RMI Middle East
Capability Statement

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INTRODUCTION

RMI Middle East (RMIME) is a leading Risk Consultancy, Engineering and Project Management provider. RMIME specialises in risk evaluation, risk prevention, mitigation planning and management of threats or hazards to client assets, personnel, functions and operations.

The main focus of the services offered is:

- Prevention of Risk Realisation
- Reduction of Likelihood of Risk Realisation
- Response to Incidents arising from Risks
- Recovery from Incidents

RMIME provides a broad range of Specialist Security, Safety, Fire, Contingency Planning and Training Support to a wide variety of industries such as: oil refineries, gas producers, chemical processing, power generation plants, water desalination facilities, commercial companies, hotels, airports, seaports, financial bodies, educational institutions and hospitals as well as government ministries and departments around the world. Services provided enable clients to manage risks in a comprehensive and practical manner. RMIME’s teams consist of specialists in the following key areas:

- Physical and Environmental Security and Safety
- Security and Safety of Personnel
- Fire Protection – Operations, Administration, Prevention and Engineering
- Technological Security and Safety
- Supply Chain Security and Safety
- Incident Response
- Business Continuity, including Disaster Recovery
- Security Management Systems
- Safety Management Systems
- Information Security
- Process Risks
- Training

RMIME is an independent organisation. It is not aligned with any professional services firm, insurance company or product supplier and provides unbiased advice and assistance to a wide international client base.
### MANAGEMENT OF OPERATIONAL RISKS

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<th>FIRE</th>
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### PREVENTION AND REDUCTION OF LIKELIHOOD OF RISK REALISATION

### INCIDENT RESPONSE AND RECOVERY
2 PREVENTION AND REDUCTION OF LIKELIHOOD OF RISK REALISATION

- Risk Reviews
- Design of Solutions
- Implementation of Solutions

2.1 PERFORMANCE OF COMPREHENSIVE RISK SERVICES

In order for clients to be proactive in Risk Management, RMIME develops solutions for prevention and reduction of likelihood of risk realisation. The teams have the capabilities to deliver services for facilities and for projects as listed below:

- Risk Reviews
- Risk Treatment Plans
- Designs of Solutions
- Requests for Tender and Technical Evaluations of Offerings
- Supervision of Implementation of Solutions

2.2 PERFORMANCE OF RISK REVIEWS

Risks reviews are performed by conducting Risk Assessments for assets. These assessments result in reports that:

- Recommend adjustments to the plans, processes and procedures (planned or in place) that provide risk management coverage.

- These adjustments include “designing-out” risks and “designing-in” risk mitigation measures.
- Highlight the specific aspects of facilities and projects that are, or may be, at risk.
- Describe the way forward for implementing a Systematic Risk Management process that allows for continuous improvement in managing risks. This enables future decisions to be made based upon analysed information and to be justified with regard to benefits and costs.
- Provide recommendations on risk mitigation measures. These are supplemented in a Risk Treatment Plan by timescales for completion and estimated order of costs.

RMIME is particularly experienced in the production of Security Vulnerability Assessments (SVA) as per the American Petroleum Institute (API) methodology.
2.2.1 WRITING RISK TREATMENT PLANS

The recommendations from the Risk Review are used as a basis to design processes and procure solutions for managing risk.

The measures arising from the recommendations of the Risk Review are implemented by following a Risk Treatment Plan.

2.2.2 PRODUCE DESIGNS

RMIME can produce:

- Design Basis Documents
- Concept Designs
- Front End Engineering Designs
- Detailed Designs

2.2.3 PRODUCE RFTS

RMIME can manage a bid process through the production of Requests for Tender (RFT), evaluation of bids and technical comments on solutions offered by security systems integrators.
2.2.4 EVALUATE SYSTEM IMPLEMENTATION

RMIME can verify specifications as agreed in contracts with security systems integrators and validate system solutions against requirements.

2.2.5 SYSTEMS CONFIGURATION

Systems that are implemented will require some configuration to be compatible with the client’s current and planned systems and processes. RMIME has capability in this field.

2.2.6 TRAINING

Training can be designed relevant to all levels of operations and encompassing all aspects of Incident Response. Training courses can range from classroom sessions, top-level seminars and workshops, tabletop exercises to complete multi-service live exercises.

- Security
- Safety
- Fire
- Incident/Emergency Response

2.3 CATEGORIES OF RISK

The four main categories of risk addressed are:

- Security
- Safety
- Fire
- Processes

Within these categories of risk are sub-categories.

Examples are below:

- Business Processes
- Technical Processes
- Industrial Processes
- Engineering
- Information Technology
- Property
- Supply Chain for client organisation:
  - Materials
  - Utilities
  - Personnel
  - Physical facilities (buildings etc)
  - Access to and from facilities
  - Access to and from countries – air, sea, land
- Ports, airports, roads etc
- Customs
- Supply chain to suppliers (as per chain for client organisation)
- Environment
- Insurance requirements
- Legal / Regulatory / Compliance
- Reputation
- Human Resource and Industrial Relations
- Support Processes
- Political
- Natural Disasters

2.4 TYPICAL SCOPE OF WORK

The Scope of Work can consist of all or any of the following:

- Performing Risk Assessments. These assessments form a Comprehensive Risk Review
- Identifying Development Lifecycle Phases and Asset relationships (for projects)
- Preparing Risk Analysis
- Presenting recommendations as inputs to the Risk Treatment Plan
- Writing the Risk Treatment Plan
- Producing designs – this can include Concept, Front End Engineering and Detailed Design
- Producing and Managing Requests for Tender
- Supervising Implementation of Solutions

For those aspects of a client’s operation which are still works-in-progress and/or projects, it is necessary to identify risk management requirements and impacts within Lifecycle Phases:
- Master Plan
- Prior to On-site Development
- During On-site Development / Pre-commissioning
- Transition to Operations / Commissioning
- Facility Operational
3 INCIDENT RESPONSE AND RECOVERY

- Planning for Incidents
- Managing Incidents
- Recovering from an Incident

3.1 OBJECTIVES OF THE SERVICE

The objectives are:

- Response to incidents
  - Prevention of escalation
  - Closing down the incident
- Recovery from the consequences of an incident

3.1.1 PLANNING AND MANAGING

To meet the objectives, RMIME’s Scope of Services can include planning not only for major incidents but also for a full range of lesser incidents in order to bring them to a close before they become disasters. Incidents addressed in order of escalation can be:

- Day-to-day Risk-Related Incidents
- Emergencies
- Crises
- Disasters
- Business Continuity Incidents
In order to allow for effective response and recovery to incidents, teams assist clients in developing their capability in:

- Incident Awareness
- Analysis of Risks
- Planning and Preparedness
- Operational Solutions
- Engineering Solutions
- Equipment Solutions
- Command and Control Systems
- Training

These capabilities give:

- Improved Incident Command
- Increased responder safety
- Safe and efficient working practices
- Fast access to data and information to inform decision-making
- Recording of information from an incident for records, audit and review
- Support for improved multi-agency working

### 3.1.2 CONTROL CENTRES

Control centers address risks to operations. Therefore, the approach taken is that the requirement is broader than mere technical design and is based upon the outputs of the Risk Reviews discussed earlier in this document. From those outputs, Operational Requirements are set and, in turn, control centre procedures, processes, systems and designs are produced.

### 3.1.3 RECOVERY

Recovery operations are planned using a fundamental knowledge of the client's business and operations. They are based upon critical assets, processes and services. Continuity strategies are developed against the minimum recovery requirements with options and alternative solutions being produced.
4 TYPICAL DELIVERABLES

4.1 REPORTS

- Information Collation and Surveys.
- Risk Reviews (one-off or periodic):
  - Characterisation of Assets
  - Hazard Analysis
  - Likelihood of Hazard Realisation
  - Consequence Analysis
  - Escalation Assessment
  - Vulnerability to Hazard
  - Risk Rating
  - Mitigating Action Priority
- Security Vulnerability Assessment
- HAZAN and HAZOP Assessments
- Fire and Explosion Scenarios
- Process Design Safety Audits
- Environmental and Safety Evaluations
- Feasibility Studies
- Business Impact Analysis
- Security (Procedural, Physical, Technological)
- Information Security
- Research and Development
- Recommendations

4.2 HAZARD REGISTERS

4.3 PLANS

- Risk Treatment
- Incidents (Emergency, Crisis, Disaster):
  - Response
  - Management
  - Recovery
- Business Continuity
- Security (Procedural, Physical, Technological)
- Information Security

### 4.4 SPECIFICATIONS

- Engineering
- Software
- Hardware and Systems
- Standards and Codes
- Procurement
- Supervisory Control and Data Acquisition (SCADA) and Distributed Control System (DCS)
- Communications

### 4.5 DESIGNS

- Basis of Design
- Concepts
- Front End Engineering Design
- Detailed Design

### 4.6 SYSTEMS

- Security Systems
- Fire Systems
- Management Systems:
  - Emergency
  - Crisis
  - Disaster
  - Business Continuity
  - Safety
  - Security
  - Information Security
  - Risk
- Command and Control Systems
  - Concept of Operations
  - Mapping of Requirements
  - Consequence Definitions and Levels
  - Objectives and Priorities
  - Organisational Structure
  - Defined Assets and Resources
  - Configurations
  - Logs
  - Standard Operating Procedures
- Instrumentation Systems.
4.7 TRAINING

- Awareness
- Planning
- Management Systems
- Seminars

4.8 EXERCISES

- Desktop
- Walkthrough
- Specific Drills
- Simulated Incidents
- Full

4.9 SUPPORTING DELIVERABLES

- Project Management
- Quality Assurance
5 RMIME EXAMPLE PROJECTS

5.1 SECURITY

- Multiple Saudi ARAMCO projects
- Multiple Saudi Basic Industries Corporation (SABIC)
- Jubail Industrial City (1 and 2)
- Multiple Ma’aden (Saudi Arabian Mining Company) projects
- Raz Al Khair Port
- Jubail Energy Services Co
- Marafiq (Power and Water Jubail and Yanbu)
- Salt Water Conversion Company (SWCC)
- Shuaibah Water and Electricity Company (SWEC)
- Shuqaiq Water and Electricity Company (SqWEC)
- Bariq Mining Company
- Saudi Aramco Total Refinery Project (SATORP)
- Jubail Water and Electricity Company
- Khafji Joint Operations
- Arcelor Mittal
- Petro-Rabigh II
- Red Sea Refining
- Saudi Electricity Company
- Ministry of Interior HQ Building Riyadh
- Bahrain Parliament and Shura Council
- National Security Agency HQ Bahrain
- Gulf Petrochemical Industries Company, Bahrain (GPIC)
- Bahrain International Investment Park (BIIP)
- Bahrain National Gas Co (BANAGAS)
- Aluminium Bahrain (ALBA)
- Al Quraiyah Power Plant

5.2 SAFETY AND FIRE

- Ma’aden Phosphate Company
- Ma’aden Aluminium Company
- Ma’aden Bauxite Mine
- SATORP Corporate Offices
- SATORP Refinery
- RTIP / SADARA
- Saudi International Petrochemical Company (SIPCHEM)
- Archirodon (Marafiq)
- Bariq Mining Company
- Arabian Amines Company (Aminat)
- Red Sea Refinery
- Petro Rabigh Refinery
- SOLVAY HPP
- Polysilicon
- TASNEE
- Yanbu-III
- Petrokemya
- Al Quraiyah Power Plant
- EICO
- Ad Duwayhi Gold mine
- Linde Gas
- Rhodia
- Bahrain Royal Court
- Bahrain National Monument
- Bahrain Airport hangars
- Fire and Safety evaluations of a number of offices, retail premises and warehouses in Bahrain

### 5.3 EMERGENCY RESPONSE PLANNING

- Qatar Petroleum – Design of Emergency Control Centers (National and Regional) to handle Safety and Environmental incidents nationwide (Dhukhan, Ras Laffan Industrial City, Messaieed Industrial City, Off-shore and Doha). Included in the design are all physical, technological, communications and management aspects as well as several other aspects.
- Bahrain International Circuit – Assistance with writing response plans for Formula 1 Racing.

### 5.4 EPC CONTRACTORS

Depending upon the circumstances of the project, RMIME works either directly to a facility's Operator and/or Owner, or to an EPC Contractor which is running a main contract on site. Example EPC Contractors with which RMIME have worked or are currently working with are:

- Worley Parsons
- KBR
- Samsung C&T
- Samsung Engineering
- JGC
- Bechtel
- Thales
- RGCK
- Technicas Reunidas
- Archirodon
- Saipem
- SNC-Lavalin
- PCMC
- Daelim
- Techint
- SK
- Alcoa
- Fluor
- Hanwhah
- China Harbor
- SETE
- Jacobs
- Hyundai Heavy Industries
- Punj Lloyd