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COMPREHENSIVE REVIEW OF THE WHOLE QUESTION OF PEACE-KEEPING OPERATIONS IN ALL THEIR ASPECTS

Requirements for United Nations peace-keeping operations

Report of the Secretary-General

I. INTRODUCTION

- 1. The present report has been prepared in pursuance of General Assembly resolution 44/49 of 8 December 1989, by which, in paragraph 2, the Assembly requested the Secretary-General "to provide Member States with the relevant information with respect to the requirements for United Nations peace-keeping operations of personnel, material and technical resources and services ...". In paragraph 4 of the same resolution, the Secretary-General was requested "to undertake a study to identify those tasks and services which could be performed by civilian personnel in peace-keeping operations". That study will be made available in a separate report, also in response to the request in paragraph 8 (c) of resolution 44/192 A of 21 December 1989. Additional reports may also be prepared following the analysis of replies to the questionnaire to be sent to Member States, as also foreseen in paragraph 2 of resolution 44/49.
- 2. The present report accordingly is concerned with military personnel and with the material and technical resources and services required for such personnel (which may also, of course, be required by civilian personnel serving in peace-keeping operations).
- 3. Military personnel are provided by Member States to United Nations peace-keeping operations in three ways:

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- (a) They are appointed by the Secretary-General as staff members. Most often, they are appointed as staff members to serve as Chief of Mission (either as Force Commander or Chief Military Observer), but such personnel may also be appointed as staff members to provide, for limited periods, certain specialized technical skills not readily available in the Secretariat, in such areas as logistics planning (see para. 6 below);
- (b) They are provided by Member States through a type of arrangement that may be described as a non-reimbursable loan (usually, individual commissioned officers who serve as military observers (UNMOs) (see paras. 7-10 below));
- (c) They are provided through a type of arrangement under which the United Nations, in effect, subcontracts with a Member State to provide a group or category of military personnel (infantry battalions or other formed units that provide specialized services of an operational or support nature) (see paras. 11-20 below).
- 4. The personnel, material and technical resources required for each of these categories are described in the following sections. A further section describes the services which they require.
- 5. The Secretary-General has overall responsibility for the conduct of a peace-keeping operation, under the authority given to him by the Security Council when the operation is established. The Secretary-General therefore has the same ultimate authority over the military component of a peace-keeping operation (except in matters of discipline, which remain the responsibility of the troop-contributing countries) that he has over its civilian component. He exercises that authority through a chain of command, the most senior official of which, in the mission area, is normally the Chief of Mission as defined above. The Chief of Mission implements the mandate of the operation utilizing, inter alia, the national units provided by Member States.

II. MILITARY PERSONNEL APPOINTED AS STAFF MEMBERS

6. As indicated in paragraph 3, military personnel may be appointed by the Secretary-General as staff members under the Staff Regulations and Staff Rules of the United Nations. Staff members are subject to the authority of the Secretary-General and are responsible to him in the exercise of their functions. Most often this arrangement is used for the appointment of Chiefs of Mission (Force Commanders or Chief Military Observers). In addition, in order to meet certain areas of technical expertise required during the initial deployment or final redeployment phase of an operation, the Secretary-General sometimes asks the Governments of Member States to make available specialist military personnel whom he may appoint as staff members for a limited period. This may be the case for specialists in such areas as logistics planning, air movements, sea movements and movement control to assist the Secretariat in planning and executing major deployment or redeployment tasks.

III. MILITARY OBSERVERS

- 7. Military observers (UNMOs) are most commonly used to monitor or verify that the parties to a conflict are complying with commitments which they have entered into, for example, to observe a cease-fire, to limit force levels in a given area, to withdraw their troops from designated areas or to demobilize forces under their control. Monitoring and verification involve not only observing and reporting, but also persuading the parties to honour their commitments, for example, by restoring the status quo after violation of a cease-fire. UNMOs also perform many other functions, including maintaining a United Nations presence, observing a situation and reporting thereon and conducting liaison with the parties involved.
- 8. In some cases UNMOs serve in a Military Observer Group, which consists only of UNMOs and whose commander is usually designated Chief Military Observer. In other cases they form part of, or are attached to, a peace-keeping force, consisting of one or more infantry battalions, with appropriate military support units, and serve under the operational control of the Force Commander. UNMOs are normally unarmed. Most UNMOs hold the rank of Captain or Major, with a few senior positions at the Lieutenant-Colonel or Colonel level. They need to be physically fit, as many of them operate in testing and uncomfortable conditions and work long hours. An army background is usually the most appropriate, but officers from other services are sometimes required and none is excluded. The most important attributes of a UNMO are keen eyes and ears, relevant military experience, political judgement, discretion, tact, linguistic skills and the ability to get on with people of other nationalities.
- 9. Although the mandates of United Nations peace-keeping operations are sometimes approved for six-month periods, a UNMO's normal tour of duty with the United Nations is one year, subject to the duration of the specific mandate. Extensions beyond one year are sometimes agreed if that is the wish of the officer and Government concerned. The United Nations pays a UNMO's travel expenses to and from and within the mission area, together with a daily subsistence allowance to cover local living costs. A UNMO's basic salary remains the responsibility of the contributing Government. Documentation providing full details of these and related administrative arrangements is made available by the United Nations Secretariat to Member States when they are requested to make UNMOs available.
- 10. UNMOs are expected to wear their national military uniforms, supplemented by United Nations uniform accourrements, while serving in a peace-keeping operation. In addition to a normal personal kit, UNMOs are asked to arrive in the mission area with the items listed in annex I. Other material and technical resources required by UNMOs for the performance of their duties are provided by the United Nations. These include vehicles, communications equipment, optical devices, generators, field accommodation and furniture, and office equipment. Those items are not generically different from those required for infantry battalions (see annex II).

IV. INFANTRY BATTALIONS

- 11. Infantry battalions are most often used in United Nations peace-keeping operations to maintain military control of a defined area, for example, a buffer zone, by denying armed or uniformed personnel access to it and by ensuring that it is not used for war-like purposes of any kind. That is achieved by the establishment of observation posts and check-points and by constant patrolling on foot and by vehicle. In other cases, infantry units are required to guard specific locations or vital installations, for example, United Nations premises or armouries containing the arms and military equipment of demobilized units, or to promote a sense of security in troubled areas by maintaining a visible United Nations presence, which can deter aggressive behaviour and help the civilian population in a variety of ways.
- 12. Infantry battalions normally form the main element in a peace-keeping force, but infantry personnel are sometimes temporarily attached to an observer group in order to perform some specific function for which armed personnel are necessary.
- 13. An infantry battalion contributed to a United Nations peace-keeping operation is lightly armed and is authorized to use its weapons only in self-defence, though this is understood to include resistance to attempts by forceful means to prevent it from discharging its duties under the mandate given to it by the Security Council. Its armament normally includes the usual infantry battalion weapons, up to and including medium mortars and heavy machine-guns. In situations where the security of United Nations personnel is judged to be at risk, battalions are normally equipped with armoured personnel carriers.
- 14. Each battalion should be reinforced to a level at which it can function as a self-sufficient line unit capable of carrying out independently any operational tasks assigned to it. In other words the unit must be able to support itself both administratively and logistically, to the greatest extent possible, taking into account the absence of higher echelons and established support structures on which infantry battalions can rely, especially in the initial stages of an operation. As a result, a battalion contributed to a United Nations peace-keeping operation is required to have a higher level of self-sufficiency than would be required at home, particularly in the areas of communications, supply and transport. The overriding need for adequate logistics support in those areas makes it very important that Member States which are considering the possibility of offering to contribute an infantry battalion to a United Nations operation should make sure that they will be able to meet these essential requirements. In particular, each battalion should be reinforced with detachments of brigade/regimental support elements to enable it to be self-sufficient for a minimum period of 60 days.
- 15. An infantry battalion normally contains the following elements:
 - (a) Battalion headquarters;
 - (b) At least three rifle companies;

(c) A headquarters company reinforced to provide second-line support, including some of the support normally provided at the brigade/regiment level, as follows:

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- (i) A maintenance platoon to carry out field repair of the battalion's vehicles and equipment, including generators and refrigerators;
- (ii) An assault pioneers platoon with qualified engineers and tradesmen to carry out limited mine-clearing and demolition, to maintain electricity, water and sewerage systems, to erect and maintain field accommodation and to perform construction and other such tasks;
- (iii) A medical unit with doctors, a dentist and qualified nurses and with the capability to provide emergency intensive care for a limited period;
 - (iv) A signals unit to provide and maintain the battalion's internal communications and to operate the United Nations-provided communications between battalion headquarters and force headquarters;
 - (v) A transport unit with sufficient vehicle capability to carry the battalion's personnel and to perform other specialized functions as required.
- 16. The minimum acceptable tour of duty for an infantry battalion is six months; where circumstances permit, there are operational and financial arguments in favour of longer tours, if that is acceptable to the contributing Government. Governments contributing infantry battalions are reimbursed at a standard rate, which is currently \$950 per person per month for all ranks, plus a supplement of \$280 per person per month for a limited number of specialists (up to 10 per cent of strength) and \$70 per person per month for usage of personal clothing, gear and equipment, including personal weapons and ammunition. As with UNMOs, infantry battalion and specialist unit troops are expected to wear their national military uniform, supplemented by United Nations uniform accoutrements, while serving in a peace-keeping operation.

V. SPECIALIST UNITS

17. Military specialist units are required to perform a wide range of functions in United Nations peace-keeping operations. Some of those units perform an operational role, for example, conducting patrols by air or sea or dealing with mines and other explosive ordnance. Other units provide logistics or other secondand third-line support for the infantry battalions deployed, for example, supply and transport or vehicle repair and maintenance. Other possibilities are specialist military teams to facilitate major movements of personnel, material and supplies through an airport or seaport where adequate local facilities do not exist; field engineering units for the initial creation of camps and headquarters facilities in advance of the deployment of the main body of troops and civilian personnel in a new peace-keeping operation; and specialist signals units to provide communications for a new operation while the United Nations-operated communications system is being established.

- 18. As in the case of infantry battalions, each specialist unit needs a high degree of self-sufficiency in such areas as internal administration, accommodation, catering, generators, transport and internal communications and in the specialized functions which it is to perform (for instance, a transport unit should be deployed with all necessary vehicles, recovery trucks, fuel tankers, field workshops and spare parts). The personnel of specialist units are, as appropriate, lightly armed for purposes of self-defence.
- 19. The minimum acceptable tour of duty for a specialist unit is six months, but, because of the specialized nature of the tasks of such units, longer tours of duty are even more desirable than in the case of infantry battalions. Contributing Governments are reimbursed for the personnel and equipment of specialist units at the same rates as for infantry battalions (see paras. 16 and 24), except that the upper limit for the specialists' supplement is 25 per cent of strength in the case of logistics units.
- 20. In general, the Secretary-General has had much greater difficulty in obtaining specialist units from Member States than has been the case with UNMOs or infantry battalions. Indeed, the problem of finding Governments willing to contribute such units has often caused delays in the deployment of urgently required elements in peace-keeping operations. Member States are therefore invited, where possible, to identify and place suitable logistics and other specialist units on standby, and to advise the Secretary-General of their readiness to make those units available at short notice for United Nations peace-keeping operations.

VI. MATERIAL AND TECHNICAL RESOURCES

- 21. It is difficult to be precise about the material and technical resources required by a particular infantry battalion, as those would have to be tailored to the location of the mission, the geography of the area, the climate, the scale of the operation and its mandate, as well as to the tasks to be performed by the unit. For a reinforced infantry battalion, as outlined in paragraph 11 above, the material and technical resources required would usually include the types of items listed in annex II. In cases where a troop-contributing country cannot provide all the equipment required to make its unit fully operational upon arrival, the shortfall is normally met by the United Nations, but could alternatively be filled by other Member States which were in a position to make the necessary resources available.
- 22. It is difficult to be more precise about the material and technical resources required by a particular specialist unit. In addition to the factors mentioned in paragraph 13 above, much depends on the size and structure of the peace-keeping operation in question and the number and type of other specialist units involved. For example, if the operation includes only one small specialist unit (for example, to operate a single fixed-wing aircraft), it would not normally be cost effective for the unit itself or the United Nations to provide its full accommodation and catering requirements. A more efficient arrangement would be for the United Nations to pay each member of the unit a mission subsistence allowance, thus enabling them to find their own accommodation and make their own catering arrangements.

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- 23. Annex IV gives an indication of the material and technical resources which are required for each of the different specialist units listed in annex III. As indicated in paragraph 13 above, Member States which may be in a position to make these resources available to contingents of countries not similarly equipped can make a very useful contribution.
- 24. As regards the financial arrangements, current practice is for the value of all contingent-owned equipment (COE) and other supplies brought in at the request of the United Nations to be determined upon their arrival in and departure from the mission area. Reimbursement for COE is made to Governments as compensation for the usage of the equipment and is equivalent to the difference between the value of the equipment at the time it is brought in and the residual value when it is repatriated. Budgetary provision for COE reimbursement is made over a four-year period at rates of 30 per cent, 30 per cent, 20 per cent and 20 per cent successively. In cases where the full incoming value of COE is reimbursed to the contributing Government, the United Nations does not take title, as such equipment is expected to be repatriated by the Government. The residual value of the outgoing COE is therefore credited to the United Nations.

VII. SERVICES

- 25. A wide range of services is required by any United Nations peace-keeping operation. They vary greatly from operation to operation, depending on its type (a peace-keeping force or military observer group), its size, location and mandate. They can be broadly subdivided into services required in order to transport the personnel of the mission and their equipment to and from the mission area and the services required by the personnel once they are deployed in the mission area.
- 26. Air and sea transport services are required for deployment, rotation or redeployment tasks. These are obtained from commercial sources or from national Governments, at United Nations expense. On occasion they may also be provided by the Governments of Member States, as a voluntary contribution in kind.
- 27. As regards the services required by military personnel once they have been deployed to the mission area, many of these have already been described in the context of the operational, personnel and logistic support services which are often provided by specialist military units in peace-keeping operations (see paras. 17-20 above and annexes III and IV). In addition to the services described therein, they also include a range of services which are often provided by local civilian contractors, for example, tailoring, hairdressing, water supply, sewerage disposal, road haulage, cleaning services, laundry and dry-cleaning, supply of fresh rations, interpretation, translation and construction work. Services other than those provided by the military units themselves are acquired by the United Nations through different means, including local or international subcontracting.
- 28. The decision on which nource to use for a particular service is taken in each case in the light of various factors, including the type and size of the mission, its operational requirements, the availability of services locally and relative costs. Some services are almost always provided by only one of the sources listed

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above; for instance, laundry and dry-cleaning are almost always provided by local contractors and explosive ordnance disposal by specialist military personnel contributed by Governments. But most services can be provided from a variety of sources, depending on the factors referred to above. For instance, vehicle maintenance services are provided, in different missions, by each of the six sources listed in the preceding paragraph.

VIII. CONCLUSION

29. The information in this report is intended to provide a broad indication to Member States of the military personnel, resources and services required for United Nations peace-keeping operations. In accordance with paragraph 2 of General Assembly resolution 44/49, Member States are being invited, by means of a separate questionnaire based on the present report, to identify which of those resources they would be prepared to contribute. On the basis of the responses, an indicative registry of resources available will be established. It is hoped that this process will lead to greater efficiency and enhanced international co-operation in the utilization of resources for United Nations peace-keeping operations.

ANNEX I

Items UNMOs are required to possess on arrival in the mission area

A. General

Owing to the varied terrain and climate of locations in which United Nations peace-keeping operations are deployed, personal clothing and equipment requirements differ greatly, depending upon the area to which the observer is assigned. During a normal tour of duty, a UNMO may be assigned to different postings which cover the whole range of climatic and other conditions within the mission area. The observer should bear this in mind and be prepared for temperature changes ranging from below 0 degrees to 50 degrees C. according to the season and location of his duty station. A detailed guide to clothing and equipment is outlined below.

Uniform as per national scale of issue to include:

B. Winter clothing

- 1. Service dress
- 2. Combat dress
- 3. Rain gear/wet suit
- 4. Gloves
- 5. Combat boots
- 6. Boots (rubber)
- 7. Pull-overs
- 8. Parka or wind jackets
- 9. Woollen scarf

C. Summer clothing

- 1. Service dress
- Working dress (khaki or green drill)

D. <u>Miscellaneous items</u>

- 1. Full web equipment with water bottle
- 2. Sleeping bag (with liner)
- 3. Sunglasses
- 4. Torch (battery-operated)
- 5. Binoculars
- 6. Compass
- 7. Nuclear biological chemical (NBC) suit (if required by the United Nations)
- 8. First-aid kit
- 9. Civilian clothing
- 10. Dress uniform (optional)
- 11. Steel helmet
- 12. Fragmentation jacket

ANNEX II

Material and technical resources required by a reinforced infantry battalion

A. Operational equipment

- 1. Weapons (personal and crewed)
- Ammunition (first- and second-line holdings)
- 3. Signals equipment (Internal Battalion Net)
- 4. Armoured personnel carriers (APCs) (only if specifically requested by United Nations Headquarters)
- 5. Defence stores (sandbags, wire etc.)

B. Personal equipment

- 1. Uniform as per national scale of issue including:
 - (a) Operational summer and winter uniforms
 - (b) Wet-weather gear
 - (c) Helmets and fragmentation jackets
- 2. Personal first-aid dressings

C. Logistical equipment (items)

- Rations (sufficient for 60 days)
- 2. Transport:
 - (a) Operational (i.e. Land Rovers)
 - (b) Logistical (i.e. trucks, recovery trucks, mobile communications/workshops, water, fuel, cargo trucks/trailers, refrigerators, staff cars, buses)
- 3. Medical (fully stocked Regimental Aid Post (RAP), including dentistry)
- 4. Generators (diesel of varying KVA capabilities)
- Special-purpose tools and equipment for vehicle and signal maintenance
- 6. Quartermaster's stores (complete)
- 7. Office equipment
- 8. Special equipment (water purification, fire fighting, observation, field kitchens, refrigeration, welfare/sports)

ANNEX III

Illustrative list of specialized military units which may be required in a United Nations peace-keeping operation to provide operational, personnel and logistic support

A. Operational support

- 1. Headquarters and signal company
- 2. Reconnaissance company
- 3. Explosive ordnance disposal (EOD) and explosive ordnance reconnaissance (EOR) units
- 4. Pioneer unit(s)
- Air support unit (fixed-wing and/or helicopter)
- 6. Naval patrol units (offshore and inshore)

B. Personnel support

- 1. Military Police unit
- 2. Field hospital
- 3. Specialized medical personnel
- 4. Postal and courier unit

C. Logistics support

- 1. Logistics unit (supply, rations, ordnance and possibly a catering unit to run central kitchen/bakery/butchery)
- 2. Transport unit
- 3. Transport-maintenance unit
- 4. Specialist repair unit
- 5. Field engineer unit
- 6. Movement control unit
- 7. Petrol and oil unit
- 8. Fire-fighting unit
- 9. Mobile laundry and bath unit

ANNEX IV

Material and technical resources required by specialized military units in support of a United Nations Peace-Keeping Operation

A. Operational support units

1. Signals unit

This unit would normally operate and maintain the communications centre at the Force headquarters, handling all within-area signals traffic to and from battalions and all logistic-type units and interfacing with the United Nations-operated communications structure working on the global link or external communications traffic. The extent to which the signals unit would need quantities of technical staff and repair and maintenance workshop capability would depend on the scale of unit-owned, or United Nations-owned, military pattern communications equipment under their control.

Usually the United Nations civilian communications staff provide and maintain (but do not operate) the equipment for all links from battalion or logistics unit locations to Force headquarters. However, a troop-contributing country is sometimes asked to cover this function and possibly help with the installation of the United Nations systems, either on a short-term or a continuing basis. Such a signals unit should be deployed fully equipped with all radio, microwave, teletype, cipher, telephone and switchboard equipment and the necessary technician and operating personnel and repair and maintenance materials, spares and equipment, including test equipment, antennas and ancilliary gear.

2. Explosive ordnance disposal (EOD) and explosive ordnance reconnaissance (EOR) units

The specialist personnel of any EOD unit need to be equipped/provided with the full range of detection, handling and disposal equipment and materials and tools commensurate with the threats with which they may be confronted. Such equipment could include remote-controlled mechanical robots equipped with video or x-ray camera equipment, and a range of handling/manipulating/recovery/destruction capability, as well as protective clothing, electronic- and mechanical-detection devices, communications equipment, armoured and regular transportation resources.

The personnel of EOR units would be trained in search techniques on how to locate Improvised Explosive Devices (IEDs), bombs, mines etc.

3. Reconnaissance company

In some peace-keeping operations there may be a requirement for a unit with high mobility, armoured protection but limited fire power. Very often such a unit will operate as, or as a portion of, the force reserve. A maximum company strength sub-unit is envisaged equipped with light Reconnaissance vehicles.

4. Pioneer unit

A pioneer unit in this context is essentially a separate construction unit. It should be composed of a mix of skilled tradesmen (...g. carpenters, electricians, plumbers, masons, welders, painters) and semi-skilled labourers, in order that it can undertake straightforward construction-type tasks, such as assembling and erecting prefabricated accommodation structures of all types (e.g. basic shells, kitchen units, ablution units, freezer/refrigeration units, steel framed/poly-vinyl covered open space structures, tents), dismantling and moving accommodation structures, building simple structures of different types, building bunkers, observation posts, re-inforced firing positions, perimeter fencing, concrete-block walls, gates, erecting observation towers, guard houses, installing surface-water drainage systems, water reticulation and sewage sy .ems. The unit should have its own hand tools, power tools, welding plant, air compressor and air tools, lifting gear, concrete mixers and ground transportation.

5. Air support unit

Air support within the mission area may be provided by a formed military unit obtained from a troop-contributing Government, or under a commercial contractual arrangement. The material and technical resources required by the air support unit(s) may vary according to the size, number and dispersal of the air assets and the level of sophistication of the local mission-area infrastructure.

- (a) Fixed-wing aircraft will need ground equipment (e.g. stairs, starter units, air-conditioning/electricity-supply units, fire-fighting units, re-fuelling equipment, washing plant, loading/unloading equipment and crew transport vehicles) and appropriate repair and maintenance equipment. Communications, navigation equipment and meteorological capability may be required. The unit would need to maintain a range of spare parts, materials and stores for use in repair and maintenance;
- (b) Helicopters will need ground equipment, including, as appropriate, starter units, fire-fighting equipment, re-fuelling equipment, crew-transport vehicles, as well as specialized fittings, such as cargo nets and medical evacuation equipment. Additional communications and certain navigation equipment may also be required. The unit would need to maintain a range of spare parts, materials, stores and equipment for use in repair and maintenance.

6. Naval unit

A naval unit deployed in support of a peace-keeping operation would most often be engaged in offshore patrols, but may also be required to conduct inshore patrols, as follows:

(a) Offshore patrol unit

An offshore patrol unit, manned by naval personnel, requires the necessary fast offshore patrol vessels and support equipment, as well as a shore-based capability to undertake its own routine repair and maintenance tasks. The unit should have all navigation and communications equipment. Defensive armament, appropriate to the circumstances, may be required.

(b) <u>Inshore patrol unit</u>

An inshore patrol unit would not necessarily be manned by naval personnel. It would have fast, capable, military-type open patrol craft - up to 25 feet in overall length. The craft should be fitted-out primarily for day-long patrolling tasks on inshore protected waters and rivers. The unit should ideally have its own shore-based repair and maintenance capability. The fast patrol craft should be fitted with HF/VHF or UHF communications equipment, as appropriate.

B. Personnel support units

1. Military police unit

The military police unit may consist of just a few individual military police, a section (10 members) or a company of 50 to 100 members. Typical police equipment, appropriate to the size of the military police unit deployed and to the size and complexity of the peace-keeping operation, would be required. Such equipment may include radio communication, cameras, flashing-light units, sirens, radar speed detectors, bollards, barriers, crowd-control equipment, distinctive clothing.

2. Field hospital and/or medical personnel

A United Nations peace-keeping operation could have as a requirement a few medical assistants (not including a doctor) or a full field hospital, or anything else in between.

A field hospital would need full accommodation (tented, prefabricated or solid construction), ambulances, administrative vehicles, the full range of medical or technical equipment for each functional area of the hospital (e.g. operating theatre, sterilizing, x-ray, dentist, technical equipment workshop, intensive care, examination rooms, wards, kitchen, staff mess, refrigerator/freezer units, water treatment, sewage disposal, mortuary, general administration, communications, safety/security/firefighting).

The hospitals would need an appropriate stock of drugs, pharmaceuticals, medical supplies, medical equipment and spare parts to ensure uninterrupted operation during the length of time necessary for re-supply using normal means.

A peace-keeping operation may be served by a small clinic staffed by medical assistants. Such a clinic should have a range of basic equipment (examination table, lights, cabinots, sterilizer, oxygen apparatus, stretchers, perhaps an ambulance). In terms of material items, such medical assistants would need extensive medical emergency first-aid kits, portable medical equipment, pharmaceuticals and medical supplies.

3. Postal and courier unit

The postal and courier unit at a peace-keeping force handles all outgoing and incoming mail for the military personnel. It is usually staffed by regular postal staff from a troop-contributing country and run on the same lines as, but as an extension of, the national postal operation. The postal unit needs appropriate closed-body vehicular transportation to handle the movement of mail bags. It needs materials-handling equipment, postal mail and heavy-duty weighing scales, calculators, cash registers, safes, and mail sorting/distribution facilities which are geared to the specific operation.

C. 1. Logistics unit

Depending on the size and configuration of the peace-keeping operation, the logistics unit could vary in size from a fairly small supply function to a full battalion-strength contingent divided into a number of company-size units, each responsible for a specialized segment of supply-support. The equipment and technical resources required by a logistics battalion/unit generally include fork-lift trucks, different types of materials - handling equipment, industrial shelving, storage systems suitable for freezer, refrigerated and dry-goods warehousing, and internal accounting/control systems.

The functions which may be performed by the logistics battalion/unit could cover:

- (a) Rations fresh, dry and frozen;
- (b) General stores;
- (c) Materials for construction and tradesmen;
- (d) Vehicle spare parts, tyres, batteries;
- (e) Catering unit including butchery, bakery and mess operation. A catering unit would need to be provided with all required plant, equipment and utensils etc.;
 - (f) Hot- and cold-equipment repair workshop.

2. Transport unit

This specialized unit would need to be provided with the required numbers, sizes and configurations of vehicles to enable it to accomplish all envisaged

tasks. Such vehicles would include Jeep-type vehicles, light, medium and heavy trucks (mostly all-wheel drive), crane trucks, fuel, water and refrigerated trucks, recovery trucks, medium and heavy buses and tractor-trailers. The transport unit should carry its own basic spare parts inventory and be able to perform first- and second-line maintenance and repair using its own personnel and workshop equipment.

3. Transportation repair and maintenance unit

A vehicle repair and maintenance unit in a peace-keeping operation should be able to operate effectively on a fleet consisting of vehicles of many different makes and models and countries of origin. In addition to normal repair and maintenance tasks, the facility needs to be equipped to handle major crash repairs, complete vehicle re-builds, motor and major assembly overhaul, painting and panel-beating/body repairs and road-side recovery tasks. The unit may also be called upon to perform generator or other types of equipment repair and maintenance. It will need to be deployed with the full range of vehicle maintenance and workshop equipment commensurate with the size of the operation and the vehicles in the fleet. An appropriate spare-parts store needs to be provided, as well as an accounting/costing and workshop control office.

4. Specialist repair unit

This unit would be called upon to repair specialist equipment, such as communication equipment, observation equipment and generators. This unit could be included as a support unit of the transportation repair and maintenance unit.

5. Field engineering unit

The size, configuration and equipment requirement for the field-engineering unit of a peace-keeping operation will depend on the requirements of such an operation. In most cases, the engineering component may need mine detection/clearance capability, as well as a range of heavy plant, including such items as - minefield clearing machines, bulldozers, excavators, front-end loaders, graders, vibrating machines, dump trucks, low-loader truck-tractors, heavy trucks/truck-tractors, mobile cranes, water trucks, concrete mixers, stone crushers, air compressors, drilling tools. In addition, the field engineering component would need its own design and contracting capability, as well as a number of skilled tradesmen, with their own tools and equipment, in order to be able to undertake a wide variety of construction, facilities maintenance and installation tasks. The field engineers would need to deploy with and/or maintain quantities of materials for use by the carpenters, masons, plumbers, electricians, painters, and welders.

6. Movement control unit

A movement control unit operating with either surface or air means, needs ground transport and communications facilities of different types (e.g. voice, telex, facsimile) depending on the relative size and complexity of the functions. The Movement control unit may also need weighing scales, baggage carts, fork-lift trucks, pallets, slings, packaging equipment, hand-held metal detectors.

walk-through detectors, baggage x-ray equipment, sign-making equipment and personnel control barriers.

7. Petroleum and oil unit

If the peace-keeping operation is of sufficient size, it may require its own specialist petroleum unit to handle the fuel supply, tank farm, pumping, fuel distribution and control system and the overhaul, repair and maintenance of all the Force's fuel handling/transport plant and equipment. Such a unit may need to provide its own equipment for ship-to-shore transfer, surface transportation by tanker truck, and field fuel-storage tank capacity (either in flexible bladder tanks or rigid underground or surface tanks of various capacities), as well as all associated pipe-work, pumps, fuel filters, filter separators, measuring devices, chemical analysis laboratory, fire-fighting equipment and repair/maintenance workshop plant, equipment and range of spare parts.

8. Fire-fighting unit

A fire-fighting unit in a peace-keeping operation needs to be designed/equipped to be able to respond to the perceived fire threats at each location. Individual requirements could suggest equipment for delivery of foam, compressed air or pumped water, using either fire engine vehicles or special trailer units. The location may need a water reservoir and a fire-fighting reticulation system and hydrants, or water-tank trucks or pumper trucks or trailers and/or laid hose. Other equipment requirements would include protective clothing, breathing apparatus, ladders, cutting equipment, lighting equipment, resuscitation/first-aid equipment, hand tools, tarpaulins and fire mats.

9. Mobile laundry and bath unit

Peace-keeping operations may require an integral capability for the provision of laundry and bath facilities. A unit of this nature should be equipped with the necessary water filtration, plumbing, heating and shower head equipment and heavy duty washing and drying machines of sufficient quantity to support the operation.