

## Competency Management

Competency Management Solutions designed to manage, assess, and develop a world-class workforce.



# Welcome to IHRDC's Competency Management

## BUILDING WORLD -CLASS PERFORMANCE USING OUR PROVEN COMPETENCY MANAGEMENT SYSTEM

In today's competitive oil and gas business, an industry-leading organization must have a competent workforce able to identify, commercialize, manage, and operate its opportunities flawlessly. But the training methods of the past are fast becoming obsolete in light of the oil and gas industry's drive toward international standards of performance, constrained access to capable personnel, and the increased focus on nationalization of the workforce.

For over 35 years, IHRDC has partnered with companies worldwide to develop their personnel into world-class employees by using our flexible, customizable, and evolving **Competency Management System (CMS)**. We continue to be relevant and successful in the changing times and throughout various business climates, in part because of our disciplined approach to competency management. We have demonstrated the effectiveness of our CMS for clients in many international settings in all sectors of the industry, including drilling, production, gas processing, refining and LNG.

IHRDC's CMS is supported by a team of highly-experienced specialists and complemented by **CMS Online**, a powerful, online reporting tool. CMS Online provides an integrated approach to managing, assessing, and developing competence by providing a fit-for-purpose system that supplies managers and employees with the tools to find success in their jobs. Working together, IHRDC can help you build a competent workforce, permanently lower your operating costs, make sustainable, long-term contributions to the growth of the host country, and meet government nationalization quotas – now and in the future.



Competence   Nationalization   International Standards   Evergreen Workforce

### IHRDC Innovations in Training

From Skills Profiles to Competency Models, IHRDC has been at the forefront of introducing groundbreaking workforce management tools to the industry.

Completed comprehensive manpower planning and development for all jobs – from entry level to senior executives – for Dubai Natural Gas Company.

Prepared career development guides for Mobil Oil's entry-level E&P specialists – geophysicists, geologists and petroleum engineers.

Introduced Task-and-Skill analysis in IHRDC publication: **Manpower Planning and Development: The Developing World.**

Completed comprehensive manpower development plan for Egyptian petroleum and electric sectors.

Created and implemented assessment and certification system for Al Furat Petroleum Company in Syria – production, gas processing and pipeline operations, and maintenance.

Refined IHRDC Competency Management System (CMS) for clients across North Africa and the Middle East.

Created, developed and delivered CMS Online – a revolutionary online assessment, management and reporting system.

Added new tools to CMS Online, including team based competency reporting and organizational budgeting.

1975

1979

1982

1992

1998

2003

2006

2008

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IHRDC has performed Competency Management projects in the Middle East, North and West Africa, South East Asia, North America and South America. It is supported by six offices and a network of representatives worldwide.

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Online Reporting   Innovation

# CMS Overview

IHRDC's Competency Management System (CMS) is a disciplined approach to workforce management. Customized to the goals and culture of each organization, our CMS ensures clients meet their strategic objectives by maximizing their workforce potential. The CMS process consists of three integrated elements: **Planning and Design Phase**, **Implementation Phase** and **CMS Online**.

## 1 PLANNING AND DESIGN PHASE

During the Planning and Design Phase, our specialists work with clients to prepare the **CMS Implementation Guide** which establishes guidelines for the entire CMS process. It explains how the assessments will be completed, how the competency models will be built, and where the training resources will be found to fill competency gaps. The implementation guide also outlines the key objectives of the system implementation and what metrics will be used as success criteria.

During this process we review – and in some cases develop – the client's **Recruitment and Training Strategy** to ensure our approach matches the goals of the organization. Once the CMS Implementation Guide is complete, we then build competency models for each job title in the facility or specialty area and identify and match the training resources required to achieve the competency objectives. The training resources, selected from multiple vendors, may include instructor-led, e-Learning, mentoring and on-the-job training, as appropriate.

## 2 IMPLEMENTATION PHASE

### Existing Employees

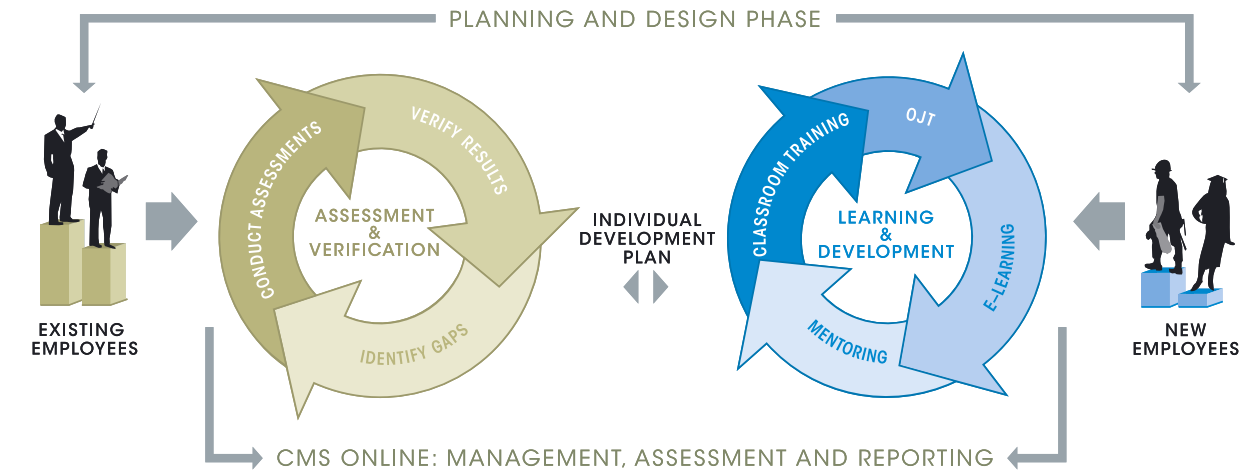
For existing employees, we use the competency models to assess employees against their specified job competencies, identify gaps, and then design a custom training program for each individual. The individual then takes ownership of his or her competence development, participates in the requisite training, and is reassessed after completing the training to ensure proper application in the workplace.

### New Employees

For new employees, we use the competency models to build a structured employee development program based on entry level job competence requirements. IHRDC personnel “work backwards” in designing the training from the job competencies to each form of training: on-the-job, specialty, foundation, and, if necessary, English language training. This ensures the training program, which starts with English language and foundation training, efficiently achieves the target levels of competence. One year after finishing the program, new employees complete the same assessment and verification process used for the existing workforce.

## 3 CMS ONLINE

CMS Online IHRDC's comprehensive management, assessment and reporting tool, provides real-time performance indicators to ensure the CMS implementation is meeting its intended goals. This web-based program covers the entire CMS process from assessment and verification to learning and development. CMS Online allows employees to complete self assessments, enables supervisors to complete assessments of their direct reports, and makes it easy for managers to see the competence level of the entire organization with one click. As a result, training budgets are spent more efficiently, competency gaps can be quickly closed throughout the organization, and clients are assured that each employee is competent to meet both current and future job requirements.



### WHAT IS COMPETENCE?

Competence is the combination of awareness, knowledge, skills and attitude that an individual must demonstrate in order to meet the performance standards required of his or her job. Our CMS ensures competence across all job areas of your organization.

### IHRDC'S COMPETENCY MANAGEMENT SYSTEM

#### Benefits

- Provides a consistent approach to manage the learning and development of different job areas
- Ensures competent personnel are in place to operate and maintain facilities safely and effectively
- Provides quantitative feedback for measuring the progress of training and development towards nationalization goals
- Identifies training assignments based on actual needs of each individual and the organization as a whole

#### Features

- Creates an integrated approach to manage both the competency assessment and competency development processes
- Uses technology and quantitative analysis to build real time, online management, assessment and reporting systems
- Allows each client to customize and implement a unique competency solution
- Provides a management solution to ensure long-term, structured development of all employees

	Technical	Field Operations	Business & Support
JOB AREAS	<ul style="list-style-type: none"> <li>• Petroleum Geology</li> <li>• Geophysics</li> <li>• Drilling &amp; Completion Engineering</li> <li>• Production Engineering</li> <li>• Reservoir Engineering</li> <li>• Formation Evaluation / Petrophysics</li> <li>• Facilities Engineering</li> </ul>	<ul style="list-style-type: none"> <li>• Oil &amp; Gas Production Facilities</li> <li>• Gas Processing</li> <li>• LNG: Liquefaction &amp; Regasification</li> <li>• Refining</li> <li>• Power Generation</li> <li>• Drilling</li> <li>• Oil Field Construction</li> </ul>	<ul style="list-style-type: none"> <li>• Human Resources</li> <li>• Finance</li> <li>• Accounting</li> <li>• Legal</li> <li>• Sales &amp; Marketing</li> <li>• Information Technology</li> <li>• Administration</li> </ul>

# A Powerful Online Competency Management, Assessment and Reporting Tool



CMS Online, IHRDC's proprietary, online management, assessment and reporting solution, integrates the entire **Competency Management System** and provides a unique view of workforce performance through a series of customized key performance indicators. This online solution includes all data gathered from building the competency models, conducting the assessment process, providing the individual development plans and tracking the training process.

Managers use CMS Online to see how their personnel are performing across the overall facility, by job area, or on an individual basis. In addition, the system tracks course completion and reassessment of the individuals after training is completed to ensure competence is developed. It can also be used to estimate the resources, time and money required to bring each employee to his or her target level of competence. The system improves upon the way employee development is traditionally managed and provides new, relevant metrics that are critical to measuring performance in an unbiased manner.

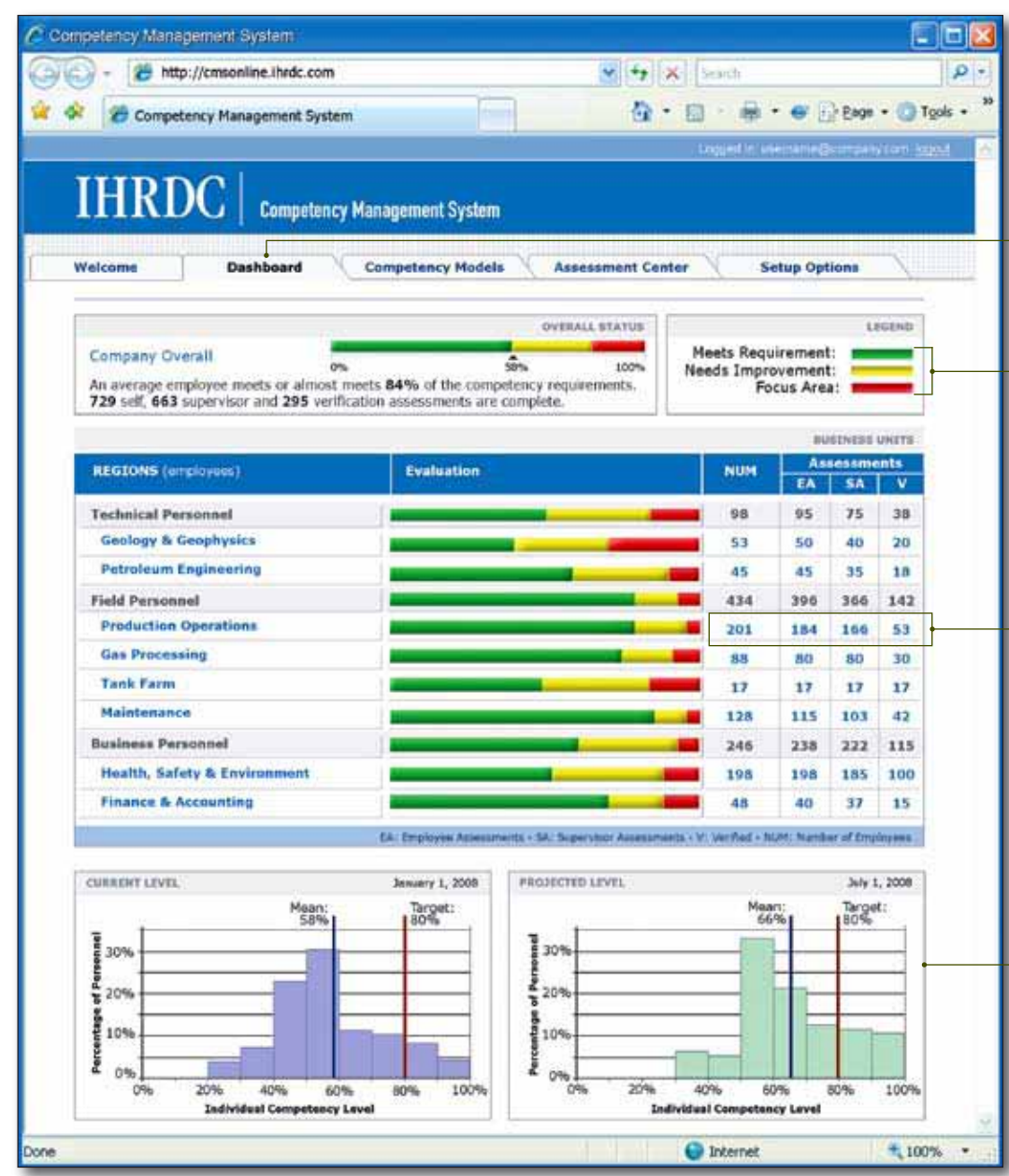
### CMS ONLINE OFFERS:

- Integrated capabilities**  
 Includes competency models, assessment and verification tools, and training resources.
- Comprehensive reporting**  
 Reports include assessment results, individual training plans, course completion tracking and reassessment, and the ability to estimate the resources, time and money required to bring each employee to his or her target level of competence.
- Macro and micro management views**  
 With just a few clicks, managers can drill down from seeing the state of workforce development across the entire organization, by job area or by job title, to the individual needs of a single employee.
- Employee views**  
 Individuals can clearly understand job requirements, learning and development needs, and opportunities for career growth for themselves and for their direct reports.

To learn more, email us at [competencymanagement@ihrdc.com](mailto:competencymanagement@ihrdc.com)

### CORPORATE-WIDE MANAGEMENT

CMS Online quickly and clearly conveys real-time information on the state of your workforce development. Upper-level managers can be assured they have the right people performing the right jobs across the organization using this comprehensive system. In addition, our system helps integrate the assessment information directly to learning and development events, ensuring training budgets are spent based on the needs of the organization. It also allows managers to anticipate future workforce development needs by clearly identifying the strengths and weaknesses in the organization.



CMS Online opens with a dashboard view that shows the current state of competence for your entire workforce and provides more detail in groupings of specific job areas.

The green, yellow and red bars indicate the average level of competence across that particular pool of employees.

CMS Online also tracks key metrics of the assessment and development process in the dashboard, including assessments and verifications, courses taken and number of gaps closed.

In addition to the average performance indicated by the colored bars, CMS Online plots the overall population to see the spread of competence across the organization.

# CMS Online

## INDIVIDUAL ASSESSMENT

The greatest level of detail is an individual's competency assessment results, or competency profile. The initial report is shown in summary form and, with one click, can be opened to show more detail. These results are displayed alongside the individual's development plan, including the learning events required to fill in any gaps. Once an individual completes the training, his record is updated to show course completion and his competency profile is updated following reassessment.

## JOB AREA REPORTING

CMS Online provides job area and job title competency profiles and training matrices in a clear, concise manner. These reports provide critical information to help prioritize company-wide training activities and, when tied to cost figures for training, can help form budgets for an organization's training needs.

### 1 COMPETENCY PROFILE

**Employee:** Timothy Caplan  
**Job Title:** Tank Farm Field Operator  
**Overall:** 50%

**Job Level Required:** Meets Requirement  
**Needs Improvement:** Needs Improvement  
**Focus Area:** Focus Area

**Final Assessment Report**

- Routine Skills & Activities: 3.5
- Basic General Knowledge: 3.5
- Procedures Applications & HES: 2.5
- Procedures Applications: 2.5
- HES: 3.0
- Behavioral & Soft Skills: 3.0

**Individual Development Plan:** 2 Days

### 1a TRAINING CURRICULUM

ID	Course Name	Duration (Days)	Priority	Register	Training Date	Completed
40-01	Safe Lifting	0.5	Low	Yes	11/11/2008	Yes
40-02	First Aid & CPR Training	1	Low	Yes	11/11/2008	Yes
40-03	Job Hazard Analysis Training	1	Low	Yes	11/11/2008	Yes
40-04	Process Survival	0.25	Low	Yes	11/11/2008	Yes
40-05	Lifted, Towed	0.14	Low	Yes	11/11/2008	Yes
40-06	Process Training	1	Low	Yes	11/11/2008	Yes
40-07	Filtering & Stripping Systems	1	Low	Yes	11/11/2008	Yes
40-08	Electrical Maintenance Training	1	Low	Yes	11/11/2008	Yes
40-09	Flow Generation	1	Low	Yes	11/11/2008	Yes
40-10	Emergency Visual Systems	1	Low	Yes	11/11/2008	Yes

### 2 COMPETENCY GAP REPORT

**Job Title:** Tank Farm  
**Overall:** 40%

**Needs Requirement:** Meets Requirement  
**Close to Requirement:** Close to Requirement  
**Focus Area:** Focus Area  
**Job Level Required:** JLR

**Job Area Gap Report**

Competencies	Tank Farm Field Operator	Tank Farm Lead Operator	Tank Farm Senior Operator	Tank Farm With Supervisor	Personnel Count	Status
Employment Operations	3.5	3.5	3.5	3.5	1	Meets Requirement
Storage Tanks / Facilities	2.5	2.5	2.5	2.5	1	Needs Improvement
Control Systems	2.5	2.5	2.5	2.5	1	Needs Improvement

### 2a TRAINING MATRIX

**Job Area Training Matrix**

Competencies	Tank Farm Field Operator	Tank Farm Lead Operator	Tank Farm Senior Operator	Tank Farm With Supervisor	Total	Status
Employment Operations	3.5	3.5	3.5	3.5	1	Meets Requirement
Storage Tanks / Facilities	2.5	2.5	2.5	2.5	1	Needs Improvement
Control Systems	2.5	2.5	2.5	2.5	1	Needs Improvement

# Additional Details

## COMPETENCY MODEL DEVELOPMENT

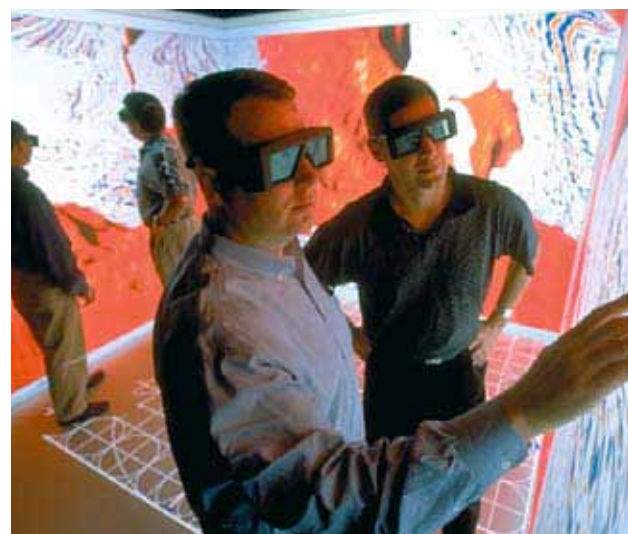
*Accurate, robust competency models are the foundation of an effective competency management system.*

A Competency Model describes the combination of knowledge, skills and attitudes needed to effectively perform a specific job within an organization. When used as the basis of a training and development system, a Competency Model provides a clearly defined set of performance objectives for each position in the organization.

These performance objectives, in turn, provide an easily understood road map for each individual to attain full competence in the position. It also allows all personnel to understand the requirements for their jobs, their supervisors' jobs, and any other position within the organization.

Our first step in building Competency Models is to identify every target job title within an organization. Then, IHRDC personnel work closely with staff, supervisors and managers to interview, observe and gather existing written documentation about the skills, tasks and knowledge needed to competently perform each job function.

The Competency Models are built in a consistent, structured format where skills, tasks and knowledge are divided into different areas based on the content of the competency elements. Finally, the relevant competencies are linked to each appropriate job title and assigned a required level of performance.



## EMPLOYEE ASSESSMENT AND VERIFICATION

*We take a balanced, systematic and thorough approach to assessments and verification.*

Assessment and verification of skillsets within an organization provide so much more than just the ability to “review” individual employees. A well-conceived and implemented Competency Management System provides a quantitative view of exactly what the learning and development needs and strengths are for the entire workforce – with one concise reporting system.

During the assessment process, every employee is assessed against the established, uniform standard for his or her job. Then, an Individual Development Plan is created for each employee to close any gaps identified during assessment.

The employee then drives his or her own learning and development opportunities and is subsequently reassessed to ensure his training is implemented on the job. This ongoing process ensures personnel continue to meet the requirements for their positions and that your organization is operating safely and effectively.

## INTEGRATION OF LEARNING EVENTS

*Our priority is to identify and integrate the learning and development resources your company needs, whether provided by us or another organization.*

Once we build competency models for all identified jobs, IHRDC personnel identify the training required to satisfy each competency element. This training may include a variety of formats: classroom, workshop, on-the-job training and e-Learning. It may also come from several different vendors such as equipment providers, professional societies and outside training organizations.

Clients use IHRDC's system not only to ensure they receive the best training available for each competence element, but also to integrate all the different training events and vendors into a cohesive learning and development plan to achieve world-class performance.

## LEARNING AND DEVELOPMENT

*We target new-hire training programs to meet entry-level competency requirements.*

For new hires and new projects, we use the competency models and the CMS process developed in the Planning and Design Phase to create fit-for-purpose training programs that ensure graduates achieve the requisite skills to perform their jobs. By tailoring the training to meet the specifications of the competency models, the program ensures an efficient use of resources in both time and money.

Once new recruits have completed the new hire training program, they may participate in daily work activities and, during the transition months, are provided a mentor to guide their work and answer questions. An employee's development continues during the first year on the job, and after that year, he or she is assessed against the requirements of the job to see if there are any gaps. If gaps are found, the employee is given an Individual Development Plan and is provided the opportunity to fill those gaps. If no gaps are found, he or she may be considered for a promotion to a more senior position and will start working to attain those higher level competencies.

*Individual Development Plans guide the learning of existing employees.*

When competency gaps are identified for existing employees, they are prioritized based on the most critical to his or her daily job and the safety of the individual and others at the work site. Individual Development Plans are then created that identify the appropriate training events to fill each of the opportunities for improvement. At this point, development plans are gathered from across the organization and clustered together by job title, discipline, and job family to create a master training plan for the whole organization. This plan is aligned with the strategic goals of the organization, operational needs and budgetary constraints to create the final, corporate-wide learning and development plan. This integrated plan is managed using CMS online and progress is tracked using metrics established in the Design Phase.



### Assessment Process

- Focuses on competence demonstrated in the field
- Relies on evidence of competence for field operations personnel: Logbook, Daily Report, Handover, Preventative Maintenance Report
- Typically involves a three stage process: Self-Assessment, Supervisor Assessment, External Verification
- Identifies opportunities for improvement between the current competence level and that required by the job

### External Results Verification and Gap Identification

- Ensures an objective process and statistical consistency
- Assesses a portion of each candidate's competencies in the workplace
- Clarifies potential areas of improvement (gaps)
- Resolves disputes between supervisors and employees
- Focuses on more important / critical topics

### New Employees/Recruits

- Entry level competency models can be used to screen new recruits
- Pursue structured training programs tailored to Competency Model requirements
- Divided into disciplines during the course of the program
- Enter job site with dedicated mentors for on-the-job training
- Assessed after opportunity to perform regular duties for 6 to 12 months after entering job site

### Existing Employees

- Assessment performed using competency models of current job – the first step of implementation
- Initial assessment sets baseline Individual Development Plan for each employee
- Build competence through tailored Learning and Development assignments
- Reassessed to ensure application of learning at the job site
- Once competency is demonstrated, they can work towards higher level job competencies

# Consulting Services

IHRDC's Consulting Services leverages our breadth of experience, disciplined processes and network of subject matter experts. We provide unique consulting support for a wide range of services including reviewing current HR management systems and providing assistance in establishing new ones. Our expertise in training services makes us a natural choice for companies facing challenges with their own learning and development systems. The following examples of IHRDC's Consulting Services are indicative of those we have provided in the past. Contact us at [competencymanagement@ihrdc.com](mailto:competencymanagement@ihrdc.com) for more information on how we can assist you.

#### *Recruitment and Training Strategy*

Often new project organizations need to establish their recruiting and development systems from scratch. We partner with these organizations to provide our expertise in competency management and ensure the appropriate systems are created at the outset. During the strategic development process we assist in defining the organization's approach to recruitment and screening, perform initial manpower planning exercises, identify key performance metrics, and design the learning and development system.

#### *Training and Development System Review*

We are often asked to review a client's training and development plan. During this review, a small team of IHRDC's multidisciplinary subject matter experts visit the client to audit its training and development strategy, design and implementation. This outside audit identifies opportunities to improve the current learning and development system and assesses the application of a full Competency Management Solution.

#### *Communication Plan Development*

Critical to any change management process is the method and means of communication used to inform all stakeholders (employees, supervisors, managers) of the new process being implemented. We can help clients develop communication strategies to rollout and manage their Competency Management System.

#### *Additional Services*

IHRDC provides a broad range of consulting services for managers in such areas as manpower planning and supply, training needs analysis, delivery system, business development advice, and content development for both traditional and web-based learning systems. Please contact us at [competencymanagement@ihrdc.com](mailto:competencymanagement@ihrdc.com) to outline your unique needs and see how we can help attain your goals.

## About IHRDC

International Human Resources Development Corporation (IHRDC) was founded in 1969 on a commitment to offer oil and gas companies the very best products and services to train and develop their workforce. In the nearly four decades since then – from both our Boston headquarters and our offices in Amsterdam, Cairo, Caracas, Jakarta and Lagos – we have set a worldwide standard of excellence through our **Instructional Programs, e-Learning Solutions** and **Competency Management**.

[WWW.IHRDC.COM](http://www.ihrdc.com)

## Client List

#### Recent IHRDC Competency Management clients include:

ADMA-OPCO (Abu Dhabi, UAE)  
 Burullus Gas Company (Egypt)  
 CNOOC (Indonesia)  
 Chevron Global Power  
 Chevron Nigeria Mid-Africa  
 Chevron Pacific Indonesia  
 Department of Petroleum Resources (Nigeria)  
 Egyptian LNG  
 Gulf Drilling International (GDI)  
 Korea National Oil Corporation  
 Kuwait Foreign Petroleum Exploration Company  
 Midom Refinery (Egypt)  
 National Drilling Company (Abu Dhabi, UAE)  
 Oil Search (Australia)  
 Petrobras (Colombia)  
 Qatargas  
 RasGas (Qatar)  
 Segas LNG (Egypt)  
 Sonahess (Algeria)  
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Some photos courtesy of Anadarko Petroleum Corporation and Petroleos de Venezuela.