

Appendix 2

34



**COALITION PROVISIONAL AUTHORITY
IRAQ INFRASTRUCTURE RECONSTRUCTION PROGRAM
IRAQ INFRASTRUCTURE RECONSTRUCTION OFFICE - BAGHDAD, IRAQ**

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PROJECT IDENTIFICATION FORM

| | | | |
|--|-----------------------------------|---|-----------------------|
| MINISTRY | | PROJECT TITLE | |
| MINISTRY OF TRANSPORTATION & COMMUNICATION | | BAGHDAD INTERNATIONAL AIRPORT (BIAP) - INFRASTRUCTURE | |
| LOCATION (GOVERNATE) | | LOCATION (MUNICIPALITY) | |
| BAGHDAD | | BAGHDAD | |
| SECTOR / SUBSECTOR | CONTACT PERSON & TITLE | CONTACT TELEPHONE | CONTACT E-MAIL |
| TRANSPORTATION | | XXX-XXX-XXXX | XXX@YYY.COM |
| AIRPORTS | GPS END | | PROJECT COST |
| GPS-START | (FORMAT ODD.DDDDD) | | IN US DOLLARS |
| (FORMAT ODD.DDDDD) | | | \$ 32,465,000 |
| N 39.26829 | N 33.26829 | | |
| E 44.22752 | E 44.22752 | | |
| IRAQI CONTACT / TITLE | PROJECT IDENTIFICATION N° | OTHER FUNDING | FROM WHOM? |
| AAAA | T-A-TC-001 | REQUESTED? NO | |
| BBBB | | | |

PROJECT OBJECTIVE AND JUSTIFICATION (Note: Address coordination with other projects, if known.)

All international airports, and domestic airports with links to international airports, must meet the International Civil Aviation Organization's (ICAO's) standards. By not meeting those standards, [foreign] airlines will either be reluctant or unable to call upon those airports. Many of the present systems at the airports have suffered from neglect in maintenance, many years of wars, and sanctions.

This project is to upgrade, repair or replace the most essential items, such as the instrument landing system (ILS), repair buildings, terminals, and other infrastructure facilities (roads, runways, taxiways, aprons, sewerage, potable water, electric power), including crash / fire / rescue systems.

It is imperative that funds will be allotted to upgrade Iraq's three most important airports: Baghdad, Iraq's capital, and the largest city, Basrah, the gateway to international maritime shipping lanes with a need for a well-functioning airport to bring in supplies, equipment and spare parts, and Mosul, the agricultural center of Iraq.

SCOPE OF PROJECT

Repair, replace, and or upgrade terminals, air traffic control towers, sewerage, electrical, including lighting, mechanical, including heating ventilation air conditioning (HVAC), water, fuel system, refurbish runways, taxiways, aprons, repair escalators, elevators, glazing, parking lots, security and safety systems. Replace old communication cabling with fiber optic cables, egress and exit ways. (This is not an exhaustive listing, the contractor must perform, document and present to the Ministry a detailed survey with work description and cost estimates.)

| # | Description | Unit | Quantity | Unit Cost | Cost |
|---------------------------------|-------------------------|----------|----------|--------------|--------------|
| INFRASTRUCTURE - BAGHDAD | | | | | |
| 1 | Trunked Radio Network | Lump Sum | 1 | \$ 500,000 | \$ 500,000 |
| 2 | Emergency Power Station | LS | 1 | \$ 3,000,000 | \$ 3,000,000 |
| 3 | Pavement Markings | LS | 1 | \$ 150,000 | \$ 150,000 |
| 4 | Tool Kits | LS | 1 | \$ 50,000 | \$ 50,000 |
| 5 | HVAC Repair Parts | LS | 1 | \$ 1,000,000 | \$ 1,000,000 |
| 6 | Off Airport Parking Lot | LS | 1 | \$ 500,000 | \$ 500,000 |
| 7 | Electrical Subcontract | LS | 1 | \$ 100,000 | \$ 100,000 |

**COALITION PROVISIONAL AUTHORITY
IRAQ INFRASTRUCTURE RECONSTRUCTION PROGRAM
IRAQ INFRASTRUCTURE RECONSTRUCTION OFFICE - BAGHDAD, IRAQ
PROJECT IDENTIFICATION FORM - CONTINUATION**

| | | | | | | |
|----|---|----|---|--------------|----|-------------------|
| 8 | Mechanical Subcontract | LS | 1 | \$ 200,000 | \$ | 200,000 |
| 9 | Glass/Glazing Subcontract | LS | 1 | \$ 1,000,000 | \$ | 1,000,000 |
| 10 | Flight Inspection support | LS | 1 | \$ 50,000 | \$ | 50,000 |
| 11 | Crash Fire Rescue | LS | 1 | \$ 4,200,000 | \$ | 4,200,000 |
| 12 | Fuel sys repair | LS | 1 | \$ 300,000 | \$ | 300,000 |
| 13 | Environmental clean up | LS | 1 | \$ 1,200,000 | \$ | 1,200,000 |
| 14 | Sewage Pump Repair | LS | 1 | \$ 30,000 | \$ | 30,000 |
| 15 | Water System Repair | LS | 1 | \$ 100,000 | \$ | 100,000 |
| 16 | Plywood Purchase | LS | 1 | \$ 5,000 | \$ | 5,000 |
| 17 | 1700M Jersey Barriers | LS | 1 | \$ 15,000 | \$ | 15,000 |
| 18 | Architectural Casework | LS | 1 | \$ 5,000 | \$ | 5,000 |
| 19 | Elevator/Escalator Repair | LS | 1 | \$ 5,000 | \$ | 5,000 |
| 20 | Aircraft Bridge Repair | LS | 1 | \$ 15,000 | \$ | 15,000 |
| 21 | ATC Radar Interface | LS | 1 | \$ 1,200,000 | \$ | 1,200,000 |
| 22 | ILS Repair/Replacement | LS | 1 | \$ 100,000 | \$ | 100,000 |
| 23 | Fiber Optic Cable Installation | LS | 1 | \$ 500,000 | \$ | 500,000 |
| 24 | Control Tower Console/radio replacement | LS | 1 | \$ 2,000,000 | \$ | 2,000,000 |
| 25 | SKYLINK Assessment/Management | LS | 1 | \$ 300,000 | \$ | 300,000 |
| 26 | Security Assessment | LS | 1 | \$ 300,000 | \$ | 300,000 |
| 27 | Ground Support Equipment | LS | 1 | \$ 500,000 | \$ | 500,000 |
| 28 | Air Traffic Control (ATC) Radar | LS | 1 | \$10,000,000 | \$ | 10,000,000 |
| 29 | Airfield substation/lighting vault | LS | 1 | \$ 2,500,000 | \$ | 2,500,000 |
| 30 | BASH equipment | LS | 1 | \$ 140,000 | \$ | 140,000 |
| 31 | Security equipment/dogs | LS | 1 | \$ 2,000,000 | \$ | 2,000,000 |
| 32 | AFTN sys and charges | LS | 1 | \$ 500,000 | \$ | 500,000 |
| | TOTAL | | | | \$ | 32,465,000 |



**COALITION PROVISIONAL AUTHORITY
IRAQ INFRASTRUCTURE RECONSTRUCTION PROGRAM
IRAQ INFRASTRUCTURE RECONSTRUCTION OFFICE - BAGHDAD, IRAQ**

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PROJECT IDENTIFICATION FORM

| | | | |
|---|---|---|--------------------------------------|
| MINISTRY MINISTRY OF TRANSPORTATION & COMMUNICATION | | PROJECT TITLE BAGHDAD INTERNATIONAL AIRPORT (BIAP) - AIR NAVIGATION SERVICES (ANS) | |
| LOCATION (GOVERNATE) BAGHDAD | | LOCATION (MUNICIPALITY) BAGHDAD | |
| SECTOR / SUBSECTOR TRANSPORTATION AIRPORTS | CONTACT PERSON & TITLE [REDACTED] | CONTACT TELEPHONE | CONTACT E-MAIL |
| GPS START (FORMAT DDD.DDDDD) | GPS END (FORMAT DDD.DDDDD) | CRA PRIORITY | PROJECT COST IN US DOLLARS |
| N E | N E | | \$ 23,404,400 |
| IRAQI CONTACT | PROJECT IDENTIFICATION N° T-A-TC-002 | OTHER FUNDING REQUESTED? NO | FROM WHOM? |

PROJECT OBJECTIVE AND JUSTIFICATION (Note: Address coordination with other projects, if known.)

All international airports, and domestic airports with links to international airports, must meet the International Civil Aviation Organization's (ICAO's) standards. By not meeting those standards, foreign airlines will either be reluctant or unable to call on those airports. Many of the present systems at the airport have suffered from neglect in maintenance, many years of wars, and sanctions. This project is to upgrade, repair or replace the navigational infrastructure.

Once the system is in place and functioning, it will greatly improve the safety, security of Iraq's navigational aerospace system and improve international traffic.

It is detrimental to Iraq's economy that a well-functioning Air Navigation Service exists.

SCOPE OF PROJECT

Repair, replace, renew, and / or upgrade the navigational infrastructure, air traffic control towers, approach control systems, and the area control center as detailed in the table below.

| # | Description | Unit | Quantity | Unit Cost | Cost |
|--|--|------|----------|--------------|--------------|
| AIR NAVIGATION SERVICES (ANS) - BAGHDAD | | | | | |
| BIAP (Baghdad Int'l Airport) | | | | | |
| Infrastructure | | | | | |
| 1 | Airport Surface Weather Reporting System; Local visibility, wind, etc. | LS | 1 | \$ 400,000 | \$ 400,000 |
| 2 | Runway & Taxiway Lights; Replace old technology lighting systems. | LS | 1 | \$ 158,400 | \$ 158,400 |
| 3 | Approach Lighting System; Replace old technology lighting systems. | LS | 1 | \$ 4,400,000 | \$ 4,400,000 |

**COALITION PROVISIONAL AUTHORITY
IRAQ INFRASTRUCTURE RECONSTRUCTION PROGRAM
IRAQ INFRASTRUCTURE RECONSTRUCTION OFFICE - BAGHDAD, IRAQ
PROJECT IDENTIFICATION FORM - CONTINUATION**

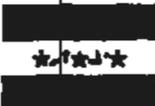
| | | | | | |
|-------------------------|---|----|---|--------------|--------------|
| 4 | Precision Approach Path Indicators; Replace old technology lighting systems. | LS | 1 | \$ 240,000 | \$ 240,000 |
| 5 | Instrument Landing System with Distance Measuring Equipment (DME); 2 Systems for runways 33R/15L. | LS | 1 | \$ 768,000 | \$ 768,000 |
| 6 | DVOR - Very High Frequency Omni- directional Range (VOR) with Distance Measuring Equipment (DME); Includes Uninterrupted Power Supply (UPS), engine generator & transfer switch. | LS | 1 | \$ 2,000,000 | \$ 2,000,000 |
| 7 | Enhance Fiber Loop. | LS | 1 | \$ 500,000 | \$ 500,000 |
| 8 | Misc. Equipment; Windssocks, Runway Indicator Tee, Rotating Beacon. | LS | 1 | \$ 250,000 | \$ 250,000 |
| | SUB-TOTAL | | | | \$ 8,716,400 |
| Control Tower | | | | | |
| 9 | General Refurbishment of the Tower Cab; Electrical wiring, lighting, controller chairs, water fountain, carpet, telephones, furniture, break room, etc. | LS | 1 | \$ 100,000 | \$ 100,000 |
| 10 | Reconstitute Tower Consoles & Cab Equipment; General repair, modify consoles to provide walk through areas, update utility wiring, update lighting, clocks, altimeter displays, phones, light guns, control & monitor system, information display system, etc. | LS | 1 | \$ 750,000 | \$ 750,000 |
| 11 | Digital Airport Terminal Information System; | LS | 1 | \$ 100,000 | \$ 100,000 |
| 12 | Radio Equipment; 4 VHF primary & backup, 2 UHF primary & backup, 2 Emergency primary. | LS | 1 | \$ 346,000 | \$ 346,000 |
| 13 | Ancillary Equipment; Control & monitor system, information display system, etc. | LS | 1 | \$ 250,000 | \$ 250,000 |
| | SUB-TOTAL | | | | \$ 1,546,000 |
| Approach Control | | | | | |
| 14 | General Refurbishment of the Approach Control Operations Area; Electrical wiring, lighting, controller chairs, water fountain, carpet, telephones, furniture, window blinds, break room, non-static carpet, etc. | LS | 1 | \$ 50,000 | \$ 50,000 |
| 15 | ATC Automation System; Equipment, racks, controller displays (including tower), controller consoles, etc. | LS | 1 | \$ 5,000,000 | \$ 5,000,000 |

**COALITION PROVISIONAL AUTHORITY
IRAQ INFRASTRUCTURE RECONSTRUCTION PROGRAM
IRAQ INFRASTRUCTURE RECONSTRUCTION OFFICE - BAGHDAD, IRAQ
PROJECT IDENTIFICATION FORM - CONTINUATION**

| | | | | | |
|----------------------------|--|----|---|--------------|---------------|
| 16 | Terminal Surveillance Radar System; Includes Uninterrupted Power Supply (UPS), engine generator & transfer switch. | LS | 1 | \$ 5,410,000 | \$ 5,410,000 |
| 17 | Radio Equipment; 6 VHF primary & backup, 3 UHF primary & backup, 2 Emergency primary. | LS | 1 | \$ 420,000 | \$ 420,000 |
| 18 | Ancillary Equipment; Control & monitor system, information display system, etc. | LS | 1 | \$ 250,000 | \$ 250,000 |
| 19 | Training Room & Lab; Pilot position, controller position, communications capability, etc. | LS | 1 | \$ 500,000 | \$ 500,000 |
| | SUB-TOTAL | | | | \$ 11,630,000 |
| Area Control Center | | | | | |
| 20 | General Refurbishment of the Area Control Center Operations Area; Electrical wiring, lighting, controller chairs, water fountain, carpet, telephones, furniture, window blinds, break room, non-static carpet, etc. | LS | 1 | \$ 50,000 | \$ 50,000 |
| 21 | Ancillary Equipment; Control & monitor system, information display system, etc. | LS | 1 | \$ 250,000 | \$ 250,000 |
| 22 | Voice Switch; 0 | LS | 1 | \$ 631,000 | \$ 631,000 |
| 23 | Radio Equipment; 6 VHF primary & backup, 2 UHF primary & backup, 2 Emergency primary. | LS | 1 | \$ 378,000 | \$ 378,000 |
| 24 | Design New Operations Area & Equipment Room Floor Space; 0 | LS | 1 | \$ 3,000 | \$ 3,000 |
| 25 | Install ACC consoles from 4th floor to 3rd floor; The old consoles will be reconfigured for Initial ACC operations. | LS | 1 | \$ 150,000 | \$ 150,000 |
| 26 | SADIS System for International Weather; | LS | 1 | \$ 50,000 | \$ 50,000 |
| | SUB-TOTAL | | | | \$ 1,512,000 |
| | TOTAL BAGHDAD INTERNATIONAL AIRPORT AIR NAVIGATION SERVICES (ANS) | | | | \$ 23,404,400 |



**COALITION PROVISIONAL AUTHORITY
IRAQ INFRASTRUCTURE RECONSTRUCTION PROGRAM
IRAQ INFRASTRUCTURE RECONSTRUCTION OFFICE - BAGHDAD, IRAQ**



PROJECT IDENTIFICATION FORM

| | | | |
|---|---|--|---|
| MINISTRY MINISTRY OF TRANSPORTATION & COMMUNICATION | | PROJECT TITLE MOSUL AIRPORT - INFRASTRUCTURE | |
| LOCATION (GOVERNATE) DAMUK | | LOCATION (MUNICIPALITY) MOSUL | |
| SECTOR / SUBSECTOR TRANSPORTATION | CONTACT PERSON & TITLE [REDACTED] | CONTACT TELEPHONE | CONTACT E-MAIL |
| AIRPORTS GPS START (FORMAT DDD.DDDDD) N E | GPS END (FORMAT DDD.DDDDD) N E | CPA PRIORITY --- | PROJECT COST IN US DOLLARS \$ 21,265,000 |
| IRAQI CONTACT | PROJECT IDENTIFICATION # T-A-TC-005 | OTHER FUNDING REQUESTED? NO | FROM WHOM? |

PROJECT OBJECTIVE AND JUSTIFICATION (Note: Address coordination with other projects, if known.)

All international airports, and domestic airports with links to international airports, must meet the International Civil Aviation Organization's (ICAO's) standards. By not meeting those standards, [foreign] airlines will either be reluctant or unable to call upon those airports. Many of the present systems at the airports have suffered from neglect in maintenance, many years of wars, and sanctions.

This project is to upgrade, repair or replace the most essential items, such as the instrument landing system (ILS), repair buildings, terminals, and other infrastructure facilities (roads, runways, taxiways, aprons, sewerage, potable water, electric power), including crash / fire / rescue systems.

It is imperative that funds will be allotted to upgrade Iraq's three most important airports: Baghdad, Iraq's capital, and the largest city, Basrah, the gateway to international maritime shipping lanes with a need for a well-functioning airport to bring in supplies, equipment and spare parts, and Mosul, the agricultural center of Iraq.

SCOPE OF PROJECT

Repair, replace, and or upgrade terminals, air traffic control towers, sewerage, electrical, including lighting, mechanical, including heating ventilation air conditioning (HVAC), water, fuel system, refurbish runways, taxiways, aprons, repair escalators, elevators, glazing, parking lots, security and safety systems. Replace old communication cabling with fiber optic cables, egress and exit ways. (This is not an exhaustive listing, the contractor must perform, document and present to the Ministry a detailed survey with work description and cost estimates.)

| # | Description | Unit | Quantity | Unit Cost | Cost |
|-------------------------------|---------------------------|----------|----------|--------------|--------------|
| INFRASTRUCTURE - MOSUL | | | | | |
| 1 | Trunked Radio Network | Lump Sum | 1 | \$ 500,000 | \$ 500,000 |
| 2 | Emergency Power Station | LS | 1 | \$ 3,000,000 | \$ 3,000,000 |
| 3 | Pavement Markings | LS | 1 | \$ 150,000 | \$ 150,000 |
| 4 | Tool Kits | LS | 1 | \$ 50,000 | \$ 50,000 |
| 5 | HVAC Repair Parts | LS | 1 | \$ 1,000,000 | \$ 1,000,000 |
| 6 | Off Airport Parking Lot | LS | 1 | \$ 500,000 | \$ 500,000 |
| 7 | Electrical Subcontract | LS | 1 | \$ 100,000 | \$ 100,000 |
| 8 | Mechanical Subcontract | LS | 1 | \$ 200,000 | \$ 200,000 |
| 9 | Glass/Glazing Subcontract | LS | 1 | \$ 1,000,000 | \$ 1,000,000 |

**COALITION PROVISIONAL AUTHORITY
IRAQ INFRASTRUCTURE RECONSTRUCTION PROGRAM
IRAQ INFRASTRUCTURE RECONSTRUCTION OFFICE - BAGHDAD, IRAQ
PROJECT IDENTIFICATION FORM - CONTINUATION**

| | | | | | |
|----|---|----|---|--------------|---------------------|
| 10 | Flight Inspection support | LS | 1 | \$ 50,000 | \$ 50,000 |
| 11 | Crash Fire Rescue | LS | 1 | \$ 4,200,000 | \$ 4,200,000 |
| 12 | Fuel sys repair | LS | 1 | \$ 300,000 | \$ 300,000 |
| 13 | Environmental clean up | LS | 1 | \$ 1,200,000 | \$ 1,200,000 |
| 14 | Sewage Pump Repair | LS | 1 | \$ 30,000 | \$ 30,000 |
| 15 | Water System Repair | LS | 1 | \$ 100,000 | \$ 100,000 |
| 16 | Plywood Purchase | LS | 1 | \$ 5,000 | \$ 5,000 |
| 17 | 1700M Jersey Barriers | LS | 1 | \$ 15,000 | \$ 15,000 |
| 18 | Architectural Casework | LS | 1 | \$ 5,000 | \$ 5,000 |
| 19 | Elevator/Escalator Repair | LS | 1 | \$ 5,000 | \$ 5,000 |
| 20 | Aircraft Bridge Repair | LS | 1 | \$ 15,000 | \$ 15,000 |
| 21 | ILS Repair/Replacement | LS | 1 | \$ 100,000 | \$ 100,000 |
| 22 | Fiber Optic Cable Installation | LS | 1 | \$ 500,000 | \$ 500,000 |
| 23 | Control Tower Console/radio replacement | LS | 1 | \$ 2,000,000 | \$ 2,000,000 |
| 24 | SKYLINK Assessment/Management | LS | 1 | \$ 300,000 | \$ 300,000 |
| 25 | Security Assessment | LS | 1 | \$ 300,000 | \$ 300,000 |
| 26 | Ground Support Equipment | LS | 1 | \$ 500,000 | \$ 500,000 |
| 27 | Airfield substation/lighting vault | LS | 1 | \$ 2,500,000 | \$ 2,500,000 |
| 28 | BASH equipment | LS | 1 | \$ 140,000 | \$ 140,000 |
| 29 | Security equipment/dogs | LS | 1 | \$ 2,000,000 | \$ 2,000,000 |
| 30 | AFTN sys and charges | LS | 1 | \$ 500,000 | \$ 500,000 |
| | SUB-TOTAL | | | | \$21,265,000 |



**COALITION PROVISIONAL AUTHORITY
IRAQ INFRASTRUCTURE RECONSTRUCTION PROGRAM
IRAQ INFRASTRUCTURE RECONSTRUCTION OFFICE - BAGHDAD, IRAQ**

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PROJECT IDENTIFICATION FORM

| | | | |
|---|---|---|--------------------------------------|
| MINISTRY MINISTRY OF TRANSPORTATION & COMMUNICATION | | PROJECT TITLE MOSUL AIRPORT - AIR NAVIGATION SERVICES (ANS) | |
| LOCATION (GOVERNATE) DAMUK | | LOCATION (MUNICIPALITY) MOSUL | |
| SECTOR / SUBSECTOR TRANSPORTATION AIRPORTS | CONTACT PERSON & TITLE [REDACTED] | CONTACT TELEPHONE | CONTACT E-MAIL |
| GPS START (FORMAT DDD.DDDDD) | GPS END (FORMAT DDD.DDDDD) | CPA PRIORITY | PROJECT COST IN US DOLLARS |
| N E | N E | | \$ 15,582,400 |
| IRAQI CONTACT | PROJECT IDENTIFICATION N° T-A-TC-005 | OTHER FUNDING REQUESTED? NO | FROM WHOM? |

PROJECT OBJECTIVE AND JUSTIFICATION (Note: Address coordination with other projects, if known.)

All international airports, and domestic airports with links to international airports, must meet the International Civil Aviation Organization's (ICAO's) standards. By not meeting those standards, foreign airlines will either be reluctant or unable to call on those airports. Many of the present systems at the airport have suffered from neglect in maintenance, many years of wars, and sanctions. This project is to upgrade, repair or replace the navigational infrastructure.

Once the system is in place and functioning, it will greatly improve the safety, security of Iraq's navigational aerospace system and improve international traffic.

It is detrimental to Iraq's economy that a well-functioning Air Navigation Service exists.

SCOPE OF PROJECT

Repair, replace, renew, and / or upgrade the navigational infrastructure, air traffic control towers, approach control systems, and the area control center as detailed in the table below.

| # | Description | Unit | Quantity | Unit Cost | Cost |
|--|--|----------|----------|--------------|--------------|
| AIR NAVIGATION SERVICES (ANS) - MOSUL | | | | | |
| Mosul Airport Infrastructure | | | | | |
| 1 | Airport Surface Weather Reporting System; Local visibility, wind, etc. | Lump Sum | 1 | \$ 400,000 | \$ 400,000 |
| 2 | Runway & Taxiway Lights; Replace old technology lighting systems. | LS | 1 | \$ 158,400 | \$ 158,400 |
| 3 | Approach Lighting System; Replace old technology lighting systems. | LS | 1 | \$ 4,400,000 | \$ 4,400,000 |

**COALITION PROVISIONAL AUTHORITY
IRAQ INFRASTRUCTURE RECONSTRUCTION PROGRAM
IRAQ INFRASTRUCTURE RECONSTRUCTION OFFICE - BAGHDAD, IRAQ
PROJECT IDENTIFICATION FORM - CONTINUATION**

| | | | | | |
|---|---|----------|---|--------------|-------------------------|
| 4 | Precision Approach Path Indicators; Replace old technology lighting systems. | LS | 1 | \$ 240,000 | \$ 240,000 |
| 5 | Instrument Landing System with Distance Measuring Equipment (DME); 2 Systems for runways 33R/15L. | LS | 1 | \$ 768,000 | \$ 768,000 |
| 6 | DVOR - Very High Frequency Omni-directional Range (VOR) with Distance Measuring Equipment (DME); Includes Uninterrupted Power Supply (UPS), engine generator & transfer switch. | LS | 1 | \$ 2,000,000 | \$ 2,000,000 |
| 7 | Misc. Equipment; Windssocks, Runway Indicator Tee, Rotating Beacon. | LS | 1 | \$ 250,000 | \$ 250,000 |
| | SUB-TOTAL | | | | \$ 3,216,400 |
| 1 | General Refurbishment of the Tower Cab; Electrical wiring, lighting, controller chairs, water fountain, carpet, telephones, furniture, break room, etc. | Lump Sum | 1 | \$ 100,000 | \$ 100,000 |
| 2 | Reconstitute Tower Consoles & Cab Equipment; General repair, update utility wiring, update lighting, clocks, altimeter displays, phones, light guns, etc. | LS | 1 | \$ 250,000 | \$ 250,000 |
| 3 | Voice Switch; Compact voice switch designed for tower operations. | LS | 1 | \$ 356,000 | \$ 356,000 |
| 4 | Radio Equipment; 4 VHF primary & backup, 2 UHF primary & backup, 2 Emergency primary. | LS | 1 | \$ 250,000 | \$ 250,000 |
| 5 | ATCT Automation System; Provides 2 displays | LS | 1 | \$ 350,000 | \$ 350,000 |
| 6 | Terminal Surveillance Radar System; Includes Uninterrupted Power Supply (UPS), engine generator & transfer switch. | LS | 1 | \$ 5,410,000 | \$ 5,410,000 |
| 7 | SADIS System for International Weather; | LS | 1 | \$ 50,000 | \$ 50,000 |
| 8 | Digital Airport Terminal Information System; | LS | 1 | \$ 100,000 | \$ 100,000 |
| 9 | Ancillary Equipment; Control & monitor system, information display system, etc. | LS | 1 | \$ 500,000 | \$ 500,000 |
| | SUB-TOTAL | | | | \$ 7,366,000 |
| | TOTAL MOSUL AIRPORT AIR NAVIGATION SERVICES (ANS) | | | | \$ 15,582,400 |



**COALITION PROVISIONAL AUTHORITY
IRAQ INFRASTRUCTURE RECONSTRUCTION PROGRAM
IRAQ INFRASTRUCTURE RECONSTRUCTION OFFICE - BAGHDAD, IRAQ**

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PROJECT IDENTIFICATION FORM

| | | | |
|---|---|--|---|
| MINISTRY MINISTRY OF TRANSPORTATION & COMMUNICATION | | PROJECT TITLE AIR NAVIGATION SERVICES (ANS) | |
| LOCATION (GOVERNATE) BAGHDAD, BASRAH, DHIKAR | | LOCATION (MUNICIPALITY) BAGHDAD, BASRAH, MOSUL | |
| SECTOR / SUBSECTOR TRANSPORTATION AIRPORTS | CONTACT PERSON & TITLE [REDACTED] | CONTACT TELEPHONE | CONTACT E-MAIL |
| GPS START (FORMAT DDD.DDDDD) N E | GPS END (FORMAT DDD.DDDDD) N E | CMA PRIORITY | PROJECT COST IN US DOLLARS \$ 17,140,000 |
| IRAQI CONTACT | PROJECT IDENTIFICATION N° T-A-TC-007 | OTHER FUNDING REQUESTED? NO | FROM WHOM? |

PROJECT OBJECTIVE AND JUSTIFICATION (Note: Address coordination with other projects, if known.)

All international airports, and domestic airports with links to international airports, must meet the International Civil Aviation Organization's (ICAO's) standards. By not meeting those standards, foreign airlines will either be reluctant or unable to call on those airports. Many of the present systems at the airport have suffered from neglect in maintenance, many years of wars, and sanctions. This project is to upgrade, repair or replace the navigational infrastructure.

Once the system is in place and functioning, it will greatly improve the safety, security of Iraq's navigational aerospace system and improve international traffic.

It is detrimental to Iraq's economy that a well-functioning Air Navigation Service exists.

SCOPE OF PROJECT

Repair, replace, renew, and / or upgrade the navigational infrastructure, air traffic control towers, approach control systems, and the area control center as detailed in the table below.

| # | Description | Unit | Quantity | Unit Cost | Cost |
|---|--|----------|----------|--------------|--------------|
| INTERNATIONAL AIR TRAFFIC SERVICES | | | | | |
| 1 | 2003 Air Traffic Control Bridge Contract controllers/technicians (BIAP, BASRAH, Enroute) | Lump Sum | 1 | \$ 8,000,000 | \$ 8,000,000 |
| 2 | BIAP DVOR - Very High Frequency Omni-directional Range (VOR) Replacement | LS | 1 | \$ 600,000 | \$ 600,000 |
| 3 | BASRAH DVOR - Very High Frequency Omni-directional Range (VOR) Replacement | LS | 1 | \$ 600,000 | \$ 600,000 |

COALITION PROVISIONAL AUTHORITY
IRAQ INFRASTRUCTURE RECONSTRUCTION PROGRAM
IRAQ INFRASTRUCTURE RECONSTRUCTION PROGRAM - BAGHDAD, IRAQ
PROJECT IDENTIFICATION FORM - CONTINUATION

| | | | | | |
|--------------|--|----|---|--------------|--------------|
| 4 | Baghdad Air Control Center (ACC) Repair | LS | 1 | \$ 500,000 | \$ 500,000 |
| 5 | Controller Refresher Training | LS | 1 | \$ 100,000 | \$ 100,000 |
| 6 | Technician Refresher Training | LS | 1 | \$ 100,000 | \$ 100,000 |
| 7 | Management Training | LS | 1 | \$ 40,000 | \$ 40,000 |
| 8 | Aviation training development | LS | 1 | \$ 2,000,000 | \$ 2,000,000 |
| 9 | National VSAT System | LS | 1 | \$ 5,000,000 | \$ 5,000,000 |
| 10 | Terminal procedures development | LS | 1 | \$ 200,000 | \$ 200,000 |
| TOTAL | | | | | \$ 8,140,000 |



**COALITION PROVISIONAL AUTHORITY
IRAQ INFRASTRUCTURE RECONSTRUCTION PROGRAM
IRAQ INFRASTRUCTURE RECONSTRUCTION OFFICE - BAGHDAD, IRAQ**

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PROJECT IDENTIFICATION FORM

| | | | |
|--|--|--|---|
| MINISTRY MINISTRY OF TRANSPORTATION & COMMUNICATION | | PROJECT TITLE AIR NAVIGATION SERVICES (NAS); OTHER LOCATIONS | |
| LOCATION (GOVERNATE) VARIOUS | | LOCATION (MUNICIPALITY) VARIOUS | |
| SECTOR / SUBSECTOR TRANSPORTATION AIRPORTS GPS START (FORMAT DDD.DDDDD) N E | CONTACT PERSON & TITLE [REDACTED] GPS END (FORMAT DDD.DDDDD) N E | CONTACT TELEPHONE CPA PRIORITY = | CONTACT E-MAIL PROJECT COST IN US DOLLARS \$ 18,410,000 |
| IRAQI CONTACT | PROJECT IDENTIFICATION N° T-A-TC-008 | OTHER FUNDING REQUESTED? NO | FROM WHOM? |

PROJECT OBJECTIVE AND JUSTIFICATION (Note: Address coordination with other projects, if known.)

All international airports, and domestic airports with links to international airports, must meet the International Civil Aviation Organization's (ICAO's) standards. By not meeting those standards, foreign airlines will either be reluctant or unable to call on those airports. Many of the present systems at the airport have suffered from neglect in maintenance, many years of wars, and sanctions. This project is to upgrade, repair or replace the navigational infrastructure.

Once the system is in place and functioning, it will greatly improve the safety, security of Iraq's navigational aerospace system and improve international traffic.

It is detrimental to Iraq's economy that a well-functioning Air Navigation Service exists.

SCOPE OF PROJECT

Repair, replace, renew, and / or upgrade the navigational infrastructure, air traffic control towers, approach control systems, and the area control center as detailed in the table below.

| # | Description | Unit | Quantity | Unit Cost | Cost |
|--|--|----------|----------|--------------|--------------|
| OTHER NATIONAL AIR TRAFFIC SERVICES | | | | | |
| General | General: Satellite link from Basrah to BIAP. For transfer of radar data from Basrah ASR to BIAP Approach Control. 64Kb Full Duplex, KU Band, Includes 10 years O&M. | Lump Sum | 1 | \$ 4,500,000 | \$ 4,500,000 |
| 1 | Satellite link from Mosul to BIAP. Northern Iraq (Kirkuk, Nafaj, Irbil.) | LS | 1 | \$ 4,500,000 | \$ 4,500,000 |