

United Nations Development Programme

Country: Saudi Arabia

Project Document

Project Title: SAU10-89732: Capacity Development for the General Commission for Survey

CCSF Outcomes: Cross-cutting outcomes 1-7 on Training, Transport, Manpower, Internal Trade, and Municipal Services.

Expected CP Outcomes: Priority Objective 7: Economic diversification; and national objective 8: Knowledge-based economy.

Expected Outputs: Policies to enhance the social effectiveness and efficiency of services sectors.

Executing Entity: General Commission for Survey.

Implementing Arrangement: National Implementation (NIM).

Brief Description

This project has been designed to develop the national capacities in conducting geo-spatial surveys, generating multi-purpose knowledge from such surveys to efficiently boost national efforts in achieving the key directions of the Ninth Development Plan (2010-2014) with particular emphasis on balanced regional development, diversification of the economic base and enhancement of the competitive capacities.


The present 3-year project (for 2014-2016) is envisaged to support the GCS in its main mission of efficiently producing and marketing geo-spatial survey information and services. This outcome will be reached through three outputs as follows:

- 1) Institutional and individual capacity development for two departments within the General Commission for Survey (GCS);
- 2) Support to the implementation of the hydrographical survey programme for the Red Sea area, including procurement of survey equipment; and
- 3) Advisory services to the hydrographical surveys (through support of International Maritime Organization (IMO) and the International Hydrographical Organization (IHO), with particular focus on uniformity of nautical charts and documents as well as promotion of oceanographic science in Saudi Arabia.

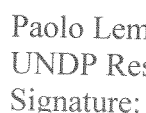
1-Year Project:	2014 - 2015
Current CPD:	2014-2016
Start date:	01 March 2014
End Date:	28 February 2015
PAC Meeting Date:	17 March 2014

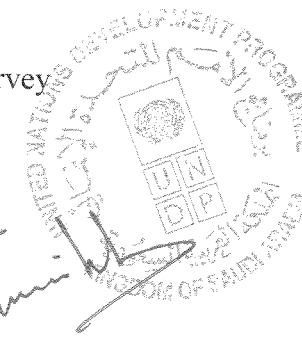
Total resources:	\$2,000,000
Total allocated resources:	\$2,000,000
• Government:	\$2,000,000
Unfunded budget:	Nil
General Management Service (GMS):	5%

Agreed by Government:

H. E. Mr. Moree Bin Hassan Al-Shahrani
President, The General Commission for Survey
Signature: 
Date:

Agreed by UNDP:

Paolo Lembo,
UNDP Resident Representative
Signature: 



Date:

I. SITUATION ANALYSIS

Saudi Arabia has witnessed a massive socio-economic development over the last four decades. The Gross Domestic Product (GDP) has experienced a constant growth rate of around 3.5% since 1970s, to reach a total of SR855 billion by 2012. Parallel to this monumental economic growth, the economy has shifted successfully into a diversified base in the framework of which a number of sectors contributed to the national production. The entire reliance on the oil and natural gas as the key source of the national revenue is no longer the norm in the economy of Saudi Arabia. The last two National Development Plans (2005-2009; and 2010-2014) emphasized diversification as a key competitive edge to be materialized through greater marketability of Saudi Arabia's commodities of comparative advantage, including cost-efficient navigational services.

Recently, Saudi Arabia has embarked on a set of measures, including creation of an overall environment conducive to competitiveness, developing science, technology and informatics system. In this framework, modern infrastructure, particularly infrastructure to facilitate land transport, aviation and marine transport, has been viewed as a key factor in building a vibrant setting for sustainable competitiveness. Immediate achievements in this respect were recorded by the 9th National Development Plan through referring to improvement of the Saudi economy's ranking in the Global Competitiveness Report published by the World Economic Forum and in the Doing Business Report of the International Finance Corporation (IFC) of the World Bank for the years 2004, 2007 and 2009.

This massive growth and diversified economic performance, with a greater role for the service sector, has created urgency for accurate and timely geo-data and hydrographical information across all sectors. As a result, the recently established General Commission for Survey (GCS) has embraced a mandate of conducting geodetic, topographic survey and production of maps as well as production and dissemination of geographic information systems to boost development as envisaged by the consecutive five-year development plans of the Kingdom.

II. STRATEGY

Recently, the Government has decided to fully utilize the hydrographical survey data to benefits all sectors of the economy. This requires immediate expansion of the national capacities to promote quality of data, on the one hand, and to broaden application of such data by all concerned audience in the public and private sectors. As a result, capacity development in terms of its three layers of individual, institutional and societal dimensions has been viewed as the key means to fully enable the General Commission for Survey to discharge its mandate of mainstreaming the application of hydrographical survey data and products at the national and regional levels. In this respect, UNDP is considered the most suitable partner with a worldwide, recognizable reputation for excellence in capacity development as well as the ability to provide a platform for wide-ranging best practices from across the world, with particular focus on the South-South Cooperation.

This project intends to utilize the strong capabilities of UNDP in capacity development as well as to forge partnership between the GCS and UNDP, International Maritime Organization (IMO) and International Hydrographic Organization (IHO) to enhance the national capacities for generation, compilation, processing and efficient usage of the geo-data and geographical information systems in Saudi Arabia. It is envisaged that the project provides the Government, represented by GCS, with the platform to tap international best practices in terms of survey methods and expertise.

The project foresees the following three outputs:

- 1) Institutional and individual capacity development for two departments within the General Commission for Survey (GCS); which are (a) Department for Marine Survey; (b) Information and Communication Technology Department. At the second phase of the project, and building on

success achieved, other department to get benefited is the Production Department for Maps (Geodesy, Topographic, and Geographic maps and charts).

This output will be delivered building on the capacity assessment exercise conducted by GCS.

- 2) Support to the implementation of the hydrographical survey programme for the Red Sea area, including procurement of survey equipment; and
- 3) Advisory services to the hydrographical surveys through support of International Maritime Organization (IMO) and the International Hydrographical Organization (IHO), with particular focus on uniformity of nautical charts and documents as well as promotion of oceanographic science in Saudi Arabia.

UNDP considers this intervention as significant in supplementing other ongoing cooperation with the Government at the macro level by assisting in broadening the scope of evidence-based planning and policy development. Moreover, an efficient functioning of the GCS is also viewed as the most expedient approach to economic diversification as the two-way traffic of trade would increase contribution of non-oil sectors to the GDP in addition to augmenting value-adding in the oil and natural gas sector.

III. RESULTS AND RESOURCES FRAMEWORK

Intended Outcome: Outcome 1: Efficiently producing and marketing geo-spatial survey information and services				
Outcome indicators as stated in the Country Programme Results and Resources Framework, including baseline and targets:				
Applicable Key Result Area (from 2014-17 Strategic Plan): Outcome 3: Countries have strengthened institutions to progressively deliver universal access to basic services				
Partnership Strategy: The General Commission for Survey to arrange partnership with UNDP, IMO and IHO with the objective of meeting the growing demand for geo-data.				
Project title and ID (ATLAS Award ID): SAU10-89732 - Capacity Development for the General Commission for Survey				
INTENDED OUTPUTS	OUTPUT TARGETS FOR (YEARS)	INDICATIVE ACTIVITIES	RESPONSIBLE PARTIES	INPUTS
<u>Outcome 1: Efficiently producing and marketing geo-spatial survey information and services</u>				
<p>Output 1: Institutional and individual capacity development for two departments with GCS: (a) Department for Marine Survey; (b) Information and Communication Technology Department</p> <p>Baseline: Capacity assessment conducted and reported with agreed upon recommendations</p> <p>Indicators:</p> <ol style="list-style-type: none"> 1. Effective discharge of Saudi Arabia's mandate in international relevant platforms 2. Material available on geo-spatial disciplines and sub-disciplines 	<ol style="list-style-type: none"> 1.1 Training programmes formulated on hydrographical survey applications and equipment. 1.2 The training programmes delivered abroad for 24-30 staff members 1.3 On-the-job training for marine survey operations and oceanographic disciplines 1.4 At least 5 training programmes for quality inspection and quality control/certification of hydrographic products 	<ol style="list-style-type: none"> 1.1 Integrated training packages developed and tested for at least 5 survey applications, including geodesy, topographical and geographic, and GIS production methods and marketing strategies 1.2 Bidding documentations prepared for surveillance vessel, posted and purchased for the Red Sea operations 1.3 Partnership agreements concluded with 2 centers of excellence to deliver training for 24-30 staff members 1.4 Capacity development modules formulated for on-the-job training on survey operations covering. 1.5 Two training workshops conducted on quality inspection and quality control 	<p>GCS</p> <p>UNDP</p>	<p><i>National and International Consultants</i></p> <p><i>National Consultants</i></p> <p><i>Travel</i></p> <p><i>International Consultants</i></p>

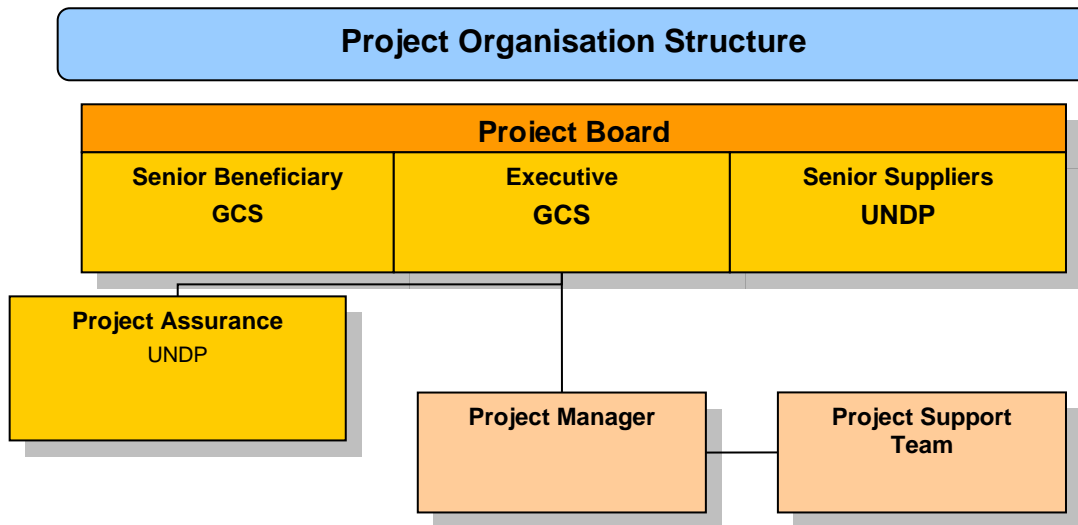
<p>Output 2: Support to the implementation of the hydrographical survey programme for the Red Sea</p> <p>Baseline: Strategic direction issued for conducting a comprehensive survey in the Red Sea coastline and territorial waters</p> <p>Indicators: At least 6 survey products produced with institutional capacity to maintain updating and re-producing products on a regular basis</p>	<p>2.1 Formulation of a strategy for the requirements of the systems and equipment and the improvement of performance indicators for the Red Sea survey operations</p>	<p>2.1 Desk review for data processing of marine surveys and ex poste tabulation and disaggregation</p> <p>2.2 Conducting a comprehensive multi-disciplinary study, involving all hydrographic disciplines and data management dimensions</p>	<p>GCS</p>	<p><i>National and International Consultants</i></p>
<p>Output 3: Advisory services to the hydrographical surveys</p> <p>Baseline: No current partnership agreements signed; however, a report on best practices was commissioned in 2009</p> <p>Indicators: At least two twinning arrangements were concluded with best practices (one at the regional level and the other at the international level)</p>	<p>3.1 Twinning arrangements forged with universities, research institutes and countries of best practices in applied hydrographic science</p> <p>3.2 Research arrangements with national research centers to complete GCS's efforts in research areas</p> <p>3.3 Formulation of national strategies for geo-spatial capacity development</p> <p>3.4 Design of at least five thematic training kits to keep abreast of marine surveys and ICT practices worldwide</p>	<p>3.1 Conduct 5 study tours for selection of at least 2 institutions as best relevant practices</p> <p>3.2 Reporting and forging partnerships for twinning arrangements</p> <p>3.3 Model arrangement (from the legal and applied hydrographical surveys' perspectives) designed, approved and signed with the main national research centers</p> <p>3.4 A national survey strategy designed, tested and work plans formulated</p> <p>3.5 Training kits (manuals and demonstration materials) prepared and tested for measurement of results and to impose improvements</p>	<p>GCS</p>	<p><i>National and International Consultants</i></p>

Annual Work Plan

Year 1: Mar 2014- Feb 2015

EXPECTED OUTPUTS <i>And baseline, indicators including annual targets</i>	PLANNED ACTIVITIES <i>List activity results and associated actions</i>	TIMEFRAME				RESPONSIBLE PARTY	PLANNED BUDGET		
		Q1	Q2	Q3	Q4		Funding Source	Budget Description	Amount (\$)
<u>Outcome 1:</u>									

IV. MANAGEMENT ARRANGEMENTS



Execution Arrangements

This project will be implemented under the National Implementation (NIM) modality with activities implemented through UNDP's NIM modality, whereby GCS assumes implementation responsibility with UNDP Implementation Support Services for recruitment of international and other activities as noted in the Annual Work Plan. UNDP will serve as UN cooperating agency in the project for provision of international advisors and other activities as noted in the Annual Work plan. All activities under the project will be done through standard Project Board mechanism to serve as a steering committee between GCS and UNDP to ensure coherence of all activities under the project. UNDP will provide technical advisory support to all activities through the UNDP Country Office in Riyadh, UNDP Regional Service Centre in Cairo and various units in UNDP Headquarters in New York, as well as support for overall project management activities on request through ISS mechanism on cost-recovery basis.

Project Board

The Project Board is the group responsible for making on a consensus basis management decisions for a project when guidance is required by the National Project Manager, including recommendation for approval of project revisions. Project reviews by this group are made at biannual basis in Riyadh, or as necessary when raised by the National Project Manager. This group is consulted by the National Project Manager for decisions when management tolerances (i.e. constraints normally in terms of time and budget) have been exceeded. This group contains three roles: executive representing the project ownership to chair the group, senior Supplier role to provide guidance regarding the technical feasibility of the project, and senior Beneficiary role to ensure the realization of project benefits from the perspective of project beneficiaries.

The Project Board has the following members: President, The General Commission for Survey (Executive and Senior Beneficiary), Resident Representative, United Nations Development Programme, Saudi Arabia (as Senior Supplier), GCS and UNDP must always be present in the project board which works on a consensus basis and final decision making on project activities and accountability in accordance with its applicable regulations, rules, policies and procedures.

Project Assurance

Project Assurance is the responsibility of each Project Board member, but the role can be delegated to staff within each agency. The Project Assurance role supports the Project Board by carrying out objective and independent project oversight and monitoring functions. This role ensures appropriate project management milestones are managed and completed. The Team Leader for Governance UNDP Saudi Arabia will hold the Project Assurance role for the UNDP, and a similar level government representative would undertake this role for GCS. The National Project Manager and Project Assurance roles will never be held by the same individual in GCS.

National Project Manager

The National Project Manager will be the Director General of the Hydrographic Survey Division at the General Commission for Survey and has the authority to run the project on a day-to-day basis on behalf of the Project Board within the constraints laid down by the Project Board. The National Project Manager is responsible for day-to-day management and decision-making for the project. The National Project Manager's prime responsibility is to ensure that the project produces the results specified in the project document, to the required standard of quality and within the specified constraints of time and cost. The National Project Manager is appointed by the General Commission for Survey through letter to UNDP. GCS will also provide counterpart staff, offices facilities and necessary office equipment (including computers) for project staff, other project support facilities as required including for project related seminars, workshops and training facilities; other support in kind.

Terms of Reference/job descriptions for the respective long term advisers and short term experts/consultants are set out in the **Annex**. The core team consists of 17 experts as follows:

Three (3) Hydrographical Survey Experts;

Two (2) Marine Survey Experts

Two (2) Aerial Survey experts;

Two (2) GIS Scientists;

Three (3) GIS Technicians;

Two (2) Marine Data Buoys Technicians;

Three (3) Tide Gauge Experts

Prior Obligations and Requisites

There are no prior obligations and requisites attached to this document.

The schedule of payments and UNDP bank account details:

Payments	Amount in US\$	Contributor
Payment Due on 1 March 2014	1,000,000	Government of Saudi Arabia
Payment Due in July 2014	1,000,000	
Total	2,000,000	

The value of the payment, in Saudi Riyal shall be determined by applying the United Nations operational rate of exchange in effect on the date of payment. Should there be a change in the United Nations operational rate of exchange prior to the full utilization by the UNDP of the payment, the value of the balance of funds still held at that time will be adjusted accordingly. If, in

such a case, a loss in the value of the balance of funds is recorded, UNDP shall inform the Government with a view to determining whether any further financing could be provided by the Government. Should such further financing not be available, the assistance to be provided to the project may be reduced, suspended or terminated by UNDP.

The above schedule of payments takes into account the requirement that the payments shall be made in advance of the implementation of planned activities. It may be amended to be consistent with the progress of project delivery. UNDP shall receive and administer the payment in accordance with the regulations, rules and directives of UNDP. All financial accounts and statements shall be expressed in United States dollars. If unforeseen increases in expenditures or commitments are expected or realized (whether owing to inflationary factors, fluctuation in exchange rates or unforeseen contingencies), UNDP shall submit to the government on a timely basis a supplementary estimate showing the further financing that will be necessary. The Government shall use its best endeavours to obtain the additional funds required.

If the payments referred above are not received in accordance with the payment schedule, or if the additional financing required in accordance with paragraph above is not forthcoming from the Government or other sources, the assistance to be provided to the project under this Agreement may be reduced, suspended or terminated by UNDP. Any interest income attributable to the contribution shall be credited to UNDP Account and shall be utilized in accordance with established UNDP procedures. Ownership of equipment, supplies and other properties financed from the contribution shall vest in UNDP. Matters relating to the transfer of ownership by UNDP shall be determined in accordance with the relevant policies and procedures of UNDP. The contribution shall be subject exclusively to the internal and external auditing procedures provided for in the financial regulations, rules and directives of UNDP.” In accordance with the decisions and directives of UNDP's Executive Board, the contribution shall be charged: **5% cost recovery for general management support (GMS) by UNDP headquarters and country office**, and Direct cost for implementation support services (ISS) provided by UNDP and/or IMO at agency fee rates.

V. MONITORING FRAMEWORK AND EVALUATION

In accordance with UNDP Programme and Operations Policies and Procedures (POPP) outlined in the UNDP User Guide, the project will be monitored through the following:

Within the annual cycle

- On a quarterly basis, a quality assessment shall record progress towards the completion of key results, based on quality criteria and methods captured in Quality Management table below.
- An Issue Log shall be activated in Atlas and updated by the Project Manager to facilitate tracking and resolution of potential problems or requests for change.
- Based on the initial risk analysis submitted (see annex 1), a risk log shall be activated in Atlas and regularly updated by reviewing the external environment that may affect the project implementation.

Based on the above information recorded in Atlas, a Project Progress Reports (PPR) shall be submitted by the Project Manager to the Project Board through Project Assurance, using the standard report format available in the Executive Snapshot. Project Lesson-learned log shall be activated and regularly updated to ensure on-going learning and adaptation within the organization, and to facilitate the preparation of the Lessons-learned Report at the end of the project.

- Monitoring Schedule Plan shall be activated in Atlas and updated to track key management actions/events

Annually

- **Annual Review Report.** An Annual Review Report shall be prepared by the Project Manager and shared with the Project Board and the Outcome Board. As minimum requirement, the Annual Review Report shall consist of the Atlas standard format for the QPR covering the whole year with updated information for each above element of the QPR as well as a summary of results achieved against pre-defined annual targets at the output level.
- **Annual Project Review.** Based on the above report, an annual project review shall be conducted during the fourth quarter of the year or soon after, to assess the performance of the project and appraise the Annual Work Plan (AWP) for the following year. In the last year, this review will be a final assessment. This review is driven by the Project Board and may involve other stakeholders as required. It shall focus on the extent to which progress is being made towards outputs, and that these remain aligned to appropriate outcomes.

Quality Management for Project Activity Results

Replicate the table for each activity result of the AWP to provide information on monitoring actions based on quality criteria.

OUTPUT 1: Institutional and individual capacity development for two departments with GCS: (a) Department for Marine Survey; (b) Information and		
Activity Result 1 (Atlas Activity ID)	<i>Capacity development at institutional and individual levels</i>	Start Date: 1 March 2014 End Date: 28 Feb 2015
Purpose	<i>Design and conduct training workshops; organize study tours; and recruit core team members for GCS</i>	
Description	<i>Planned actions to produce the activity result.</i>	
Quality Criteria <i>how/with what indicators the quality of the activity result will be measured?</i>	Quality Method <i>Means of verification. what method will be used to determine if quality criteria has been met?</i>	Date of Assessment <i>When will the assessment of quality be performed?</i>
Demonstrated participation of Saudi Arabia in international forums (with reports reflecting substantive contribution to worldwide efforts in this area)	Desk review of reports produced by international forums	September 2014
OUTPUT 2: Support to the implementation of the hydrographical survey programme for the Red Sea		
Activity Result 2 (Atlas Activity ID)	Technical assistance to the hydrographical survey programme	Start Date: 1 March 2014 End Date: 28 Feb 2015
Purpose	<i>Providing technical assistance to hydrographical survey programme at the Red Sea</i>	
Description	<i>Technical assistance through recruitment of team of experts in hydrographical survey</i>	
Quality Criteria <i>how/with what indicators the quality of the activity result will be measured?</i>	Quality Method <i>Means of verification. What method will be used to determine if quality criteria has been met?</i>	Date of Assessment <i>When will the assessment of quality be performed?</i>
Products of three surveys verified by recognizable international agencies	Desk review	December 2014
OUTPUT 3: Advisory services to the hydrographical surveys		
Activity Result 3	<i>Advisory services (long and short terms)</i>	Start Date: 1 March 2014 End Date: 28 Feb 2015

(Atlas Activity ID)		
Purpose	<i>Advisory services to the hydrographical surveys</i>	
Description	<i>Advisory services</i>	
Quality Criteria <i>how/with what indicators the quality of the activity result will be measured?</i>	Quality Method <i>Means of verification. what method will be used to determine if quality criteria has been met?</i>	Date of Assessment <i>When will the assessment of quality be performed?</i>
Monitoring of 10 short-term missions to ensure products are aligned with GCS requirements	Monitoring of mission implementation and delivery of results	January 2015

VI. LEGAL CONTEXT

If the country has signed the Standard Basic Assistance Agreement (SBAA), the following standard text must be quoted:

This project document shall be the instrument referred to as such in Article 1 of the SBAA between the Government of (country) and UNDP, signed on (date). Consistent with the Article III of the Standard Basic Assistance Agreement, the responsibility for the safety and security of the executing agency and its personnel and property, and of UNDP's property in the executing agency's custody, rests with the executing agency. The executing agency shall put in place an appropriate security plan and maintain the security plan, taking into account the security situation in the country where the project is being carried; and assume all risks and liabilities related to the executing agency's security, and the full implementation of the security plan.

UNDP reserves the right to verify whether such a plan is in place, and to suggest modifications to the plan when necessary. Failure to maintain and implement an appropriate security plan as required hereunder shall be deemed a breach of this agreement. The executing agency agrees to undertake all reasonable efforts to ensure that none of the UNDP funds received pursuant to the Project Document are used to provide support to individuals or entities associated with terrorism and that the recipients of any amounts provided by UNDP hereunder do not appear on the list maintained by the Security Council Committee established pursuant to resolution 1267 (1999). The list can be accessed via <http://www.un.org/Docs/sc/committees/1267/1267ListEng.htm>. This provision must be included in all sub-contracts or sub-agreements entered into under this Project Document.

VII. ANNEXES

- 1. Risk Analysis/Risk Log**
- 2. Terms of Reference: for key project personnel**

1) Risk Analysis/Risk Log

Project Title: SAU10-89732					Award ID:		Date: 17 March 2014		
#	Description	Date Identified	Type	Impact & Probability	Countermeasures / Mngt response	Owner	Submitted, updated by	Last Update	Status
1	Timely recruitment of consultants as disciplines are extremely rare <i>(In Atlas, use the Description field. Note: This field cannot be modified after first data entry)</i>	When was the risk first identified Upon formulation of PD	Organizational <i>Subcategories for each risk type should be consulted to understand each risk type (see Deliverable Description for more information)</i>	Describe the potential effect on the project if this risk were to occur Enter probability on a scale from 1 (low) to 5 (high) P = 2 Enter impact on a scale from 1 (low) to 5 (high): 1	What actions have been taken/will be taken to counter this risk	Who has been appointed to keep an eye on this risk <i>(in Atlas, use the Management Response box)</i>	Who submitted the risk <i>(In Atlas, automatically recorded)</i>	When was the status of the risk last checked <i>(In Atlas, automatically recorded)</i>	e.g. dead, reducing, increasing, no change <i>(in Atlas, use the Management Response box)</i>
2	Difficulty, and probably time delay, in forging future partnership with IMO/IHO to contribute to implementation of next phase of project	When was the risk first identified: Upon formulation of PD	Operational and Organizational	Describe the potential effect on the project if this risk were to occur Enter probability on a scale from 1 (low) to 5 (high) P = 3 Enter impact on a scale from 1 (low) to 5 (high): 1					
3	Organizational adaptation to marketing geo-spatial products after a history of free and targeted distribution of such products	When was the risk first identified Upon formulation of PD	Organizational	Describe the potential effect on the project if this risk were to occur Enter probability on a scale from 1 (low) to 5 (high) P = 1 Enter impact on a scale from 1 (low) to 5 (high): 2					

2) Terms of Reference: for key project personnel

PROJECT: SAU10-89732: Capacity Development for the General Commission for Survey

POST TITLE: **HYDROGRAPHIC SURVEY EXPERT**

DURATION : 12 Months

DATE REQUIRED: March 2014 - Feb 2015

DUTY STATION: General Commission for Survey, Kingdom of Saudi Arabia

DUTIES: The specific responsibilities of the Hydrographic Survey Expert will be as follows:

- Undertake all the functions of hydrographic office and execution of hydrographic projects utilizing state of the art Hydrographic surveying technologies compliance with IHO standards to ensure adequate maritime information for navigation safety .
- Dealing with International Maritime Organization (IMO) and International Hydrographic Organization (IHO) resolutions and publications, regional hydrographic commissions matters and government authorities reporting to Hydrographer and being updated in new developments in the field of Hydrography and related disciplines .
- Supervision of nautical publication production and publications and overall QA/QC aspects.
- Formulate technical specifications for projects and instrumentation and tender bit evaluation for procurement.
- work with other stakeholders for utilization of hydrographic data/information, value addition ,develop new product and incorporate to MSDI for various aspects of maritime, marine sciences, environmental and economic activities.
- Instructional abilities for training.
- Operation and exploitation of various modern hydrographic equipment/systems.

REPORTING: The Hydrographic Survey Expert reports to Manager (TRG)at Jeddah
OR DG(H) at Riyadh.

QUALIFICATIONS: Graduate Degree with Geomatics or Hydrography or BSc with Physics /Mathematics and Hydrography FIG/IHO/ICA Category “ A “ Training under the International Board on Standards of Competence for Hydrographic Surveyors (IBSC) recognized courses .

LANGUAGES: English. Arabic speaking and writing an advantage.

PROJECT: SAU10-89732: Capacity Development for the General Commission for Survey

POST TITLE: **MARINE SURVEY EXPERT**

DURATION : 12 Months

DATE REQUIRED: March 2014 - Feb 2015

DUTY STATION: General Commission for Survey, Kingdom of Saudi Arabia

DUTIES: The specific responsibilities of the Marine Survey Experts will be as follows:

- To set up, test, calibrate and operate a variety of survey and positioning systems. To collect, arrange and present survey data and results.
- To ensure that all work is undertaken to the highest quality and professionalism, in accordance with project specific documentation.
- To identify personal training needs, bring them to the attention of Operations and to take full advantage of the training opportunities provided.
- To setup, interface, test, calibrate and operate survey sensors.
- Operate online survey software and monitor the data quality to ensure the survey specification is achieved, bringing non conformances to the attention of the Survey operation.
- To collect, collate and present results from various survey sensors.
- The preparation of various reports including mobilization and calibration reports.
- During the conduct of any watch period maintain comprehensive surveying logs.
- To maintain and develop experience with processing software and techniques.
- Instructional abilities for training.

REPORTING: The Hydrographic Survey Expert reports to Manager (TRG) at Jeddah
OR DG(H) at Riyadh.

QUALIFICATIONS: Graduate Degree in BSc with Physics/ mathematics or Geomatics with Hydrography specialization or Hydrography FIG/IHO/ICA Category “ A “ Training under the International Board on Standards of Competence for Hydrographic Surveyors (IBSC) recognized courses .

LANGUAGES: English. Arabic speaking and writing an advantage

PROJECT: SAU10-89732: Capacity Development for the General Commission for Survey

POST TITLE: **AERIAL SURVEY EXPERTS**

DURATION : 12 Months

DATE REQUIRED: March 2014 - Feb 2015

DUTY STATION: General Commission for Survey, Kingdom of Saudi Arabia

DUTIES: The specific responsibilities of the Aerial Survey Experts will be as follows:

- Execute airborne hyperspectral surveys, digital aerial photography, Bathymetric and Topographic Lidar , thermal surveys and remote sensing techniques for mapping, environmental impact assessment,
- Mapping coastal areas, coral structures etc and processing..
- Identifying marine vegetation in near-shore and coastal features.
- Analyzing data from these sensors as well as from other remote sensing sensors and GIS mapping
- Instructional abilities for training.

REPORTING: The Aerial survey Experts reports to Manager DG(H) at Riyadh.

QUALIFICATIONS: Graduate Degree with Remote Sensing or Geomatics or Aerial Photogrammetry.

LANGUAGES: English. Arabic speaking and writing an advantage

PROJECT: SAU10-89732: Capacity Development for the General Commission for Survey

POST TITLE: **OCEANOGRAPHER**

DURATION : 12 Months

DATE REQUIRED: March 2014 - Feb 2015

DUTY STATION: General Commission for Survey, Kingdom of Saudi Arabia

DUTIES: The specific responsibilities of the Oceanographer will be as follows:

- To play an active role in work program related to the project & participation in scientific cruises;
- Maintenance and operation of oceanographic instruments, deployments at sea, calibration of instruments, data acquisition;
- Processing and interpretation and preparing detailed reports
- Excellent inter personal skills and demonstrated ability to work in teams in a multicultural, international environments
- Processing and management of GIS data.
- Instructional abilities for training.

REPORTING: The Oceanographer reports to DG(H) /Manager Jeddah Branch.

QUALIFICATIONS: M.Sc. Physical Oceanography/Marine Physics and 2 years' experience in the relevant field.

LANGUAGES: English. Arabic speaking and writing an advantage

PROJECT: SAU10-89732: Capacity Development for the General Commission for Survey

POST TITLE: **HYDROGRAPHIC QC/QA EXPERT**

DURATION : 12 Months

DATE REQUIRED: March 2014 - Feb 2015

DUTY STATION: General Commission for Survey, Kingdom of Saudi Arabia

DUTIES: The specific responsibilities of the Hydrographic QC/QA Expert will be as follows:

- Primary evaluation of the Order of survey for survey instruction interpreting guidelines provided in IHO S44, be vigilant of interim survey result and review for necessary change
- Ensure QA/QC procedures are incorporated in to survey instructions and appropriate for the survey method and instrument.
- Assist hydrographers to execute QA/QC procedures during data acquisition and processing (MBES, LIDER etc).
- Adopt QC/QA aspect for nautical publication in its production and maintain products are updated timely in particular navigational safety.
- Ensure QA/QC procedures are met explicitly in to survey project deliverables compliance with IHO standards and specifications and prepare final QC/QA reports for each survey projects.
- Training of Saudis.

REPORTING: The Hydrographic QC/QA Expert reports to Manager DG(H) at Riyadh.

QUALIFICATIONS: Degree in BSc with Physics /Mathematics or Geomatics or Hydrography and Hydrography FIG/IHO/ICA Category “ A “ Training under the International Board on Standards of Competence for Hydrographic Surveyors (IBSC) recognized courses .

LANGUAGES: English. Arabic speaking and writing an advantage

PROJECT: SAU10-89732: Capacity Development for the General Commission for Survey

POST TITLE: **GIS SCIENTIST**

DURATION : 12 Months

DATE REQUIRED: March 2014 - Feb 2015

DUTY STATION: General Commission for Survey, Kingdom of Saudi Arabia

DUTIES: The specific responsibilities of the GIS Scientist will be as follows:

- Create, analyze, report, convert, or transfer data, using specialized applications program software.
- Design, program, or model Geographic Information Systems (GIS) applications or procedures.
- Develop specialized computer software routines, internet-based Geographic Information Systems databases, or business applications to customize geographic information.
- Lead, train, or supervise technicians or related staff in the conduct of GIS analytical procedures.
- Meet with clients to discuss topics such as technical specifications, customized solutions, or operational problems.
- Produce data layers, maps, tables, or reports, using spatial analysis procedures or Geographic Information Systems technology, equipment, or systems.
- Conduct or coordinate research, data analysis, systems design, or support for software such as Geographic Information Systems or Global Positioning Systems (GPS) mapping software.
- Coordinate the development or administration of Geographic Information Systems projects, including the development of technical priorities, client reporting and interface, or coordination and review of schedules and budgets.
- Coordinate or direct research or publication activities of technicians or related staff.
- Instructional abilities for training.

REPORTING: The GIS Scientist reports to Manager DG(H) at Riyadh.

QUALIFICATIONS: A Bachelor's degree from an accredited four-year college or university in Civil Engineering, Geology, or equivalent or MSc in GIS.

LANGUAGES: English. Arabic speaking and writing an advantage

PROJECT: SAU10-89732: Capacity Development for the General Commission for Survey

POST TITLE: **GIS TECHNICIAN**

DURATION : 12 Months

DATE REQUIRED: March 2014 - Feb 2015

DUTY STATION: General Commission for Survey, Kingdom of Saudi Arabia

DUTIES: The specific responsibilities of the GIS technician will be as follows:

- Create, edit, and manipulate GIS databases using ESRI's ArcGIS/Caris GIS software.
- Generate maps, plots, and cross sections.
- Read and/or create VBA/Python or other ESRI ArcGIS compatible scripting language and make modifications as necessary.
- Assist hydrographers with survey instruction and report preparation.
- Performs field exploration work and may make technical recommendations while assigned to project teams.
- Instructional abilities for training.
- Performs other related duties as assigned.

REPORTING: The GIS technician reports to Manager DG(H) at Riyadh.

QUALIFICATIONS: A Bachelor's degree from an accredited four-year college or university in Civil Engineering, Geology, or equivalent. A Master's degree is preferred.

LANGUAGES: English. Arabic speaking and writing an advantage

PROJECT: SAU10-89732: Capacity Development for the General Commission for Survey

POST TITLE: **MARINE CARTOGRAPHER**

DURATION : 12 Months

DATE REQUIRED: March 2014 - Feb 2015

DUTY STATION: General Commission for Survey, Kingdom of Saudi Arabia

DUTIES: The specific responsibilities of the Marine Cartographer will be as follows:

- Check survey data received for completeness and quality.
- Carry out data processing as per requirement.
- Carry out check computations using raw and processed data.
- Check and approve final map products compliance with IHO S4.
- Ensure that technical data submitted in reports are correct.
- Check format and content of reports and charts.
- Responsible for correct processing of survey data for Electronic Nautical chart(ENC) and Paper Nautical chart(PNC) production.
- Instructional abilities for training.

REPORTING: The Marine Cartographer reports to Manager (MC).

QUALIFICATIONS: Cartographer FIG/IHO/ICA International Board on Standards of Competence for Nautical Cartographers recognized Category “B” certification.

LANGUAGES: English. Arabic speaking and writing an advantage

PROJECT: SAU10-89732: Capacity Development for the General Commission for Survey

POST TITLE: **MARINE DATA BUOYS TECHNICIAN**

DURATION : 12 Months

DATE REQUIRED: March 2014 - Feb 2015

DUTY STATION: General Commission for Survey, Kingdom of Saudi Arabia

DUTIES: The specific responsibilities of the Marine Data Buoys Technician will be as follows:

- Implement and execution of deployment of mooring buoys, installation of sensors, operation, calibration, data retrieval etc.
- Routing maintenance work to ensure continues data flow to the GCS main office.
- Data processing , analyses interpretation for maritime, marine scientific and environmental applications.
- Cooperate with nautical publications to ensure updated information are provided to the production team.
- Excellent inter personal skills and demonstrated ability to work in teams in a multicultural, international environments
- First line maintenance of Marine Science Data Buoys(MSDB).

REPORTING: The Marine Data Buoys Technician reports to Manager (MS).

QUALIFICATIONS: BE/B.tech/M.Sc. Physical Oceanography/Physics/Maths/Electronics with data buoys knowledge, optional 2 years' experience in the relevant field.

LANGUAGES: English. Arabic speaking and writing an advantage

PROJECT: SAU10-89732: Capacity Development for the General Commission for Survey

POST TITLE: **TIDE GAUGE EXPERT**

DURATION : 12 Months

DATE REQUIRED: March 2014 - Feb 2015

DUTY STATION: General Commission for Survey, Kingdom of Saudi Arabia

DUTIES: The specific responsibilities of the Tide Gauge Expert will be as follows:

- Undertake in setting up tide gauges stations, installation of sensors, operation, calibration, data retrieval etc.
- Routing maintenance work to ensure continues data flow to the GCS main office.
- Handling survey leveling technics with surveyors for integrity verifications of data.
- Excellent inter personal skills and demonstrated ability to work in teams in a multicultural, international environments
- Instructional ability for training.

REPORTING: The Tide Gauge Expert reports to Manager (MS).

QUALIFICATIONS: BE/B.tech/M.Sc. Physical Oceanography/Physics/Maths/Electronics 2 years' experience in the relevant field is preferred.

LANGUAGES: English. Arabic speaking and writing an advantage

PROJECT: SAU10-89732: Capacity Development for the General Commission for Survey

POST TITLE: **SURVEY EQUIPMENT ENGINEER OR TECHNICIAN**

DURATION : 12 Months

DATE REQUIRED: March 2014 - Feb 2015

DUTY STATION: General Commission for Survey, Kingdom of Saudi Arabia

DUTIES: The specific responsibilities of the Survey Equipment Engineer or Technician will be as follows:

- Undertake repairs and maintenance of equipment when required on survey vessels/units .
- Prepare and update equipment maintenance reports using Microsoft Office.
- Build, maintain and repair survey based acquisition computers. Maintain Workshop Facilities
- Update equipment and spares tags to reflect database status.
- Maintain spares inventory to support hydrographic survey mobilizations and operations (e.g. cables, components, repair kits and consumables).
- Maintain offshore tool kits, Maintain base tool kits.
- Keep stores and repair areas tidy and well presented.
- Support Mobilizations and Transport of survey Equipment
- Prepare and test equipment, spares, tools and consumables for survey projects.
- Package equipment for mobilization and transportation.
- Prepare shipping inventories using Microsoft Office for equipment when shipped, including internal shipping.
- Instructional abilities on survey equipment.

REPORTING: The Survey Equipment Engineer or Technician reports to Manager Jeddah branch OR DG(H) at Riyadh.

QUALIFICATIONS: Be educated to NDT level, or equivalent, in engineering or electronics or similar.

LANGUAGES: English. Arabic speaking and writing an advantage

PROJECT: SAU10-89732: Capacity Development for the General Commission for Survey

POST TITLE: **MARINE SCIENTIST**

DURATION : 12 Months

DATE REQUIRED: March 2014 - Feb 2015

DUTY STATION: General Commission for Survey, Kingdom of Saudi Arabia

DUTIES: The specific responsibilities of the Marine Scientist will be as follows:

- To play an active role in work program marine science related to the project & participation in scientific cruises; research activities, marine data acquisition.
- processing and interpretation and preparing detailed reports on marine science data.
- Instructional abilities on marine science
- Excellent inter personal skills and demonstrated ability to work in teams in a multicultural, international environments

REPORTING: The Marine Scientist reports to Manager (MS).

QUALIFICATIONS: Ph.D. Marine Sciences/Oceanography/Environmental Sciences . 2 years' experience in the relevant field preferred.

A strong publication record, mainly ISI peer-reviewed journals with high impact factor journals in Marine Sciences/Oceanography

LANGUAGES: English. Arabic speaking and writing an advantage

PROJECT: SAU10-89732: Capacity Development for the General Commission for Survey

POST TITLE: **ENC ENGINEER OR TECHNICIAN**

DURATION : 12 Months

DATE REQUIRED: March 2014 - Feb 2015

DUTY STATION: General Commission for Survey, Kingdom of Saudi Arabia

DUTIES: The specific responsibilities of the ENC Engineer or Technician will be as follows:

- Check survey data received for completeness and quality.
- Carry out data processing as per requirement.
- Carry out check computations using raw and processed data.
- Check and approve final map products compliance with International Hydrographic Organization (IHO) S4, S57, S100, S101 standards.
- Ensure that technical data submitted in reports are correct.
- Check format and content of reports and charts.
- Responsible for correct processing of survey data for ENC production.
- QC/QA of survey data.
- Ability to train.

REPORTING: The ENC Engineer or Technician reports to Manager (MC).

QUALIFICATIONS: Cartographer FIG/IHO/ICA International Board on Standards of Competence for Nautical Cartographers recognized Category “B” certification.

LANGUAGES: English. Arabic speaking and writing an advantage

PROJECT: SAU10-89732: Capacity Development for the General Commission for Survey

POST TITLE: **MARINE DATA BASE EXPERT**

DURATION : 12 Months

DATE REQUIRED: March 2014 - Feb 2015

DUTY STATION: General Commission for Survey, Kingdom of Saudi Arabia

DUTIES: The specific responsibilities of the Marine Data Base Expert will be as follows:

- Work effectively in a highly-collaborative and agile team to develop MSDI and Integrated to Geospatial Information Center(GIC) .
- Discover and analyze requirements coming from internal users, Stakeholders, marketing, and the industry; have an ability to understand how the software should evolve without needing everything spelled out in lengthy documents.
- Implement new features professionally, writing high-quality code, in an environment that emphasizes building loosely-coupled systems that can be reused and grown to meet any challenge
- Maintain and enhance existing software, including fixing reported bugs
- Use benchmarking tools to evaluate and optimize code, refactor existing code
- Identify and communicate solutions to technical problems
- Assist in the development of specifications based on problem statements
- Stay up-to-date on current software development trends and practices; enjoy spending time on research and learning.
- Training in Data Base.

REPORTING: The Marine Data Base Expert reports to Manager (MC).

QUALIFICATIONS: Masters or Bachelor's Degree in Computer Science, Computer/Software Engineering, or similar qualifications. 2 years experience preferred.

LANGUAGES: English. Arabic speaking and writing an advantage

PROJECT: SAU10-89732: Capacity Development for the General Commission for Survey

POST TITLE: **MARINE ARCHITECT OR SURVEYOR**

DURATION : 12 Months

DATE REQUIRED: March 2014 - Feb 2015

DUTY STATION: General Commission for Survey, Kingdom of Saudi Arabia

DUTIES: The specific responsibilities of the Marine Architect or Surveyor will be as follows:

- Conduct surveys throughout the ship's life (building new ship, annual survey, interim survey, special survey) to ensure standards are maintained;
- Perform inspections required by domestic statutes and international conventions by (IMO) and GCS.
- Witness tests and operation of emergency and safety machinery and equipment;
- Measure ships for tonnage and survey them for load line assignment;
- Advice GCS on Survey Ships/Survey Launches issues.
- Develop HRD in GCS.
- Investigate marine accidents.

REPORTING: The Marine Architect or Surveyor reports to Manager DG(H) at Riyadh.

QUALIFICATIONS: 4 year degree in naval architecture .
3 years experience in designing vessels preferred.

LANGUAGES: English. Arabic speaking and writing an advantage

PROJECT: SAU10-89732: Capacity Development for the General Commission for Survey

POST TITLE: **VESSELS MANAGEMENT EXPERT**

DURATION : 12 Months

DATE REQUIRED: March 2014 - Feb 2015

DUTY STATION: General Commission for Survey, Kingdom of Saudi Arabia

DUTIES: The specific responsibilities of the Vessels Management Expert will be as follows:

- To ensure all the vessels are compliant with survey requirements from the beginning of the survey routine operations.
- Attend vessels pre-qualification inspections and any other surveys or inspections and ensure vessel is prepared for compliance.
- Liaise with port to ensure vessels are smoothly operated.
- Liaise with Captains and Crew establishing and maintaining positive communication between vessel and office staff, promoting the safety and wellbeing of seafarers
- The efficiency of this position is critical for ensuring that all vessels are operated in accordance with good marine practice, in compliance with Procedures and Rules, and in accordance with all local and international laws and regulations.
- Conduct project briefing including project needs
- Instruct field staff on accident / incident reporting as well notices to mariners.
- Assist in capacity building at GCS.

REPORTING: The Vessels Management Expert to Manager DG(H) at Riyadh.

QUALIFICATIONS:

- a) Master Mariner Certification
- b) Ship security officer certification
- c) Any other useful ship management courses under STCW conventions , and GMDSS..

LANGUAGES: English. Arabic speaking and writing an advantage

PROJECT: SAU10-89732: Capacity Development for the General Commission for Survey

POST TITLE: **SURVEY PROJECT MANAGEMENT EXPERT**

DURATION : 12 Months

DATE REQUIRED: March 2014 - Feb 2015

DUTY STATION: General Commission for Survey, Kingdom of Saudi Arabia

DUTIES: The specific responsibilities of the Survey Project Management Expert will be as follows:

- Planning of Hydrographic department project for execution.
- Manage overall Field and Office activities within the operations zone of survey for all onshore, near-shore and offshore projects.
- Develop, implement, maintain and apply a quality control system that guarantees the highest achievable standard of products and services
- Develop, implement and apply procedures to maintain vehicles and equipment to a satisfactory standard.
- Identify and suitably deploy personnel and equipment resources to enable work to be performed within the financial, safety and time limits covered by the project.
- Keep track of equipment locations and materials on stock so that use of all available resources is optimized.
- Provide and allocate technical expertise and professional advice to ongoing projects to solve survey related questions or problems within the division.
- Capacity building within GCS.

REPORTING: The Survey Project Management Expert reports to Manager DG(H) at Riyadh.

QUALIFICATIONS: BSc. Or Degree in Geomatics or Engineering Survey.

LANGUAGES: English. Arabic speaking and writing an advantage

PROJECT: SAU10-89732: Capacity Development for the General Commission for Survey

POST TITLE: **GEODESY EXPERT**

DURATION : 12 Months

DATE REQUIRED: March 2014 - Feb 2015

DUTY STATION: General Commission for Survey, Kingdom of Saudi Arabia

DUTIES: The specific responsibilities of the Geodesy Expert will be as follows:

- Assist with the plan examination function including plan audits, field inspections, maintenance of databases, and preparation of reports where appropriate. Facilitate processes and systems, e.g. accreditation, to enhance the integrity of cadastral infrastructure.
- Provide assistance to internal and external clients on interpretation of land and titling legislation and prepare submissions for approval by the delegated senior officer recommending specific actions in respect of land dealings.
- Participate in geodetic surveys including GNSS field observations, collation of data for processing, manipulation of data using adjustment software, and upload of data into the Survey Control Database. Be familiar with practices and procedures including relevant geodetic datums and transformations; assignment of class and order to survey data; and how to deal with geoid-spheroid separations.
- Assist the Senior Surveyor to co-ordinate and supervise the work activities of staff and undertake surveys including cadastral, topographic, engineering, hydrographic and inspection surveys, and provide necessary reports.
- Assist GCS in all geodetic control surveys including cadastral, topographic, engineering, hydrographic and inspection surveys, and provide necessary reports.
- Participate in projects, researching and using modern technology including Global Navigation Satellite Systems, Remote Sensing, Geographic Information Systems and computerized Land Information Systems.
- Develop and maintain a basic level of GIS knowledge and hands on skills to ensure that DERM information system developments are in line with leading edge technological advances.
- Capacity building within GCS.

REPORTING: The Geodesy Expert reports to Manager DG(H) at Riyadh.

QUALIFICATIONS: A Degree qualification in Geodetic Surveying or a related discipline.

LANGUAGES: English. Arabic speaking and writing an advantage

PROJECT: SAU10-89732: Capacity Development for the General Commission for Survey

POST TITLE: **MARINE SURVEYS DATA PROCESSER**

DURATION : 12 Months

DATE REQUIRED: March 2014 - Feb 2015

DUTY STATION: General Commission for Survey, Kingdom of Saudi Arabia

DUTIES: The specific responsibilities of the Marine Surveys Data Processor will be as follows:

- Check survey data received for completeness and quality as per contract.
- Carry out data processing as per requirement.
- Carry out check computations using raw and processed data.
- Check and approve final map products.
- Ensure that technical data submitted in reports are correct.
- Check format and content of reports and charts.
- Provide survey data at project commencement to Survey team.
- Responsible for correct processing of survey data.
- Perform field quality control and ensure compliance with IHO standards
- Train Saudis on Job.

REPORTING: The Marine Surveys Data Processor reports to Manager (MC).

QUALIFICATIONS: Cartographer FIG/IHO/ICA International Board on Standards of Competence for Nautical Cartographers recognized Category “B” certification.

LANGUAGES: English. Arabic speaking and writing an advantage