

## PROJECT DOCUMENT

**Project No.:** IRQ/08/...  
**Project Title:** Civil Aviation Master Plan for Iraq  
**Estimated Starting Date:** August 2008  
**Duration:** 1 year  
**Government Implementing Agency:** Iraq Civil Aviation Authority (ICAA)  
**UN Implementing Agency:** International Civil Aviation Organization (ICAO)  
**Project Site:** Amman, Jordan – Baghdad and other airports in Iraq – ICAO Headquarters  
**Sector and Sub Sector:** Transport and Communication – Air Transport

### Brief Description:

This project will assist the Ministry of Transport, the Civil Aviation Authority and the various airports of Iraq through the preparation of a Civil Aviation Master Plan for the development and upgrading of civil aviation laws, regulations, organizational structure, personnel, infrastructure and facilities to comply with ICAO standards and requirements for safety and regularity of air transport and to satisfy the country's needs for safe, reliable and economical means of transport for passengers and freight.

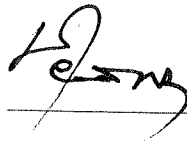
Signed on behalf of:

Signature

Name/Title

Date

International Civil Aviation  
Organization (ICAO)



Taïeb Chérif  
Secretary General

26/08/08

United Nations Development  
Programme (UNDP)

Paolo Lembo  
Director

## A. CONTEXT

### 1. Background

- 1.1 Iraq has experienced much instability and suffering since 1980, including three wars, civil and political strife, terrorist activities, as well as sanctions and interruptions to many activities, supplies and links with the outside world. These catastrophic events caused loss of life, displacement of whole communities as refugees within and outside the country and the destruction and deterioration of much of its infrastructure, utilities and institutions.
- 1.2 Air transport infrastructure, installations, facilities and equipment were damaged, destroyed or deteriorated because of war, neglect or lack of maintenance and because they often became obsolete and inoperable. Similarly, the qualified and trained personnel that once managed, operated and maintained civil aviation facilities, installations and equipment have either retired, passed away, became refugees or simply lost their abilities and their qualifications for either lack of practice or for being out of touch with new equipment, systems, methodologies and regulations in their field of specialization.
- 1.3 As a result of all the foregoing and the unfavourable security situation still prevailing in Iraq, air transport traffic in the country is only a fraction of what it was or what it should be. Nevertheless, modern new airports in Erbil and Sulaimaniyah in the Kurdish region in Northern Iraq have been built and are now operational. Partial rehabilitation and construction have also been undertaken at Baghdad, Mosul and Basra airports. Some new equipment has been purchased and installed and some people have apparently been trained, but without a systematic and coordinated approach nor with any assurance that they meet the international standards required for the best interest of Iraq.
- 1.4 In 2006, the United Nations Development Programme (UNDP), Iraq in concert with the United Nations Assistance Mission in Iraq (UNAMI) determined that the Civil Aviation System in Iraq had been ineffectual because of the damage it had sustained, and needed to be restored to assist in rebuilding the country and promoting its economic development.
- 1.5 Accordingly, the International Civil Aviation Organization (ICAO) was asked by UNDP in 2006 to develop a project and field a mission of experts to Iraq to assess the state of civil aviation organization regulations, facilities, installations, services, etc. and make appropriate recommendations.
- 1.6 A project entitled "Rehabilitation and updating of Civil Aviation in Iraq" was prepared by ICAO and was duly approved by UNDP and the Government, and was implemented in November 2006 by a team of four ICAO experts accompanied by selected UNDP personnel. A Mission Report was finalized by ICAO Headquarters in December 2006 and was submitted to UNDP and through UNDP to the appropriate Iraqi authorities.
- 1.7 The Mission Report highlighted the deficiencies and weaknesses it had identified in the civil aviation laws, regulations, organizational structure, qualification of personnel, compliance with ICAO standards and guidelines, quality and the state of infrastructure, facilities, equipment and services. It made several recommendations for correcting the aforementioned deficiencies but first of all that a national Civil Aviation Master Plan should be prepared for rehabilitating the aviation sector in systematic, logical and fiscally prudent manner in keeping with the projected user demand for aviation services and in conformity with safety requirements.
- 1.8 Based on the previous ICAO Mission Report recommendations, UNDP Iraq developed a project agreement to be implemented in phases with the participation of ICAO where needed, and having as development goals the "Maximized" accessibility of the country to trade flows through reliable and efficient air routes, airports, waterways and ports, ensuring a prompt delivery of goods needed

for the country's recovery and development. The initial phase of the project has the following two Immediate Objectives:

- a. Support the preparation and adoption by the Government of Iraq, a ten year Civil Aviation Master Plan (CAMP) and strategy for the phased reform of the civil aviation sector leading to the implementation of sound air transport and civil aviation policies, laws and regulations as well as programmes and projects for ensuring safety, efficiency and regularity of air transport fully compliant with ICAO Standards and Recommended Practices (SARPs).
  - b. Support through master planning the Iraqi civil aviation sector to meet standards set by international Conventions.
- 1.9 This ICAO project is essentially based on the above two immediate objectives and its outputs are confined to those related to these immediate objectives, i.e. the development of the CAMP in compliance with international Conventions and ICAO SARPs.
- 1.10 The implementation of the Master Plan recommendations, including the preparation and updating of detailed regulations, policies and procedures, development and actual rehabilitation of airport infrastructure, buildings, installations and services, the establishment of a new organizational structure for civil aviation, the establishment of a new civil aviation training institute, and implementing the training programme would have to be done under subsequent follow-up projects in which ICAO would be ready to participate.

## **2. Problems to be addressed**

- 2.1 The civil aviation/air transport sector in Iraq has been badly hurt by the wars, boycotts, civil strife, terrorism, instability and lack of security. Like other sectors of the government and national economy, steps have been taken to revive air transport and its civil aviation facilities and services by building new airports, purchasing air navigation and telecommunications facilities, renewing the aircraft fleet, training some personnel, adopting new laws and regulations etc. Unfortunately these actions were undertaken without a coordinated system and plan, thereby creating a situation where regulations, installations, equipment and services are sometime incompatible or non compliant with ICAO requirements. Training of civil aviation personnel is often non systematic and does not use appropriate training aids or programmes. Many navigational aids are not properly tested for reliability and most importantly, safety oversight is lacking due to non availability of suitably qualified inspectors and proper procedures and methods for certification and licensing.
- 2.2 The preparation of the Master Plan will entail an up-to-date assessment of the civil aviation laws, regulations, policies and procedures as well as an evaluation of the existing civil aviation structure, airports infrastructure, installations, navigational facilities and services, in addition to assessment of engineering management, technical and operational personnel capabilities to undertake successfully and effectively their responsibilities in the various fields, particularly those related to safety oversight and security. Based on these assessments and evaluations, the CAMP will present its findings and recommendations for each specific field and airport so that rehabilitation, updating, upgrading and modernization of the civil aviation sector is done in a coherent, harmonized and systematic manner, while ensuring compliance with the requirement of the Chicago and other civil aviation conventions and adherence to ICAO SARPs, as well as optimum economic returns.

**3. Overall Objective**

- 3.1 The establishment of sound basis for rehabilitation, updating and upgrading of the civil aviation sector in Iraq in a safe, secure and efficient manner, consistent with international requirements and which enables it to meet the air transport demands of the country and to contribute to its economic and social development requirements and to promote trade and tourism.

**4. Strategy to be followed for achieving the development objective**

- a. Assignment of ICAO experts and consultants in accordance with the time table and work plan established by the Senior Civil Aviation Adviser (SCAA) and the Team Leader in consultation with the UNDP Project Manager and Iraqi Civil Aviation Authority Personnel concerned.
- b. Due to the continued security situation in Iraq, the ICAO team members will be based in Amman, Jordan (where UNDP Iraq offices are situated) but will undertake short missions to Baghdad and other airports in Iraq to perform their assigned duties and activities.
- c. Each ICAO team member will prepare, in consultation with the the Team Leader and in the light of the Assessment Report submitted by the previous ICAO Mission in December 2006, a list of the places, airports and officials he needs to visit in Iraq and indicate where possible, the issues to be discussed and the timing of such visits in fulfilment of the above work plan.
- d. Each ICAO consultant during his mission to Iraq will assess the items that fall within his field of expertise and assigned duties and will hold discussions with the officials concerned to obtain a sound understanding of the situation, propose coordinated solutions and recommend appropriate actions.
- e. Based on the assessments made, the discussions held, the finding identified, the proposed corrective steps and the recommendations submitted and priorities assigned, each team member will submit a draft report to the Team Leader with a copy to the SCAA.
- f. The Team Leader will review the reports, coordinate the findings and recommendations to ensure their coherence, accuracy and clarity and take into account relevant comments made by the SCAA on behalf of UNDP.
- g. Make a presentation of the draft Civil Aviation Master Plan (CAMP) to a gathering of Iraqi officials and UNDP personnel for discussion, comments and adjustment to the CAMP if necessary.
- h. ICAO Headquarters will review and finalize the draft CAMP by ensuring its compliance with ICAO SARPs and other requirements and guidelines of ICAO, as well as with relevant international civil aviation conventions and that the CAMP is well presented and is based on satisfactory assessments of the issues under consideration and satisfies the objectives of the project.

## B. IMMEDIATE OBJECTIVES, OUTPUTS AND ACTIVITIES

### 1. Immediate Objective 1.

Preparation of a ten year Civil Aviation Master Plan (CAMP) for the Government of Iraq, with a strategy for the phased reform of the civil aviation sector that enables the implementation of sound air transport and civil aviation policies, laws and regulations, as well as programmes and projects for ensuring safety, efficiency and regularity of air transport in full compliance with ICAO SARPs.

#### 1.1 Output 1.1

A report will have been submitted by each ICAO Consultant in the CAMP Team covering his assessments, findings, proposals and recommendations of the civil aviation elements within his field as appropriate. These reports will include:

- a. A review and assessment of the existing civil aviation organization and management structure and its subordinate entities, with proposals as appropriate for an alternative structure that ensures it is based on sound legal foundations, separated service and regulatory functions, improved efficiency and effectiveness, as well as encompassing all relevant responsibilities and functions, following modern management methods and being adequately staffed by qualified personnel.
- b. A review of the existing approved and draft civil aviation legislation and regulations with proposals and amendments considered necessary to bring them in conformity with the latest ICAO requirements and the civil aviation policy of the Government, as well as to reflect the legal aspects related to the mandate of the Civil Aviation Authority and the different civil aviation entities, as proposed in the report under a) above.
- c. An Air transport economic study covering an assessment of the economic outlook of the country and its potential impact on air transport development, a ten year forecast of aircraft, passenger and freight traffic at major airports, assessing the capability of national and other airlines for meeting forecasted air transportation needs and the suitability of existing air transport regulations and policies. The report will include a review of existing airport and air navigation fees and charges, and proposals for revising them as appropriate to increase revenue sources and propose policies and actions that can enhance the development of air transport and its contribution to the national economy.
- d. An assessment of the existing airports infrastructures, buildings, installations and facilities and identification of elements that need to be replaced, rehabilitated and upgraded to meet traffic and ICAO requirements. Proposals for rehabilitation and upgrading the airports with general descriptions and cost estimates of each project and indication of the priority attached to each. Assessment of personnel needed for the management, operation and maintenance of airports, indicating the basic ICAO requirements for licensing the airports and the corrective actions needed in this regard.
- e. A review and assessment of the air navigation services structure, regulations and procedures in Iraq, particularly as it applies to air traffic management, as well as

evaluation of the adequacy of the air traffic services being provided and their compatibility with ICAO SARPs and Regional Air Navigation Plans, together with proposals for upgrading Air Traffic Management (ATM), Search and Rescue (SAR), Aeronautical Information Services (AIS) and Meteorological information (MET) in Iraq, to meet the latest ICAO SARPs and Safety Management Systems requirements.

- f. An assessment of the Communications, Navigation and Surveillance (CNS) systems used by the air traffic control units for the provision of efficient, effective and safe navigational services over Iraq and the identification of aspects and facilities that need to be upgraded or rehabilitated to meet international safety and calibration requirements, as well as proposals with descriptions and cost estimates of equipment and installations needed. Assessment of the adequacy or otherwise of the CNS engineers and maintenance technicians and propose corrective measures for the deficiencies identified, if any.
- g. A review of the civil aviation legislative provisions and civil aviation regulations related to flight safety in coordination with the Air Law Consultant, with proposals for their amendment and updating to comply with the latest ICAO safety oversight requirements as well as an assessment of the Safety Oversight Division of ICAA and proposals for enhancement of its authority and capability and for upgrading its surveillance and inspection procedures, as well as the qualifications and experience of its inspectors to ensure the effectiveness of Iraq Civil Aviation Authority (ICAA) safety oversight and that airlines and aircraft maintenance organizations implement the corrective actions requested by Safety Oversight personnel and ICAO USOAP audits.
- h. An assessment of the human resources needed by ICAA, the airports and the Civil Aviation Training Institute in each specialty over the next ten years and proposals for covering the deficiencies in the number and qualifications of present personnel through recruitment of additional personnel and implementation of a comprehensive recruitment and training programme. This programme to include upgrading the organizational structure, training facilities and methodology, course material and the standard of the teaching staff of the Civil Aviation Training Institute, as well as external and on-the-job training of personnel by experts to satisfy all the training needs of civil aviation personnel. The training programme will include also a cost estimate and time table for its implementation to ensure capacity building in the new and modified organizational structure of ICAA and the anticipated autonomy of some or all airports authorities.
- i. A review of the national and airports security programmes and related emergency procedures with proposals and recommendations for their upgrading and improvement to meet ICAO requirements and local security concerns. Assessment of the adequacy of aviation security personnel and detection equipment at airports and proposing necessary corrective actions on any weaknesses and deficiencies identified in aviation security organizations, control procedures, detection equipment, airport fences, security personnel and threat assessment and giving special importance to those requiring urgent and immediate action.

#### Activity 1.1.1

Each ICAO Consultant, after being fully briefed and prepared, will undertake organized visits that have been coordinated by the UNDP Project Manager, SCAA and the ICAO

Team Leader, to one or more locations in Iraq to conduct the necessary review and assessments related to his field, meet the personnel concerned, discuss the issues and exchange views and information.

Activity 1.1.2

Each expert after concluding his missions to Iraq, will prepare his report on his findings and assessments of all related aspects, and will develop his proposals and recommendations, and draft a report on his part of the CAMP in accordance with his terms of reference.

1.2 Output 1.2

The draft reports submitted by the individual ICAO Consultants will have been reviewed individually and collectively by the Team Leader together with any comments from the SCAA where necessary, to ensure their coherence, clarity, compatibility and practicability, and consolidated into a single Civil Aviation Master Plan and presented thereafter at a meeting to relevant UNDP personnel and interested Iraqi government, civil aviation, airport and airline personnel for comments and modification if appropriate, after which, the CAMP will have been reviewed and finalized by ICAO Headquarters to ensure compliance with ICAO requirements.

Activity 1.2.1

Individual reports of consultants are reviewed by the Team Leader to ensure coherence, clarity, compatibility and practicability.

Activity 1.2.2

Reports are consolidated into a single draft Civil Aviation Master Plan, with copies provided to the UNDP project manager and the SCAA for comments.

Activity 1.2.3

A presentation of the draft CAMP is made to UNDP, the Iraqi Government and Civil Aviation officials at a special meeting, and necessary modifications are introduced.

Activity 1.2.4

CAMP is reviewed and finalized at ICAO Headquarters.

1.3 Output 1.3

ICAA and airport personnel accompanying the ICAO consultants will have been trained on-the-job on the conduct of future reviews and assessments, and the development of proposals and recommendations.

Activity 1.3.1

Each ICAO Consultant will ensure that his Iraqi counterpart(s) is/are given necessary explanations, informed of related ICAO requirements, and any deficiencies noted and what is needed to correct them.

## 2. **Immediate Objective 2.**

The implementation of the Civil Aviation Master Plan proposals and recommendations will enable the Civil Aviation Sector in Iraq to meet more efficiently the requirements of the Convention on International Civil Aviation and its Annexes.

### 2.1 Output 2.1.

The CAMP will have been reviewed and adopted by the appropriate levels of government and parties concerned with civil aviation and air transport and a plan developed for its implementation.

#### Activity 2.1.1

The CAMP is distributed by UNDP to all concerned for review by the authorities and parties concerned and for development of an action programme, with necessary budgetary allocations, for implementation of its recommendations in accordance with the priorities assigned to each proposal. Early attention will need to be given by the Government to updating and approval of the civil aviation legislation and regulations, and to the formation of a Civil Aviation Regulatory Authority with the necessary mandate and the qualified personnel needed to implement safety and security requirements of ICAO.

**Note:** This activity will extend beyond the life span of this project and would require other experts and training inputs.

## C. **INPUTS**

### 1. **Government Input**

- Suitably qualified counterparts for the ICAO consultants

### 2. **UNDP Inputs**

- Funding for the project
- A UNDP Project Manager to ensure timely coordination and proper implementation of the project
- Offices and secretarial facilities for the ICAO team while in Amman, Jordan
- Transportation of ICAO Consultants between Amman and Iraqi destinations
- Safe accommodation at Baghdad Airport
- Offices and office facilities for consultants during their visits to Baghdad and other airports in Iraq
- Local transportation of consultants and counterparts in Iraq
- Security protection where needed while in Iraq
- Security briefing and protection as required



### 3. ICAO Inputs

#### a. Personnel

Senior Civil Aviation Adviser to UNDP-Iraq	7 months
Team Leader/Civil Aviation Organization and Management Consultant	4 months
Air Transport Economist	2.5 months
Air Law Consultant	2.5 months
Airport Engineering Consultant	2.5 months
CNS Consultant	2 months
Flight Safety Consultant	2.5 months
Aviation Security (AVSEC) Consultant	2 months
Human Resources and Training Consultant	3.5 months

#### b. International travel of Consultants to and from Amman

#### c. Miscellaneous Expenditure including sundry expenses, preparation of reports in English and Agency handling charges.

#### d. ICAO Documents as stipulated in the budget.

#### e. Fellowship training of ICAA personnel requested by ICAA through UNDP Iraq.

## D. RISKS AND PREREQUISITES

### 1. Risks

a. Security situation preventing or restricting the mission of ICAO Consultants in Iraq; prior to the departure of the Consultants to Iraqi destinations, UNDP and concerned authorities will ensure their safety while on mission	Medium
b. Restrictions imposed on visiting certain airports or aviation facilities	Medium
c. Unavailability of suitable counterparts	Low
d. Delay in recruitment of ICAO Consultants due to security concerns	Low to Medium

### 2. Pre-Requisites

Government/UNDP Inputs are assured.

## **E. INSTITUTIONAL FRAMEWORK**

1. ICAO will execute and monitor the project from its Headquarters, nominate and recruit the international consultants, provide financial management and budgetary control of the project and submit financial reports in accordance with its rules and procedures. It will also provide backstopping to ICAO Team members in the performance of their duties and undertake a full review of the Civil Aviation Master Plan to ensure its compliance with ICAO requirements before finalizing it.
2. UNDP provides managerial and technical assistance and funding to Iraq for upgrading civil aviation infrastructure and operations, institutional strengthening of its civil aviation authorities and for developing vital initiatives for rehabilitating and updating the civil aviation sector, is funding this part of the project related to the development of the CAMP by ICAO. The project will be supervised and monitored by UNDP Iraq through its Project Manager and SCAA who will maintain liaison and coordination with ICAO Headquarters and ICAO Team Leader, and assist in organizing the necessary security and other arrangements for the ICAO consultants' missions in Iraq and provide them with the necessary security briefing and instructions. The UNDP Project Manager will also arrange for a meeting of stakeholders to review and discuss the draft CAMP.
3. The ICAO Team Leader will prepare, in consultation with the SCAA and UNDP Project Manager and, through UNDP with Iraqi Civil Aviation Authorities, the project work plan including the number and timing of missions to Iraq and the sites to be visited, the issues to be discussed and the counterparts needed. He will also ensure that team members are fully briefed and aware of their individual and combined tasks as well as the objective to be achieved and are exchanging relevant information and data to ensure their coherence and obtain a wider understanding of the issues encountered and the solutions envisaged by other members of the team which affect their field. The Team Leader will follow up the implementation of the work plan, review the draft reports prepared by the team members to ensure they are clear, coherent and well documented and consolidate them as a Civil Aviation Master Plan. He will also cooperate with the UNDP Project Manager and the Government Authorities concerned in arranging and participating in a stakeholders conference to review, discuss and comment on the draft CAMP before forwarding it to ICAO Headquarters for final review and finalization.
4. The Ministry of Transport as well as the Civil Aviation and Airport Authorities will facilitate the task of the ICAO consultants by designating suitable qualified counterparts for each of them, allowing them access to civil aviation facilities and installations, providing them with the necessary information, data, specifications, statistics and other relevant materials as needed to enable the consultants to obtain a clear picture of the situation and be aware of Government policies and intentions in the field of civil aviation.

## **F. PROJECT REVIEW AND REPORTING**

1. The project may be reviewed by UNDP Iraq, ICAO and Iraqi authorities as considered necessary.
2. Each ICAO Team Consultant will submit a report encompassing a description of existing situation in his field of specialty, his findings, recommendations and any related proposals and attachments.
3. The Team Leader will, with the support of the SCAA, review, coordinate and consolidate the consultants reports as a Civil Aviation Master Plan

4. ICAO Headquarters will review and finalize the CAMP and submit it to UNDP Iraq and, through UNDP Iraq offices, to the Civil Aviation Authority

#### **G. LEGAL CONTEXT**

This project document shall be the instrument referred to as such in Article I of the Standard Basic assistance Agreement between the Government of Iraq and the United Nations Development Programme. The host country implementing agency shall, for the purpose of the Standard Basic Assistance Agreement, refer to the government co-operating agency described in that Agreement.

#### **H. BUDGET**

The budget is provided in Attachment I.

**PROJECT BUDGET COVERING MSA CONTRIBUTION  
(IN UNITED STATES DOLLARS)**

COUNTRY: IRAQ  
PROJECT NO: IRQ/08/801  
PROJECT TITLE: CIVIL AVIATION MASTER PLAN

	TOTAL		2008		2009	
	w/m	\$	w/m	\$	w/m	\$
10. - PROJECT PERSONNEL						
11. - INTERNATIONAL PROFESSIONALS						
11.01 SENIOR CIVIL AVIATION ADVISER TO UNDP	8.0	231 800	5.0	148 200	3.0	83 600
11.51 CIVIL AVIATION ORGANIZATION AND MANAGEMENT CONSULTANT/TTL	4.0	116 500	3.5	93 400	0.5	23 100
11.52 AIR TRANSPORT ECONOMIST	2.5	62 800	2.0	51 500	0.5	11 300
11.53 AIR LAW CONSULTANT	2.5	67 300	2.5	67 300		
11.54 AIRPORT ENGINEERING CONSULTANT	2.5	67 300	2.5	67 300		
11.55 CNS CONSULTANT	2.0	54 200	2.0	54 200		
11.56 FLIGHT SAFETY CONSULTANT	2.5	67 400	2.5	67 400		
11.57 AVIATION SECURITY CONSULTANT	2.0	48 000	2.0	48 000		
11.58 HUMAN RESOURCES AND TRAINING CONSULTANT	3.5	78 200	3.0	67 700	0.5	10 500
11.99 SUB-TOTAL	29.5	793 500	25.0	665 000	4.5	128 500
19. COMPONENT TOTAL		793 500		665 000		128 500
30. - TRAINING						
32.01 - GROUP FELLOWSHIPS		140 000				140 000
39 SUB-TOTAL		140 000				140 000
40. - EQUIPMENT						
45.01 EXPENDABLE EQUIPMENT		10 200		10 200		
49 SUB-TOTAL		10 200		10 200		
50. - MISCELLANEOUS						
52.01 - REPORTING COSTS		20 000		5 000		15 000
53.01 - SUNDRY		16 000		8 000		8 000
55.01 - HANDLING CHARGE		98 000		68 800		29 200
59. COMPONENT TOTAL		134 000		81 800		52 200
99. PROJECT TOTAL		1 077 700		757 000		320 700

**INTERNATIONAL CIVIL AVIATION ORGANIZATION**  
**TECHNICAL CO-OPERATION BUREAU**

**JOB DESCRIPTION**

**Title:** Senior Civil Aviation Advisor (SCAA) to UNDP on the development of Civil Aviation Master Plan (CAMP) for Iraq and associated Capacity Building and Training Initiatives

**Post No.:** 11-01

**Duty Station:** Amman, Jordan with some work to be performed in Baghdad, Iraq and Montreal, Canada

**Duration:** 7 months of work over a 12 month period

**Starting date:** July 2008

**Qualifications Requirements:**

1. University degree or equivalent professional qualification in at least one major civil aviation field.
2. Appropriate qualifications in administration or management, preferably related to civil aviation.
3. Ten years experience at senior level within a civil aviation administration with responsibility for a wide area of multi-disciplinary functions.
4. Familiarity with modern concepts of management and with organization of autonomous civil aviation authorities and aeronautical service providers.
5. Experience in the development of civil aviation organizational structures and human resource plans.
6. Full understanding of the mandates and functions of civil aviation authorities and responsibility of states under the Chicago Convention and its Annexes.
7. Knowledge of ICAO safety oversight audit programmes in various aspects of civil aviation, as well as of its CNS/ATM system and prevailing air transport policies.
8. Command of the English language. Fluency in Arabic is desirable.
9. Initiative, tact, sound judgement and ability to maintain harmonious working relationships.

**Duties:**

Under the overall supervision and guidance of UNDP Iraq Directorate , and in close coordination with the Deputy Resident Representative/Infrastructure, the Advisor will:

1. Provide support to the preparation of a ten-year Civil Aviation Master Plan (CAMP) and Strategy for the phased reform of the civil aviation sector and to the implementation by the Government of Iraq, of sound air transport and civil aviation policies, laws and regulations, as well as programmes and projects for

- ensuring the security and safety, efficiency and regularity of air transport, fully compliant with ICAO Standards and Recommended Practices (SARPs).
2. Assist in the preparation of TORs, and in the fielding of civil aviation experts, in accordance with the requirements outlined in the Preliminary Action Plan, to work with national staff in the project office/task force to be established by the Government of Iraq.
  3. Assist the ICAO CAMP Team Leader in the preparation of the work plan and in organizing consultants' missions to Iraq, as well as maintaining close liaison with the Iraqi Civil Aviation Authority (ICAA) officials and concerned government officials.
  4. Ensure that the organizational structures of ICAA, selected airports and relevant Ministry of Transport Departments are reviewed by the CAMP.
  5. Ensure that the CAMP fully addresses the necessity to establish the national capability to regulate Iraqi airspace and manage air traffic to standards set by International Convention (ICAO)
  6. Review the reports produced by the CAMP team members at various stages and discuss amendments/elaboration required, if any.
  7. Compile, analyze and eliminate contradictions/duplications between the detailed Action Plans of the CAMP.
  8. Assist in the preparation and organization of an international donor conference to mobilize donor, public and private support for the implementation of the CAMP and the detailed action plans and projects.
  9. To the extent practicable, provide assistance to mobilizing public/private resources and partnerships for the implementation of the Civil Aviation Master Plan and other action plans and projects for the modernization, rehabilitation and strengthening of the air transport and civil aviation sector.

INTERNATIONAL CIVIL AVIATION ORGANIZATION  
TECHNICAL CO-OPERATION BUREAU  
JOB DESCRIPTION

**Title:** Civil Aviation Organization and Management Consultant/Team Leader  
**Post No.** 11-51  
**Duty Station:** Amman, Jordan with some work to be performed in Baghdad, Iraq  
**Duration:** 4 months  
**Starting Date:** September 2008  
**Qualifications Requirements:**

1. University degree or equivalent professional qualification in a major field of civil aviation.
2. Appropriate qualifications in administration or management, preferably related to civil aviation.
3. Ten (10) years experience at senior level within a civil aviation administration with responsibility for a wide range of multi-disciplinary functions and responsibilities, including those related to airport and air navigation services.
4. Familiarity with modern concepts of management and with organization of autonomous civil aviation authorities, airports and air navigation.
5. Full understanding of the mandates and the regulatory functions of civil aviation authorities and responsibility of States under the Chicago Convention and its Annexes.
6. Knowledge of ICAO safety oversight audit programmes in various aspects of civil aviation, as well as of CNS/ATM concepts and prevailing air transport policies.
7. Command of the English language. Knowledge of Arabic is desirable.
8. Initiative, tact, sound judgement and ability to maintain harmonious working relationships.

**Duties:**

- A. As Team Leader:**
1. Develop in coordination with UNDP Project Manager and the Senior Civil Aviation Adviser, Government authorities and personnel, a work plan for fulfilment of project activities and for the production of the Civil Aviation Master Plan.
  2. Coordinate the activities of the ICAO Consultants and promote cooperation between the team and authorities concerned to ensure efficient and timely implementation of the project.

3. Provide guidance and advice, as appropriate, to ICAO Team members to ensure that their evaluation, assessment and presentation of issues are made in a systematic and coordinated manner and in conformity with ICAO requirements and guidelines.
4. Review and edit the reports prepared by the individual consultants and consolidate them in a coherent Civil Aviation Master Plan , utilizing any supplementary information and costing parameters obtained by UNDP Iraq.
5. Organize in cooperation with the UNDP Project Manager and the Senior Civil Aviation Adviser, as well as the Iraqi Government Authorities concerned, the conference for presentation of the conclusions, proposals and recommendations of the CAMP to UNDP, Government and Civil Aviation industry personnel concerned and obtain their feedback and comments before finalizing the CAMP.
6. Encourage the adoption by the Government of Iraq, of the ten year Civil Aviation Master Plan for the phased reform of the civil aviation sector and for implementation of sound air transport policies, enactment of updated civil aviation laws and regulations, establishment of civil aviation organizational and management structures, funding and executing project proposals and recommendations for ensuring safety, security, efficiency and regularity of air transport through rehabilitation and construction works, better trained and qualified personnel and full compliance with international requirements.
7. Maintain close liaison and coordination with the Technical Co-operation Bureau of ICAO Headquarters, UNDP Iraq and Iraqi Civil Aviation Authority officials and other Government officials concerned.
8. To the extent practicable with in the limited duration of the project, provide assistance in mobilizing public/private resources and partnerships for the implementation of CAMP proposals and recommendations and in preparation of action plans for modernization, rehabilitation and strengthening of the civil aviation sector and for training of personnel.
9. Provide on-the-job training.
10. Perform other duties in his field of expertise or responsibility.

**B. As Civil Aviation Organization and Management Consultant:**

1. Review the existing civil aviation organization and management structure of the Iraqi Civil Aviation Authority and its subordinate entities and propose, as appropriate, alternative or modified organizational structures that takes into account the following principles and considerations:
  - The proposed organizational structure of the Iraqi Civil Aviation Authority (ICAA) is based on a sound and clear legal foundation that defines its specific mandate, responsibilities and functions;
  - The organizational structure ensures the complete separation and independence of civil aviation regulatory functions from the airlines and civil aviation services providers;



- The organizational structure is efficient and ensures performance of tasks with the least amount of transactions and personnel; and
  - The organizational structure of the ICAA includes all the regulatory functions that are subject to ICAO universal safety oversight audit programmes on flight safety, aviation security, aerodromes and air navigation services.
2. Review the existing responsibilities and functions of the ICAA and its major divisions and expand and clarify them as appropriate.
  3. Propose introduction of modern management methods and computerization as appropriate.
  4. Recommend as appropriate, creation of separate airport authorities and propose an outline of their organizational structure.
  5. Assess the adequacy of personnel for the management, operational and technical posts within the ICAA and propose their recruitment and training as needed, taking into account relevant information obtained from other experts and reports.
  6. Provide on-the-job training.
  7. Perform other related duties as required.

INTERNATIONAL CIVIL AVIATION ORGANIZATION  
TECHNICAL CO-OPERATION BUREAU  
JOB DESCRIPTION

**Title:** Air Transport Economist  
**Post No.:** 11-52  
**Duty Station:** Amman, Jordan with some work to be performed in Baghdad, Iraq  
**Duration:** 2.5 months  
**Starting date:** October 2008

**Qualifications Requirements:**

1. University degree with specialization, preferably in air transport economics.
2. At least ten (10) years experience in a Government department or airline including policy submissions or decisions on matters of major concern to air transport such as the setting up and regulation of air transport operations, route permits, rates, fares, business practices and competition; regulation of the air transport market and control of the economics of airports and route facilities; traffic studies and forecasting trends; and relationship of recurrent costs and user charges.
3. Familiarity with the relevant provisions and Annexes of the Convention on International Civil Aviation and related ICAO air transport policies and guidelines.
4. Command of oral and written English is essential. Knowledge of Arabic is desirable.
5. Initiative, tact, sound judgement and the ability to maintain harmonious working relationships.

**Duties:**

1. Assess the economic situation and the general outlook for the country and its potential impact on air transport.
2. Assess the capacity of the national and other Iraqi airlines in meeting the domestic and international air transport needs of the country and the objectives of the Civil Aviation Policy.
3. Prepare aircraft, passenger and air freight forecasts at Baghdad and other major airports for a period of at least ten years, based on different scenarios of developments in the country.

4. Assess the airport and air navigation fees and charges and the revenue generated by aeronautical and non-aeronautical charges and propose application of revised rates of charges as appropriate for increasing revenue sources at airports.
5. Prepare, in light of the traffic forecast, the estimated annual airport and air navigation services revenues over a period of ten years.
6. Recommend policies, legislation, regulations and actions that could enhance the development of air transport in Iraq and contribute to the national economy.
7. Assess the capability of ICAA for regulating air transport and propose as necessary its enhancement.
8. Propose concepts for an economic diversification project based on the expansion of the air transport sector activities and outlining the international community role or input.
9. Partake in the Civil Aviation master Plan conference and submit or present recommendations for the enhancement of the air transport sector.
10. Provide on-the-job training.
11. Perform other related duties as required.

INTERNATIONAL CIVIL AVIATION ORGANIZATION  
TECHNICAL CO-OPERATION BUREAU  
JOB DESCRIPTION

**Title:** Air Law Consultant  
**Post No:** 11-53  
**Duty Station:** Amman, Jordan with some work to be performed in Baghdad, Iraq  
**Duration:** 2.5 months  
**Starting date:** September 2008

**Qualifications Requirements:**

1. University degree in Law with specialization and advanced qualification in Air Law.
2. At least ten (10) years experience at a senior level in the Legal Department of a Civil Aviation Administration, an airline or similar aviation-related organization.
3. Experience in the drafting of basic legislation for a Civil Aviation Authority.
4. Familiarity with civil aviation regulations and related to personnel licensing, flight operations and continuing airworthiness.
5. Familiarity with Civil Aviation related Conventions and ICAO Annexes.
6. Command of oral and written English is essential. Knowledge of Arabic is desirable.
7. Initiative, tact, sound judgement and the ability to maintain harmonious working relationships.

**Duties:**

1. Review the civil aviation legislation in force and propose any amendments considered necessary to make it conform to international conventions, latest SARPs and national requirements and Civil Aviation Policies of the Government.
2. Review with the Organization and Management Consultant the legal provisions that name and specify the mandate and functions of the Iraqi Civil Aviation Authority (ICAA) and the other civil aviation entities and recommend, as appropriate, their enhancement and clarification.
3. In coordination with other consultants, review the Civil Aviation Regulations and assess their conformity with ICAO SARPs.
4. Advise and assist in the establishment of a library of relevant Civil Aviation Legislation and Regulations documents including ICAO documentation.
5. Provide on-the-job training for the national counterpart personnel in the above duties.
6. Perform other related duties as required.

INTERNATIONAL CIVIL AVIATION ORGANIZATION  
TECHNICAL CO-OPERATION BUREAU  
JOB DESCRIPTION

**Title:** Airport Engineering Consultant  
**Post No.:** 11-54  
**Duty Station:** Amman, Jordan with some work to be performed in Baghdad, Iraq, and other international airports in Iraq  
**Duration:** 2.5 months  
**Starting date:** September 2008

**Qualifications Requirements:**

1. University degree in civil engineering or aerodrome engineering or equivalent professional qualifications.
2. A minimum of ten (10) years experience in airport planning, construction, maintenance, operation and management at major airports and qualified to perform aerodrome inspections.
3. Experience in preparing, approving and using Aerodrome Manuals and related documents.
4. Familiar with ICAO requirements for Aerodrome Certification.
5. Experience in aerodrome inspection and certification.
6. Sound knowledge of ICAO Standards and Recommended Practices (SARPs) and guidelines, (Annex 14 and related documents).
7. Proficiency in technical writing.
8. Command of the English language and proven ability in preparing reports and similar documents. Knowledge of Arabic would be an asset.
9. Initiative, tact, sound judgement and ability to maintain harmonious working relationships.

**Duties:**

1. Establish through the Team Leader, in consultation with Iraq Civil Aviation Authority (ICAA), a list of airports to be visited and evaluated.
2. Assess the condition of infrastructure, buildings, installations and facilities at the airports visited and identify elements that need to be replaced, upgraded or rehabilitated to meet operational and traffic requirements and conform to ICAO requirements.

3. Prepare a cost estimate for each proposed project for rehabilitation of airports visited.
4. In the light of the Civil Aviation Policy of the Government concerning airports, and in coordination with the Team Leader, the Air Transport Economist, the Ministry of Transportation and the ICAA, determine the priority to be given to the development of different airports.
5. Determine, on the basis of operations envisaged at airports, the fire and rescue classification for each airport.
6. Assess the adequacy of the airport infrastructure and building maintenance personnel and the equipment that need to be provided at major airports.
7. Provide guidance on the ICAO requirements for certification of international airports in Iraq and indicate any corrective actions needed prior to their certification.
8. Provide on-the-job training to counterpart(s).
9. Perform other related duties as required.

INTERNATIONAL CIVIL AVIATION ORGANIZATION  
TECHNICAL CO-OPERATION BUREAU  
JOB DESCRIPTION

**Title:** Communications, Navigation, Surveillance (CNS) System Consultant  
**Post No.:** 11-55  
**Duty Station:** Amman, Jordan with some periods in Baghdad, Iraq,  
**Duration:** 2.0 months  
**Starting date:** October 2008

**Qualifications Requirements:**

1. Experience at a management level in provision and maintenance of CNS installations within an Airways Facilities Section of a civil aviation department, a major airport or air navigation service providing agency.
2. Fifteen (15) years minimum background experience in complex navigation and control systems.
3. Five years experience at supervisory or managerial level in air traffic control systems.
4. Knowledge of ICAO CNS/ATM documents.
5. Good command of English and knowledge of Arabic desirable.
6. Initiative, tact, sound judgement and the ability to maintain harmonious working relationships.

**Duties:**

1. Assess the CNS facilities and capabilities that are available at airports.
2. Assess the adequacy of the present air traffic control centre, installations, the telecommunication network and the navigational aids for the provision of an efficient and effective area control service over Iraq and identify aspects that need to be upgraded or rehabilitated to provide the required standard of service needed to meet ICAO air traffic safety audit requirements.
3. Provide cost estimates of equipment and installations needed for the rehabilitation and upgrading of air navigation and telecommunication facilities.
4. Assess the air navigation system regulations and procedures in force and propose, as necessary, their updating and upgrading.
5. Assess the adequacy or otherwise of the electronics technicians and engineers and recommend as appropriate, their recruitment or retraining.
6. Prepare a short term plan of corrective measures to address all identified deficiencies.
7. Provide on-the-job training to counterpart(s)
8. Perform other related duties as required.

INTERNATIONAL CIVIL AVIATION ORGANIZATION  
TECHNICAL CO-OPERATION BUREAU  
JOB DESCRIPTION

**Title:** Flight Safety Consultant  
**Post No.:** 11-56  
**Duty Station:** Amman, Jordan with some periods in Baghdad, Iraq,  
**Duration:** 2.5 months  
**Starting date:** September 2008

**Qualifications Requirements:**

1. University degree or equivalent professional qualification in aeronautical engineering, preferably with flying qualifications.
2. At least ten (10) years experience at a senior capacity in a government flight safety department or in a similar capacity in an airline.
3. Experience in safety oversight of airlines, their personnel and their aircraft maintenance facilities and installations.
4. Familiarity with the organizational structure of safety oversight departments.
5. Sound knowledge of ICAO standards, Recommended Practices and guidance material related to flight safety as well as with ICAO Universal Safety Oversight Audit Programme.
6. Familiarity with national and multinational regulations relating to flight safety.
7. Familiarity with requirements for the issue and validation of airworthiness and air operators' certificates and of personnel licences.
8. Command of the English language. Knowledge of Arabic desirable.
9. Initiative, tact, sound judgement and ability to maintain harmonious working relationships.

**Duties:**

1. Review, in participation with the Aviation Legislation Consultant, the Civil Aviation Legislation provisions and the Civil Aviation Regulations related to flight safety, and update them as appropriate to comply with the latest ICAO SARPs and guidelines and to enhance the authority of Iraq Civil Aviation Authority (ICAA) in safety oversight.
2. Assess the Safety Oversight division of ICAA and submit proposals for enhancing and upgrading its capability by improving its organizational structure, and its surveillance and inspection procedures, as well as by providing it with the



- appropriately qualified personnel needed in flight operations, airworthiness and licensing and for their operator certification.
3. Assess the adequacy of the number, qualification and experience of safety oversight inspectors and personnel and recommend appropriate actions for recruitment of additional personnel and for training them to appropriate standards.
  4. Assess the extent to which the Recommendations of Safety Oversight Audits have been implemented in Iraq, and recommend, as appropriate, actions for their implementation.
  5. Assess the extent to which safety oversight comments and requests made by ICAA inspectors are implemented by airlines and aircraft maintenance organizations.
  6. Submit recommendations, including immediate and medium term plans, for a more effective and efficient safety oversight in conformity with ICAO requirements.
  7. Partake as appropriate and feasible, in the CAMP presentation conference.
  8. Provide on-the-job training to counterpart(s).
  9. Perform other related duties as required.

INTERNATIONAL CIVIL AVIATION ORGANIZATION  
TECHNICAL CO-OPERATION BUREAU  
JOB DESCRIPTION

**Title:** Aviation Security (AVSEC) Consultant  
**Post No.** 11-57  
**Duty Station:** Amman, Jordan with some periods in Baghdad and other airports as necessary  
**Duration:** 2.0 months  
**Starting date:** October 2008

**Qualifications Requirements:**

1. At least six (6) years of experience in an airline, airport, government or civil aviation organization in a senior or supervisory capacity in aviation security.
2. Experience in the planning, organization and implementation of aviation security programmes and procedures for safeguarding of civil aviation, installations, aerodromes and facilities, appreciation of the legal basis of AVSEC and restricted articles regulations.
3. Knowledge of the principles of operation and use of the security devices and equipment including surveillance, detection and intrusion alarm systems in relation to purely domestic, mixed and international regulations.
4. Familiar with bomb threat response procedures, anti-highjacking procedures and other aerodrome security measures.
5. Working knowledge of ICAO Standards and Recommended Practices (SARPs) related to Aviation Security speciality; i.e. ICAO Annex 17 to the Convention on ICAO (Chicago Convention), ICAO Security Manual for the Safeguarding of Civil Aviation from Acts of Unlawful Interference (Doc. 8973).
6. Familiarity with ICAO AVSEC Training Programme and ICAO Annexes 6, 9, 14 and 18.
7. Experience of working in the environment of a developing country is desirable.
8. Command of English is essential and knowledge of Arabic is desirable.
9. Initiative, tact, sound judgement and the ability to maintain harmonious working relationships.

**Duties:**

1. Review the national security programme provisions, procedures and arrangements.
2. Review the aviation security programme and related emergency procedures at airports.

3. Assess the adequacy of aviation security personnel and detection equipment at airports.
4. Identify weaknesses and deficiencies in aviation security organization, control procedures, detection equipment, airport fences, personnel and threat assessment and propose corrective actions with cost estimates to bring them in line with ICAO requirements.
5. Formulate a project proposal for immediate to medium term plan for needed improvements in the sector.
6. Partake in coordination meetings and the final CAMP presentation conference as appropriate and feasible.
7. Provide on-the-job training to counterpart(s).
8. Perform other related duties as required.

INTERNATIONAL CIVIL AVIATION ORGANIZATION  
TECHNICAL CO-OPERATION BUREAU  
JOB DESCRIPTION

**Title:** Human Resources and Training Consultant  
**Post No.** 11-58  
**Duty Station:** Amman, Jordan with some periods in Baghdad, Iraq,  
**Duration:** 3.5 months  
**Starting date:** October 2008

**Qualifications Requirements:**

1. University degree or equivalent professional qualifications related to civil aviation human resources development and training.
2. Experience in human resources development, training and management in a civil aviation department, airport or airlines.
3. Experience in preparation and implementation of training programmes.
4. Experience at a managerial level, in an aviation training institute.
5. Familiarity with the regulatory and service provision functions of civil aviation entities and airlines, as well as the major specialization fields of their personnel.
6. Familiarity with ICAO TRAINAIR Programme.
7. Command of the English language. Knowledge of Arabic desirable.
8. Initiative, tact, sound judgement and the ability to maintain harmonious working relationships.

**Duties:**

1. Assess the adequacy of the human resources available at the existing Iraqi Ministry of Transportation, Iraq Civil Aviation Authority (ICAA) and the Iraqi Civil Aviation Training Institute (ICATI), and determine in coordination with the other CAMP Team members the additional personnel and training needed in each civil aviation field for the next ten years.
2. Assess the organizational structure, training facilities and methodology, curricula and the teaching staff of the ICATI to determine its adequacy and suitability for providing the civil aviation training needed.
3. Submit recommendations and proposals for upgrading ICATI capabilities and for adoption of TRAINAIR methodology as appropriate to meet the envisaged training needs of the civil aviation sector.

4. Submit a report with findings and appropriate recommendations with cost estimates for meeting the human resources needs of civil aviation entities in Iraq over the next ten years and the steps needed to enable ICATI to fulfil a large part of these training needs.
5. Formulate proposals for immediate to medium term capacity building needs, institutional strengthening and basic training needs in the sector, including a training plan for a period of three to five years covering in-country and external training programmes.
6. Partake in coordination meetings and the CAMP presentation conference as appropriate and feasible.
7. Provide on-the-job training to counterpart(s).
8. Perform other related duties as required.