li>• Support temporary facilities, such as command and observation posts.</li> <li>• Support mobile tactical operations.</li> </ul>		
f	<b>Mine, Explosive Ordnance (EO) and IED Awareness.</b> Is the Military Signals Unit guided in the hazards of minefields, EO and IEDs? Are the C-IED basics like 5/25m search known and trained?		
g	<b>Organization.</b> Is the unit organized into task-oriented groups with support structure as per the Mission organization?		
h	<b>Leadership.</b> Is the unit chain of command capable, responsive and accountable for delivering in a peacekeeping environment?		
i	<b>Command and Staff.</b> Is the unit command and staff integrated, trained and capable of planning, organizing, coordinating and directing the multifaceted operational and administrative tasks in the peacekeeping environment?		
j	<b>Training.</b> Has the Military Signals Unit undertaken peacekeeping-oriented and Mission-specific training? Has it achieved the requisite standards?		
k	<b>Resources.</b> Is the unit carrying or in possession of the required number of personnel, arms, ammunition, equipment, accessories, spares, unit stores and expendables as per MOU and Mission requirements?		
l	<b>Equipment Maintenance/Management.</b> Does the unit maintain a minimum serviceability state of 90 percent and does it have the capability to organize preventive maintenance and repair/recovery in situ?		
m	<b>Weapons, Instruments and Vehicles.</b> Are all weapons zeroed, instruments calibrated, vehicles maintained and inspected and certified for correctness and functionality as per required standards.		
n	<b>Logistics.</b> In case of deployment at more than one location, are the forward deployed elements configured for independent and self-sustained logistics capability (food, water, accommodation, hygiene and sanitation, transport,		



	and medical), or do they receive this support from the hosting headquarters?		
o	<b>Medical.</b> Do all personnel meet the requisite medical standards? Have they been inoculated as per Mission requirements and have they cleared the periodic medical examination? Does the unit have access to a fully operational medical facility (medical level 1) in accordance with the MOU?		
p	<b>Integrity.</b> Are all unit personnel aware of applicable UN rules, regulations and code of conduct, and have they demonstrated high standards of professionalism and integrity?		
q	<b>Morale and Motivation.</b> Are all unit personnel well motivated to operate in a complex, restrictive, multinational and multidimensional environment while maintaining high morale?		
r	<b>Welfare.</b> Does the unit maintain high standards of personnel welfare as per national standards and Mission requirements?		
s	<b>Legal.</b> Do unit personnel and commanders clearly understand the responsibility to adhere to, promote and protect the legal framework for UN peacekeeping operations with specific reference to SOFA/SOMA, RoE, Human Rights and Humanitarian Law, other relevant international legal statutes and the host nation law?		
t	<b>Evaluation.</b> Has the unit carried out a formal evaluation? Have shortcomings been rectified? Have TCC authorities certified the unit to be fit for deployment to the Mission on time?		

### In-Mission Evaluation

Serial	Evaluation Criteria	Evaluation	Remarks
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a	<b>Performance.</b> Does the unit plan and perform all Mission essential tasks effectively and safely as per Mission mandate(s), peacekeeping norms and Mission SOPs?		
b	<b>Shortcomings.</b> Has the unit taken corrective action on shortcomings in performance or resources observed by the unit, COE team or Mission leadership?		
c	<b>On-The-Job Training.</b> Does the chain of command institute measures for on-the-job training of all personnel (based on their basic job categories) to maintain qualification standards?		
d	<b>In-Mission Training.</b> Is the unit carrying out periodic in-Mission refresher, task-oriented and Mission-specific training as per IMTC guidelines?		
f	<b>Serviceability.</b> Is the unit carrying out periodic inspection, preventive maintenance and repairs on time and replacing items that are unserviceable?		
g	<b>Conduct and Discipline.</b> Does the unit continue to maintain the highest standards of conduct and discipline as laid out in UN policy and the Infantry Battalion Manual?		
h	<b>Outreach and Engagement.</b> Has the unit been able to (where relevant) establish good rapport and effective interface with the local population through CIMIC, Quick Impact Projects and welfare activities?		

## **References**

### **General References**

United Nations Peacekeeping Operations, Principles and Guidelines (UN Capstone Doctrine) (2008)

[http://pbpu.unlb.org/pbps/Library/Capstone\\_Doctrine\\_ENG.pdf](http://pbpu.unlb.org/pbps/Library/Capstone_Doctrine_ENG.pdf)

United Nations Infantry Battalion Manual (August 2012)

<http://www.un.org/en/peacekeeping/documents/UNIBAM.Vol.I.pdf>

<http://www.un.org/en/peacekeeping/documents/UNIBAM.Vol.II.pdf>

United Nations Security Management System, Security Policy Manual (8 April 2011)

[http://ppdb.un.org/Policy%20%20Guidance%20Database/Security\\_management\\_system\\_policies.pdf](http://ppdb.un.org/Policy%20%20Guidance%20Database/Security_management_system_policies.pdf)

UN Force Link

The Online Strategic Movements and Force Generation Knowledge Center

<https://cc.unlb.org/default.aspx>

Generic Guidelines for Troop Contributing Countries Deploying Military Units to the United Nations Peacekeeping Missions

[https://cc.unlb.org/COE%20Documents/Generic%20Guidelines%20-%20Military%20\(TCC\)/Generic%20Guidelines%20for%20TCCs%20Deploying%20Military%20Units%20to%20the%20UN%20Peacekeeping%20Missions\(Mar%202008\).pdf](https://cc.unlb.org/COE%20Documents/Generic%20Guidelines%20-%20Military%20(TCC)/Generic%20Guidelines%20for%20TCCs%20Deploying%20Military%20Units%20to%20the%20UN%20Peacekeeping%20Missions(Mar%202008).pdf)

Manual on Policies and Procedures Concerning the Reimbursement and Control of Contingent-Owned Equipment of Troop/Police Contributors Participating in Peacekeeping Missions (COE Manual)

[http://www.un.org/en/peacekeeping/sites/coe/referenceddocuments/COE\\_manual\\_2011.pdf?bcsi\\_scan\\_00259711a12fb51a=sOZRyx95Yi5OihONCU1qZkoP3AqaAAAvo2FNA==&bcsi\\_scan\\_filename=COE\\_manual\\_2011.pdf](http://www.un.org/en/peacekeeping/sites/coe/referenceddocuments/COE_manual_2011.pdf?bcsi_scan_00259711a12fb51a=sOZRyx95Yi5OihONCU1qZkoP3AqaAAAvo2FNA==&bcsi_scan_filename=COE_manual_2011.pdf)

Medical Support Manual for UN PKO

[http://physiciansforhaiti.org/wp-content/uploads/2013/04/DPKO-MSM.pdf?bcsi\\_scan\\_00259711a12fb51a=hmWzNdn8DV+iaiew2GfNRDw0H+aAAAAvo+FNA==&bcsi\\_scan\\_filename=DPKO-MSM.pdf](http://physiciansforhaiti.org/wp-content/uploads/2013/04/DPKO-MSM.pdf?bcsi_scan_00259711a12fb51a=hmWzNdn8DV+iaiew2GfNRDw0H+aAAAAvo+FNA==&bcsi_scan_filename=DPKO-MSM.pdf)

UN Integrated Assessment and Planning Handbook

<http://www.un.org/en/peacekeeping/publications/2014-IAP-HandBook.pdf>

UN PKO: Principles and Guidelines

[http://pbpu.unlb.org/pbps/library/capstone\\_doctrine\\_eng.pdf](http://pbpu.unlb.org/pbps/library/capstone_doctrine_eng.pdf)

UN PKO Planning Toolkit – 2012

[http://www.un.org/en/peacekeeping/publications/Planning%20Toolkit\\_Web%20Version.pdf](http://www.un.org/en/peacekeeping/publications/Planning%20Toolkit_Web%20Version.pdf)

## Training References

The following list of training references will be of great value to UN military unit commanders and their staff. These documents provide better understanding of the peacekeeping training system, its participants' roles and responsibilities, and available resources. These and other important peacekeeping documents are available at:

<http://ppdb.un.org/SearchCenter/Results.aspx?s=PPDB%20Scope&k=2.%09SOP%20on%20Implementation%20of%20Amendments%20on%20Conduct%20and%20Discipline%20in%20the%20Model%20Memorandum%20of%20Understanding%20Between%20UN%20and%20TCCs>.

Policy on Training for all UN Peacekeeping Personnel (2010)

Policy on Support to Military and Police Pre-Deployment Training for UN Peacekeeping Operations (2009)

Guidelines on Roles and Training Standards for UN Military Staff Officers (2009)

SOP on Mobile Training Support Team (2009)

SOP on Training Recognition (2009)

SOP on Training-of-Trainers Courses (2009)

Pre-Deployment Information Packages (PIP)

UN Training Support to Member States

[http://www.peacekeepingbestpractices.unlb.org/PBPS/Pages/Public/PeaceKeepingTraining.aspx?page=support&menukey=12\\_4](http://www.peacekeepingbestpractices.unlb.org/PBPS/Pages/Public/PeaceKeepingTraining.aspx?page=support&menukey=12_4)

## Evaluation References

In addition to this manual, the following UN peacekeeping documents provide guidelines and standards by which UN military units can evaluate their operational readiness. The following documents are available on-line at:

<http://ppdb.un.org/SearchCenter/Results.aspx?s=PPDB%20Scope&k=2.%09SOP%20on%20Implementation%20of%20Amendments%20on%20Conduct%20and%20Discipline%20in%20the%20Model%20Memorandum%20of%20Understanding%20Between%20UN%20and%20TCCs>

or, through the Office of the Military Advisor, DPKO at UN Headquarters:

- TCC-specific UN peacekeeping operations manuals, guidelines and standard operating procedures.
- Mission mandate, memoranda of understanding, status of forces agreement and Rules of Engagement and TCC Guidelines.
- Statement of Unit Requirement issued by the UN Office of Military Affairs, DPKO.
- Mission Concept of Operations, operational directives and orders, Operational Plans, Standard Operating Procedures and Mission-specific case studies.
- Generic Guidelines for Troop-Contributing Countries Deploying Military Units (2012), the COE Manual 2011 and Guidelines on Peacekeeping Training (2011).
- Lessons learned and best practices of current and past peacekeeping Missions.
- Information obtained during the military unit's command group reconnaissance visit and feedback from the unit being relieved.
- After action reports and end of assignment reports of units and previous commanders.