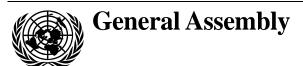
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Agenda item 128

Programme budget for the biennium 2008-2009

Revised estimates relating to the programme budget for the biennium 2008-2009 under sections 3 and 32 related to the provision of an integrated headquarters facility for the United Nations Assistance Mission in Iraq, in Baghdad

Report of the Secretary-General

## Summary

In section V, paragraph 15, of its resolution 62/238, the General Assembly requested the Secretary-General to submit a new, complete and detailed proposal for the construction of the United Nations integrated compound in Baghdad, under section 32, Construction, alteration, improvement and major maintenance, of the programme budget, for its consideration at the first part of its resumed sixty-second session.

In late January 2008 there were new developments in connection with the planned construction of a United Nations integrated compound in Baghdad which led to the delay in the submission of the requested report until the second part of the resumed sixty-second session of the General Assembly.

The new developments regarding the construction of the compound and their implications are reflected in the present report.



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### I. Introduction

- 1. The United Nations Assistance Mission in Iraq (UNAMI), through the Special Representative of the Secretary-General for Iraq and in consultation with representatives of the Government of Iraq and authorities of the United States, identified an alternate and more suitable site for the development of long-term facilities for UNAMI in Baghdad than the one initially selected.
- 2. Subsequently, a decision was taken to place the initial project proposal for the construction of facilities, as contained in part two of document A/62/512/Add.5, on hold, pending the outcome of a viability study and receipt of confirmation from the respective authorities to the effect that the new site had been formally allocated to the United Nations for its exclusive use for a period of not less than 20 years.
- 3. In a letter dated 18 March 2008 addressed to the Council of Ministers of Iraq, the Special Representative sought the favourable consideration of the Council for use of the site by the United Nations for an initial period of 20 years. Owing to the present political and security situation, the Prime Minister of Iraq has as yet been unable to respond to the request for confirmation on land assigned to the United Nations, although every effort is being made to obtain a response in the near future.

### II. Location of the new site

- 4. The new site, which was formerly known as the Al-Sijud Palace, is located in the south-western corner of the existing international zone, which is an area that occupies almost 10 square kilometres, or approximately 2,000 acres of land in the centre of Baghdad in an area that was formerly a centre of Government and international diplomacy. The international zone is bordered to the north and west by urban development and to the east and south by the Tigris River. For the last four years the international zone has been functioning as a sequestered military base. However, there is now a plan for the consolidation and redevelopment of a future neighbourhood evolving from the international zone that will ultimately result in a more accessible international district. The redevelopment concept and the infrastructure transitional plan envisages the withdrawal of coalition forces, the restoration of essential services and the establishment of a sustainable neighbourhood that will provide for continued diplomacy and economic success.
- 5. The Al-Sijud compound is currently occupied by a Georgian element of the Multinational Force-Iraq that provides direct support to UNAMI as middle ring protection in Baghdad. The compound is adjacent to the new embassy compound of the United States of America and occupies an area of some 96,000 square metres. The site is bordered to the south by a man-made lake and the Tigris River, and to the north by Al-Kindi Avenue, which runs east-west past the new embassy compound. A series of residential villas are located on either side of the compound on the southern boundary. These premises are to be transformed into diplomatic quarters under the future redevelopment plan. The property is central to the proposed international district and the conceptual vision is that a future United Nations headquarters will contribute significantly to the reinvigoration of the neighbourhood.

6. The proximity of the site to the new embassy compound and its central position within the previously specified international district has meant that the security requirements under the initial project proposal could be reconsidered.

## III. Long-term perspective and opportunities

- 7. By its resolution 1770 (2007), the Security Council extended and enhanced the mandate of UNAMI concerning a wide range of issues that include assistance in national reconciliation encompassing difficult boundary disputes; institution-building, including assistance to the constitutional review process; regional cooperation; organization of elections and the census; humanitarian assistance; human rights monitoring; and implementation of the International Compact with Iraq, which is a five-year initiative to channel long-term economic support to that country. The role of the United Nations Assistance Mission for Iraq in all those areas will necessarily result in the long-term involvement of the United Nations in Iraq.
- 8. Over the past four years, UNAMI has attempted to consolidate its presence in Iraq, in particular in Baghdad, with a view to ensuring the development of sustainable facilities that would provide a safe and secure working environment for United Nations staff not only in the near term but also for the foreseeable future. Extensive mitigation measures have been put in place to minimize the overall risk to United Nations personnel. However, the facilities currently available, including those provided by the Government of Iraq, and those secured on a lease or rental basis, fall far short of adequate long-term arrangements to provide secure working and living conditions for United Nations staff. The need for secure premises in order to ensure that the United Nations is able to operate effectively has been highlighted and reiterated in a number of reports of the Secretary-General (for example, S/2007/126 and S/2007/330).
- 9. At present, the United Nations country team for Iraq, consisting of United Nations agencies, funds and programmes, is based in Amman. While there is strong demand from the Iraqi Government that the team should be based inside Iraq, there is currently not enough office space or accommodation to enable it to do so. An integrated compound would facilitate the return and re-establishment of United Nations agencies in the country as well as increase administrative efficiency and promote cohesive and coordinated action. Such an arrangement would be particularly important during an initial period of political and security transition which is expected to lead to a more stable and secure environment.
- 10. The recently confirmed availability of the Al-Sijud compound for use by the United Nations has created an opportunity whereby UNAMI could now proceed to develop safe and secure facilities, including the necessary security, logistics and communications infrastructure, which will provide accommodation for all UNAMI personnel and staff of United Nations agencies, funds and programmes. It will also provide space for the United Nations Guard Unit and other security personnel as well as office space for all staff, including civilian personnel, visiting experts and delegations.

## IV. Current security situation

### Threat assessment and situational analysis

- 11. The overall situation in Iraq remains volatile, with in excess of 85 significant security incidents reported daily, mainly in Baghdad and the northern and northeastern regions of the country. Those incidents tend to be focused against the Iraqi Security Forces, coalition forces, local authorities, as well as civilians and international entities, such as the United Nations.
- 12. Throughout the latter stages of 2007, the level of violence decreased in many areas of the country, including Baghdad. However, that appears to have been related to a self-imposed ceasefire by the followers of the Jeish al-Mahdi militia which has significant capability and expertise in waging asymmetric warfare against the Multinational Force-Iraq and the Iraqi Security Forces through insurgent tactics, indirect fire, explosive attacks and possibly suicide bombers. Other armed groups, including Sunni-based entities, criminals and Al-Qaida in Iraq, also have significant capabilities and expertise in the foregoing tactics and techniques.
- 13. The future role and capabilities of the coalition military forces in 2008 to 2010, which have yet to be determined, will have a significant impact on the security situation in Iraq. It seems certain, however, that the Iraqi Security Forces will continue to play an increasing role and that the Multinational Force-Iraq security presence within and around the current Baghdad international zone may diminish.

#### **Current international zone**

- 14. Access to the international zone is controlled by a number of checkpoints manned by Multinational Force-Iraq troops, private security companies and/or the Iraqi Security Forces. The Multinational Force-Iraq elements provide "over watch" and substantial quick reaction forces, when required.
- 15. Located within the international zone are the Iraqi Government institutions and a number of diplomatic missions, embassies and international organizations, together with a large number of private entities. In addition, the zone is home to several thousand Iraqi nationals, many of whom are employees of the Iraqi Government. It is estimated that between 10,000 and 15,000 Iraqis enter the zone every day in order to work within Multinational Force-Iraq or Iraqi Government installations. That figure includes several hundred armed Iraqis, who are either members of the Iraqi Security Forces, or are tasked with protecting various Iraqi VIPs and their premises.

### **Future international zone**

16. The United Nations has been informed that the international zone will change significantly in the next two to three years based on a potential Multinational Force-Iraq drawdown, Iraqi Security Forces improving their capabilities and an evolving political situation. With the completion of the new embassy compound expected in the latter part of 2008, the United States Embassy and respective Multinational Force-Iraq entities will move from the current Palace site. It is projected that the present international zone and its control by the Multinational Force-Iraq will remain in place until they move out of the Palace, at which time will begin a steady

reduction in the zone from its current site to one encompassing only a few supported locations, including the new embassy compound and the proposed site of the UNAMI integrated headquarters. The current perimeter entrance checkpoints would be handed over to the Iraqis, who would exert full control during that process. When the reconfiguration of the international zone is complete, the future zone will no longer be under Multinational Force-Iraq security arrangements. Thus, the present UNAMI facilities will be at a greater level of risk, referred to as either an "amber zone" (high level of risk) or a "red zone" (critical level of risk) location/security environment.

- 17. The foregoing assessment is based upon plans being prepared by the Multinational Force-Iraq and the best information available to date. The time frames identified are subject to change without notice and could be significantly compressed, based upon factors beyond the control of the United Nations. Thus, the apparent two-plus years window of opportunity to construct an integrated headquarters compound for UNAMI could close quicker than currently assumed.
- 18. The reconfigured international zone development plan envisages a diplomatic enclave around the new embassy compound and it is anticipated that several diplomatic missions will occupy either new or refurbished building sites in the enclave. The proposed site for the UNAMI integrated headquarters is within the enclave. It is expected that enhanced security arrangements will be in place to control access to the area adjacent to the new embassy compound and the diplomatic enclave.

#### **Overall threats**

19. Within Iraq there are two common forms of attack against protected facilities. They are carried out through indirect fire by using mortars or rockets and/or through large explosive attacks, often delivered by suicide attackers. Both pose a significant threat to the United Nations.

### **Indirect fire**

20. Armed opposition groups are capable of firing different types of high-calibre rockets (as high as 240 mm) and mortars into the international zone, despite Multinational Force-Iraq detection and interdiction. Such projectiles are commonly designed to splinter upon explosion of the warhead. The resulting fragmentation wounds people in the open. However, the explosive content of the warhead also has the ability to severely damage and penetrate standard designed brick or concrete buildings.

### Improvised explosive devices

21. The most common means used in explosive attacks are improvised explosive devices in the form of roadside bombs, improvised explosive devices carried by individuals or vehicle-borne improvised explosive devices. The latter are known to cause the greatest number of casualties. They range from moderate size devices (perhaps 250 kg) to truck-size weapons of 1,000 kg or more. However, all explosive forms of attack can potentially cause mass casualties. In Iraq it is common for vehicle-borne improvised explosive devices and roadside bombs to be used to directly attack facility entrances or mobile convoys, whereas suicide bombers on foot attack accessible groups of people.

### **Security considerations**

- 22. Security management for the United Nations in Iraq is well developed and operates effectively countrywide. A security risk assessment has been conducted in which are described the mitigation measures required to permit the use of the Al-Sijud compound as a combined office and residential accommodation site for the United Nations in Iraq. The security risk assessment and its various annexes will guide the development of scopes of work for construction and equipment requirements for security protection.
- 23. The UNAMI integrated headquarters will be located within the security envelope provided for the new embassy compound and the diplomatic enclave. It is expected that access to the area, which will be located within the international zone controlled by Multinational Force-Iraq, will have additional security measures in place. Those measures, such as vehicle inspection stations and perimeter security guards, will reduce the requirement for duplicative and expensive measures to be installed by the Mission. It is expected that the properties adjacent to the UNAMI integrated headquarters will be occupied by reliable security partners, whose level of security will be similar or higher than that of the Mission. One particular advantage is that it is projected that a secure helicopter landing zone, which will be constructed in close proximity to the eastern perimeter of the UNAMI headquarters, will enable rapid access to helicopters in the event of emergencies and for routine operations.
- 24. Notwithstanding the advantages inherent in its location, the UNAMI integrated headquarters must be protected against the described threats. That would include a guard force to provide access control to the site and to protect its immediate perimeter. The construction must be robust enough to be able to withstand large explosive devices detonated in the vicinity of perimeter walls. Furthermore, high-occupancy areas within buildings must be designed to fully protect occupants against the direct impact of a 122 mm rocket and to prevent penetration of rocket fragments from the strike of a 240 mm rocket. This will require the employment of creative engineering solutions, such as locating high occupancy areas in the centre of the buildings, with corridors or low occupancy areas around them, in order to increase the stand-off distance from impact points.
- 25. The management of the security posture in the international zone is subject to continuing review. No major changes are anticipated prior to the end of 2008. However, the level of Multinational Force-Iraq involvement and the scope of the international zone are difficult to predict beyond this period. While it is not presently possible to accurately estimate the state of security at that time, a likely scenario would suggest that the situation is likely to be similar to that being experienced at this time. UNAMI will require a secure compound to coincide with the complete drawdown of the Multinational Force-Iraq presence and the subsequent reconfiguration of the international zone.

# V. Planning assumptions

26. In light of extant security conditions, rigorous control procedures for managing the deployment of staff in Iraq have been put in place. The staff ceiling is controlled by the Department of Safety and Security and is managed on a day-to-day basis by the Special Representative of the Secretary-General as designated official

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for security in Iraq. The assignment and deployment of staff is needs-driven and only sanctioned once the requisite security and life-support mechanisms are guaranteed and in place.

- 27. The following are the Mission's planning assumptions for the operating environment in 2008 and beyond:
- (a) The UNAMI mandate is expected to be renewed by the Security Council for the foreseeable future:
- (b) The United Nations will continue to be considered a high-value target by extremists and armed opposition groups;
- (c) The security environment in Iraq will remain unstable and the present international zone will continue to be threatened by attacks from the indirect fire and improvised explosive devices;
- (d) The UNAMI integrated headquarters compound will not be completed before the new embassy compound is occupied;
- (e) Once the new embassy compound is occupied and the United States Embassy and Multinational Force-Iraq move from the Palace, the management of the international zone will be reconfigured, involving a larger degree of Iraqi control, resulting in a red or amber zone environment for the present UNAMI facilities;
- (f) The availability of the Multinational Force-Iraq to protect the international zone will be diminished as coalition forces are reduced and repositioned;
- (g) The Mission will continue to avail itself of Multinational Force-Iraq support for movement outside the UNAMI integrated headquarters compound, as required.
- 28. The staff strength underlying the planning assumptions for the development of integrated facilities in Baghdad is as follows:
- (a) A total of 165 international staff, including all senior staff, members of the protective security details and 50 staff of United Nations agencies, funds and programmes (accommodation, office and workspace);
  - (b) A total of 150 national staff (office and workspace only);
- (c) A total of 50 members of a United Nations Guard Unit/Force (accommodation, office and workspace for a contingent provided by a troop-contributing country, a United Nations own guard unit or personnel/staff provided by a commercial security support contractor). The precise composition of the unit will be determined at a later date:
- (d) A total of 60 contractual support staff (accommodation, office and workspace for the services of support contractors).
- 29. The total space requirements, including that for offices, accommodation, workspace, workshops and storage have been identified in consultation with all stakeholders, including representatives of United Nations agencies, funds and programmes. The size of buildings and the amount of space allocated was determined in consideration of the established United Nations standards for space

allocation and with a view to ensuring that facilities were fit for the purpose. For example, the kitchen/dining facility is of sufficient size for 300 persons and the associated storage space is adequate to maintain daily operating stocks for 14 days and a 14-day reserve.

30. For planning purposes, preliminary cost estimates have been determined considering the type of structure being provided and bearing in mind the type of protection that each building must afford its occupants. In general, buildings with 122 mm rocket protection will be of substantial construction and, consequently, the cost per square metre will be much higher than for those buildings that are built to lower construction specifications.

## VI. Support from the Government of Iraq

- 31. At the current stage, the Government of Iraq has limited ability to support the security arrangements for the United Nations in ways normally accorded to it in other countries. It is also clear that without Government support, a United Nations presence in Iraq, however constrained, would not be possible.
- 32. In the future, it is highly likely that the United Nations will rely increasingly on the Government of Iraq to provide it with security to carry out its activities. It remains unclear as to whether the Iraqi Security Forces will be able to protect the reconfigured international zone sufficiently to maintain an acceptable level of risk to United Nations facilities during the coming years. Therefore, the United Nations will be required to develop a secure facility in order to accommodate its operations and staff in Baghdad.
- 33. Although there is limited space available in the international zone, the Government of Iraq has been supportive so far in providing UNAMI with facilities, such as the Diwan School, as an office compound and a residence for the Special Representative of the Secretary-General, both free-of-charge.
- 34. The Government of Iraq has further indicated its willingness to contribute, and it is the understanding of the United Nations that the Government of Iraq would contribute, towards the construction of the facility. However, owing to the present political and security situation, a confirmation on the level of the contribution towards construction costs is still pending.

# VII. Preliminary cost estimates

- 35. Preliminary cost estimates have been determined on the basis of a review of the space requirements. Construction costs have been estimated on the basis of the size and type of structure being provided in each instance and bearing in mind the type of protection that each building must afford its occupants. Additional estimates have been included in respect of services and equipment that will be required for the completion of the project on a turnkey basis.
- 36. The cost of construction is based on the cost of a 2,000 square metre staff accommodation project that was implemented in the international zone by another international organization. The cost of that particular project was US\$ 3 million or \$1,500 per square metre. A factor of 40 per cent is applied to the base cost given

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that the project was implemented more than two years ago on a turnkey basis. An overview of estimated preliminary construction and equipment costs is provided in table 1 below.

Table 1 **Preliminary construction and equipment cost estimates** 

Description	Required area (m²)	Estimated cost/m <sup>2</sup> (United States dollars)	Preliminary estimates (United States dollars)
Office space: total required area 6,000	$m^2$		
New office space	4 800	1 800	8 640 000
Office space to be renovated	1 200	1 000	1 200 000
Subtotal office space			9 840 000
International staff accommodation: to	otal required area 5	5,200 m <sup>2</sup>	
Special Representative of the			
Secretary-General/VVIP	400	2 500	1 000 000
Staff accommodation	4 800	2 100	10 080 000
Subtotal international staff accon	ımodation		11 080 000
United Nations Guard Unit accommo	dation: total requi	red area 750 m <sup>2</sup>	
United Nations Guard Unit	7.50	1.700	1.275.000
accommodation	750	1 700	1 275 000
Subtotal United Nations Guard U	nit accommodation	on	1 275 000
Catering/services staff accommodation	on: total required a	rea 600 m <sup>2</sup>	
Catering staff	600	1 500	900 000
Subtotal catering services staff ac	commodation		900 000
Medical Unit/Clinic: total required are	a 300 m <sup>2</sup>		
Medical staff	300	2 500	750 000
Subtotal Medical Unit/Clinic			750 000
Dining Facility: total required area 1,0	00 m <sup>2</sup>		
Dining Hall	700	2 000	1 400 000
Kitchen	300	2 250	675 000
Subtotal Dining Facility			2 075 000
Food storage: total required area 400 n	$n^2$		
Chilled food store/deep freezer	100	4 000	400 000
Cold/fresh food store	100	2 000	200 000
Dry food store (air-conditioned)	200	1 800	360 000
Subtotal food storage			960 000

Description R	Required area (m²)	Estimated cost/m <sup>2</sup> (United States dollars)	Preliminary estimates (United States dollars)
Security storage and workshops: total re	quired area 4,10	00 m <sup>2</sup>	
Steel structure with thermal insulation	2 300	1 300	2 990 000
Hard structure to be renovated	2 000	1 000	2 000 000
Subtotal security storage and works	hops		4 990 000
Staff welfare: total required area 1,250 m <sup>2</sup>	!		
Recreation centre	250	4 000	1 000 000
Gym	300	2 000	600 000
PX	200	1 800	360 000
Theatre	500	2 500	1 250 000
Swimming pool	200	1 000	200 000
Subtotal staff welfare			3 410 000
Landscaping, infrastructure and suppor	ting equipmen	t	
200 m deep water borehole (each)	2	100 000	200 000
Water purification system (each)	1	500 000	500 000
Water storage tank	400	1 200	480 000
Irrigation system (lump sum)	1	600 000	600 000
Power station and power grid (lump sum)	1	1 000 000	1 000 000
4 x 1, 500KVA generator sets (each)	4	400 000	1 600 000
External information technology cabling (lump sum)	1	1 500 000	1 500 000
Roads and asphalt	25 000	50	1 250 000
Curb stones (m)	3 500	100	350 000
Vehicle shed	1 000	300	300 000
Landscaping/drainage system	40 000	100	4 000 000
Improvement of existing perimeter			
fence (m), including gates	1 000	1 000	1 000 000
Sewage network (lump sum)	1	1 200 000	1 200 000
Sewage treatment plant (lump sum)	1	750 000	750 000
Solid waste collection point (lump sum)	1	100 000	100 000
Industrial incinerators (each)	2	100 000	200 000
Subtotal landscaping infrastructure	and supporting	g equipment	15 030 000
Security installations			
Reinforcement of the front wall 300 m x 3 m height	900	1 000	900 000
Road bollards with installation (each)	300	5 000	1 500 000
Hard structure entry checkpoint	150	2 000	300 000
Gates	3	30 000	90 000
Air-conditioned observation towers (each)		200 000	800 000

Description	Required area (m²)	Estimated $cost/m^2$ (United States dollars)	Preliminary estimates (United States dollars)
Fire hydrants (lump sum) and fire			
prevention/fighting systems	1	1 000 000	1 000 000
Ammunition stores	100	4 000	400 000
Roads and asphalt	20 000	50	1 000 000
Security lighting (lump sum)	1	850 000	850 000
Security/guards' booths 10 units x 10 m <sup>2</sup>	100	1 000	100 000
Security equipment (logistics)	1	5 800 000	5 800 000
Subtotal security installations			12 740 000
Other: furniture and supply			
Supply items	1	10 000 000	10 000 000
Subtotal other: furniture and supp	ly		10 000 000
Grand total			73 050 000

- 37. Although a rough order of magnitude/costing of some \$73 million has been estimated in respect of the cost of construction and equipment, it should be noted that those costs are preliminary in nature and that cost estimates remain subject to change until such time as a design is finalized, agreed on and accepted by concerned stakeholders.
- 38. In terms of overall cost, additional provision must be made for: (a) the engagement of an architectural consultancy firm; (b) the provision of site security; (c) deployment of additional staff to the Engineering Section of UNAMI for project management; (d) communications and information technology infrastructure; (e) supplies and equipment; and (f) contingencies for the design and construction phase of the project. A preliminary estimate of the total project costs (estimated to be \$98.6 million) is outlined in table 2 below.

Table 2 **Preliminary total cost estimates** 

(Millions of United States dollars)

Project deliverables		
Construction costs		
Construction services, including materials		
Offices and accommodation facilities	26.88	
Workshops and warehouses	4.99	
Facilities for staff welfare	3.41	
Infrastructure and external works (power and water supply, cabling,		
perimeter security)	15.03	
Security installations	12.74	
Supplies and equipment	10.00	73.05
Specialized communications and information technology equipment		6.60
Construction contingency (10 per cent)		7.30

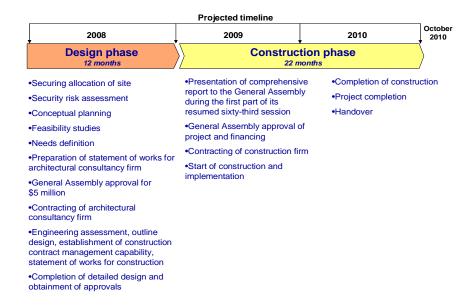
Project deliverables	
Miscellaneous	
Architectural consultancy contract (engineering assessment, design, project control, schedule compliance and performance measurement)  Expert security review of UNAMI recommended security standards for the project	5.00
Provision for contract security (site security for the duration of the project)	4.00
Design and planning contingency (5 per cent)	0.20
Additional staff for project management	2.00
Total (range)	98.60

39. It is recalled that, on the basis of the initial project plan in 2007 for the construction of integrated facilities at the old United States Embassy compound site, UNAMI had planned to enter into a design contract as soon as possible with related costs estimated to be in the range of \$10 to \$15 million. However, no expenses were incurred for the project during the biennium 2006-2007.

## VIII. Project execution

- 40. Development of constructed facilities is a complex undertaking, regardless of location and irrespective of size. Large-scale construction projects, such as that proposed for the UNAMI integrated headquarters, involve multiple inputs from the conceptual planning stage through design and completion. Successful outcomes and completion within the predetermined objectives of scope, cost, time and quality demand that projects are carefully managed and that roles and responsibilities are clearly defined.
- 41. The management requirements for the project are projected to involve and cover three major phases comprising the conceptual planning phase, which is followed by the design phase and concluded by the construction phase.
- 42. The chief of mission support, formerly the chief administrative officer, of UNAMI will be the officer of the project, accountable and responsible overall for all administrative, financial and logistical aspects. The chief engineer of UNAMI will serve as the project manager responsible for planning, organizing and controlling the project, while the chief of a dedicated project coordination unit will be responsible for the supervision, administration and management of the design and construction. Both the chief engineer and the chief project coordinator will be accountable to the chief of mission support.
- 43. The completion of the project at maximum efficiency of time and cost will require close management attention and well thought-out scheduling and allocation of available resources. Whereas to date the conceptual planning phase has been managed from within available resources, the supervision, administration and management of the design and construction phases will require the contracting of an architectural consultancy firm, which will be responsible for:
  - (a) Completing an engineering assessment on the site;
  - (b) Developing of an outline and final design;

- (c) Developing bid documentation;
- (d) Establishing a construction contract management capability for the provision of total quality management services during construction.
- 44. It is anticipated that the project will be executed in two distinct phases, the design phase and the construction and project execution phase, following a traditional methodology of design-bid-build. UNAMI has decided to proceed with the classical United Nations approach to construction projects whereby the design phase will provide for the completion of all preliminary work, including the site survey, the development and approval of a design and the preparation of bid documentation for use in the contracting of a construction contractor and with the construction phase resulting in the delivery of a purpose-built facility.
- 45. The main reason for the change of the approach from the design-build concept is based on the fact that there is no longer the same level of urgency compared to 2007 to complete the compound before the end of 2008 owing to the delays in expected changes of security arrangements in the international zone.
- 46. The total estimated duration of the project is 34 work-months and is illustrated in the chart below.



47. It is expected that the project will be completed by October 2010. However, that overall time frame is dependent on actual developments during both project phases and when relevant approvals can be obtained.

# IX. Project management

48. The chief engineer of UNAMI will serve as the project manager and he or she will be responsible for planning, organizing and controlling the project. The supervision, administration and management of the design and construction phases will be the responsibility of the Project Coordination Unit, comprising additional

staff in support of the Engineering Section of the Mission. A total of six additional positions are projected (2 P-4, 2 P-3 and 2 LL) for the duration of the project. Those staff members will work under the leadership and guidance of the project manager and will be responsible for ensuring:

- (a) Project integration management to ensure that the various project elements are effectively coordinated;
- (b) Project scope management to ensure that all the work required (and only the work required) is included;
  - (c) Project time management to provide an effective project schedule;
- (d) Project cost management to identify needed resources and maintain budget control;
- (e) Project quality management to ensure that functional requirements are met;
- (f) Project human resources management to develop and effectively employ project personnel;
- (g) Project communications management to ensure effective internal and external communications;
  - (h) Project risk management to analyse and mitigate potential risks;
- (i) Project procurement management to obtain necessary resources from external sources;
- (j) Project security management to ensure the security integrity of the construction to include the construction site, construction materials, transit security and other security standards.
- 49. Whereas the UNAMI Engineering Section will oversee the overall administration and management of the project, the architectural consultancy firm will be retained to manage the construction contract. The firm will focus specifically on project control, specification compliance, standards compliance, schedule compliance, health and safety compliance, performance measurement, risk identification, risk analysis and reporting during construction.
- 50. The architectural consultancy firm will work in collaboration with the Engineering Section of UNAMI to ensure that the construction contractor complies with quality and performance in accordance with contractual provisions, key performance indicators and quality control/quality assurance plans and will coordinate implementation, monitor performance and service delivery, provide technical advice and generally protect the interests of the United Nations during implementation of the construction contract.
- 51. In terms of project management, the architectural consultancy firm may be required to deliver services, including, but not limited to, the following:
  - (a) Integration management:
  - (i) Finalize specific terms of reference in consultation with UNAMI and the construction contractor for total quality management (elimination of defects, losses and unsatisfactory quality and integration of United Nations requirements for reporting and oversight);

- (ii) Establish key performance indicators in consultation with UNAMI and the construction contractor for measuring compliance, output and effectiveness, and client satisfaction;
- (iii) Establish data collection procedures and methodologies for ensuring construction contractor compliance with key performance indicators;
- (iv) Participate in discussions to define/amend plans and schedules towards ensuring that acceptance criteria for deliverables are clear and performance criteria are quantifiable;
- (v) Assist with the transfer of knowledge to United Nations staff via a training programme;
- (b) Scope management:
- (i) Provide technical advice and guidance to ensure that the various project elements are effectively coordinated and the project is delivered to specification, on time and within budget;
- (ii) Monitor contract performance to verify that the service level and delivery standards meet established key performance indicators and the total quality management plan;
- (iii) Provide technical advice on cost and schedule development;
- (iv) Provide planning and design reviews;
- (v) Provide constructability and operability reviews;
- (vi) Provide construction inspection services, including spot checks;
- (vii) Provide technical support for the ongoing improvement and development of contract management;
- (viii) Provide security oversight to ensure the security integrity of the project;
- (c) Time management:
- (i) Assist in the development of an effective project schedule (time and cost) and provide an information system that will make data available for comparing expected with actual performance;
- (ii) Manage, evaluate and report on job progress, comparing it with planned performance;
- (iii) Provide an effective and workable procedure for monitoring the designbuilders' planning and construction scheduling operations;
- (d) Cost management:
- (i) Provide advice and assistance in verifying the cost of approved design changes;
- (ii) Provide cost and time control information on job progress;
- (iii) Identify needed resources and maintain budget control;

- (e) Quality management:
- (i) Assist the United Nations with the evaluation of technical plans (e.g., quality control plan, life support plan, health and safety plan), as submitted by the construction contractor, with particular emphasis on quality and performance monitoring issues;
- (ii) Provide construction management to assist United Nations personnel with certification of engineering and construction deliverables and compliance with specifications. That includes the maintenance of, inter alia, a project diary and photo library;
- (iii) Provide the necessary information technology systems, data capture systems, software, guidance materials (e.g., standard operating procedures, training and instruction manuals) for quality and performance management of the construction contract:
- (iv) Provide shop drawing review and approval;
- (v) Provide precedence diagrams, identify construction milestones and provide progress analysis;
- (vi) Observe and supervise all construction activity and review and report on test results submitted by the construction contractor;
- (vii) Check and validate the bill of quantities for each aspect of the work and provide advice on discrepancies and corrective action;
- (viii) Certify all civil, mechanical and electrical installations as having been completed to internationally recognized standards;
- (ix) Complete spot inspections on construction activity and report on the work being done;
- (f) Resource management personnel and equipment:
- (i) Monitor mobilization and demobilization of staff:
- (ii) Assist with developing plans for monitoring compliance with health and safety regulations;
- (iii) Assist with developing plans for monitoring compliance with stated United Nations policies for contractors;
- (iv) Assist in procurement management to obtain necessary resources from external sources:
- (g) Communications management internal and external:
- (i) Ensure and maintain effective internal and external communications;
- (ii) Prepare, edit and issue reports as necessary;
- (iii) Provide, operate and maintain collaborative project management software for effective communications, collaboration, control and accountability;
- (iv) Ensure a library of handbooks and maintenance guidelines;

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- (h) Risk analysis identification and management:
- (i) Identify and analyse risk and provide management advice regarding technical and management approaches to mitigation/elimination;
- (ii) Provide assistance, upon request, to manage resolution of disputes.
- 52. The architectural consultancy firm is expected to deploy a dedicated project team to Baghdad immediately upon receipt of notice to proceed.

## X. Design changes

53. The design and any proposed design changes or modifications will be reviewed, approved and controlled by the UNAMI chief engineer (in consultation with the designated official and the Department of Safety and Security), who will head a design approval team responsible for ensuring that the designs meet user requirements appropriately, and by a firm policy of avoiding additions to the scope of the project after completion of the design phase. The design approval team will be comprised of representatives of UNAMI, the Department of Political Affairs, the Department of Safety and Security, the Department of Peacekeeping Operations and the Department of Field Support, and requested changes will be referred for review and advice by the Project Coordination Unit.

## XI. Construction project security management

- 54. Security management is necessary to ensure the security integrity of the construction project, to include the construction site, construction materials, transit security of construction materials and other applicable security requirements, such as:
- (a) Issuance of UNAMI-approved construction site identification badges/passes to employees/visitors/vendors;
  - (b) Access control at the site entrances and vehicle gates;
- (c) Appropriate responses to emergencies/assistance to emergency responders to the scene of incidents;
- (d) Establishment of procedures to minimize theft, misconduct, safety rule violations, property damage, sabotage on the site, armed opposition group activities targeting the construction site, such as indirect fire attacks;
  - (e) Security incident reporting.
- 55. The UNAMI project team will provide the construction of security management oversight of the project and the contractor will provide construction site security.

# XII. Financial aspects and cash-flow requirements

56. Assuming that the revised project proposal is approved, it will be necessary to immediately commence with the contracting of an architectural consultancy firm. UNAMI engineers have undertaken a thorough assessment of all the costs involved

for activities and services of the firm covering the areas described in paragraphs 43 and 49 to 52 above, which are essential to the success of the project. The architectural consultancy firm will complete an engineering assessment and provide outline and final designs as well as bid documentation for the construction aspects of the project, which will be contracted separately.

- 57. Related costs for the architectural consultancy firm are estimated to be \$5 million and efforts will be made to absorb those costs within the overall appropriation for UNAMI for 2008 under section 3, Political affairs. In accordance with the provisions of section V, paragraph 15, of resolution 62/238 in which the General Assembly requested the Secretary-General to submit a new, complete and detailed proposal for the construction of the United Nations integrated compound in Baghdad, under section 32, Construction, alteration, improvement and major maintenance, of the programme budget, and in case costs can be absorbed, such absorption would require the transfer of an amount of \$5 million from the initial appropriation for UNAMI for 2008 from section 3, Political affairs, to section 32, Construction, alteration, improvement and major maintenance, of the programme budget for the biennium 2008-2009.
- 58. Upon completion of the design phase, it will be possible to develop a more comprehensive submission for review by the General Assembly and it is expected that definitive requirements can be submitted for consideration of the Assembly at the first part of its resumed sixty-third session. Meanwhile, for planning purposes, it is estimated that approximately 40 per cent of the remaining estimated costs (some \$37.4 million) will be required in 2009 and that the remaining 60 per cent (some \$56.2 million) will be required in 2010.

### XIII. Common services

59. The proposed development is in line with the United Nations common house concept endorsed by the General Assembly in its resolution 44/211. The facility will be managed by the UNAMI administration and costs arising from the presence of staff of the United Nations agencies, funds and programmes, including costs for the provision of services, will be recovered in conformity with the terms and provisions of the Common Services Agreement signed by participating agencies, funds and programmes in 2004.

## XIV. Cost overruns and risk management

- 60. While many variables have an impact upon construction, time and cost overruns, inflationary increases in material cost, imprecise material estimation, imprecise budgeting, inadequate contingencies for unforeseen circumstances, project complexity and overly complex decision-making processes are the main causes of cost overruns. The predominant causes of delay are design changes, poor labour productivity and inadequate planning.
- 61. The construction of the UNAMI integrated headquarters will face the traditional constraints of scope, time and cost; however, the specific measures proposed to prevent each potential cause of cost overruns and delays are described below:

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- (a) For budgeting purposes, the preliminary cost estimates are considered the midpoint of a cost range that could reasonably increase or decrease;
- (b) A design and planning contingency of 5 per cent is included in the estimates to account for cost changes that will occur during the design phase;
- (c) A construction contingency of 10 per cent is included in the estimates to account for the fact that the construction will be implemented in Baghdad under restricted and limiting security conditions;
- (d) The design phase will result in an open disclosure of all costs, including costs pertaining to the provision of non-design services, such as materials specification and preparation of documentation;
- (e) Design changes will be reviewed and controlled by the design approval team, which includes principal security adviser/chief security adviser, who will be responsible for ensuring that the designs meet user requirements appropriately, and by a firm policy of avoiding additions to the scope of the project after completion of the design phase;
- (f) The project will be administered and managed by a project coordination unit consisting of appropriately qualified United Nations staff. The project coordination unit will be located in Baghdad;
- (g) Project implementation will be overseen on behalf of the United Nations by an architectural consulting firm which will provide total quality management services, including schedule compliance and performance measurement reporting to the project manager;
- (h) A detailed reporting and information system will be implemented for purposes of project cost control, and cost reports will be submitted at regular intervals;
- (i) Progress payments will be made against certification of satisfactory completion of works by the project coordination unit.

# XV. Next steps

- 62. In order to proceed with the development of constructed facilities, several actions must be taken:
- (a) The procurement process for the contracting of an architectural consultancy firm must proceed;
- (b) The design phase must be completed and agreed upon with all stakeholders in order to avoid construction-phase changes that would have financial consequences for the Organization;
- (c) A comprehensive implementation schedule must be finalized upon completion of the design phase for the construction;
  - (d) The construction itself must be bid and contracted.

## XVI. Action required of the General Assembly

- 63. The General Assembly is requested to:
- (a) Approve in principle the proposal for the construction of a purposebuilt integrated headquarters for UNAMI at the Al-Sijud site;
  - (b) Note the preliminary cost estimate of \$98.6 million;
- (c) Approve the requirements for the contracting of an architectural consultancy firm in 2008 for completing an engineering assessment on the site, developing an outline and final design, developing bid documentation and establishing a construction contract management capability for the provision of total quality management services during construction estimated at \$5 million, to be absorbed within the overall appropriation for UNAMI for 2008;
- (d) Approve the transfer of the amount of \$5 million from section 3, Political affairs, to section 32, Construction, alteration, improvement and major maintenance, of the programme budget for the biennium 2008-2009;
- (e) Request the Secretary-General to submit a new, complete and detailed proposal for the construction of the United Nations integrated compound in Baghdad, under section 32, Construction, alteration, improvement and major maintenance, of the programme budget, for its consideration at the first part of its resumed sixty-third session in March 2009.