Competency Management

Build a competent workforce, meet compliance requirements, and achieve operational excellence.

Used by more than 50 international oil and gas companies around the world.
IHRDC can help you build a fully competent workforce, meet compliance requirements, streamline training, reduce costs, and achieve your strategic goals through our products and services:

- **CMS Online**, our industry-leading, proprietary competency management assessment, assurance, and reporting web-based software.
- An integrated **Compliance Module** to ensure mandatory, safety-critical training is completed.
- The broadest **Competency Library** available in the industry covering petro-technical, field and craft, and business technical competencies as well as behavioral and soft skills.
- A highly qualified **Professional Services** team to implement projects successfully on a global scale — including process consultants and subject matter experts with deep experience in our industry.
- An **evergreen process and methodology that allows individuals to build competencies over time** through assessments and personalized learning plans.

**Knowledge**

of facts and theories, procedures and principles.

**Skills**

both practical and conceptual.

**Experience**

that contributes to excellent job performance.
International oil and gas companies are challenged to realize the maximum return on their assets while maintaining the highest standards of safety and operating performance. To achieve these goals, they must build and maintain a competent, skilled workforce — a task that is becoming ever more difficult with the aging demographics, increased number of new hires, and expanding compliance regulations. To solve this dilemma many companies are turning to IHRDC and its Competency Management Group to help them implement and manage a complete workforce solution.

IHRDC has partnered with petroleum companies around the world for more than 40 years to support the development of their personnel. Our approach has consistently evolved to keep pace with new technologies, training techniques, and compliance requirements. We offer the broadest set of competency libraries in our industry, an on-line assessment and development system, integrated learning resources, and a team of consultants and subject matter experts to deliver the best competency system to meet your unique needs.

IHRDC provides a complete competency management solution—from assessment and assurance through blended development opportunities including e-Learning, instructor-led, on-the-job-training, and coaching. In fact, we have developed competency-based, structured learning curricula for all major technical positions within the oil and gas industry incorporating a blend of learning content. Training is not limited to IHRDC’s materials — through CMS Online we can integrate courses and other materials from the client’s existing resources and outside vendors as options to eliminate skills gaps. Our process and systems allows us to leverage any existing resources and interface with in-house software systems, saving time and money during the implementation.

Whether you want to engage the full set of IHRDC’s products and services or use specific elements, IHRDC can help you build a skilled workforce, meet compliance and competency assurance requirements, streamline training activities, and reduce costs. We look forward to helping you meet your competency and compliance challenges!

Sincerely,

Bradford Donohue
Vice President, Competency Management
CMS Online

CMS Online, IHRDC’s proprietary competency management, assessment, and reporting tool, incorporates the entire process into one system. This on-line solution includes all the data from building competency models, employee, supervisor, and qualified assessor assessments, individual learning plans, and training results. CMS Online can stand alone or be integrated into existing learning management or human resource systems behind a firewall to make data available to supervisors and employees and ensure long-term sustainability to meet corporate policies and goals.

CMS Online provides every user with the tools they need to manage their competency development and compliance activities. The system tracks assessments, course completion, reassessment, and compliance status on a variety of levels—from the individual, to the employees in a job area, to the entire company.

Managers use CMS Online to monitor competency levels across a department, by job title, or by employee. Staff members use CMS Online to clearly understand their own competency requirements, learning and development needs, and compliance status and opportunities for career growth.

CMS Online offers:

• **Integrated capabilities**  
  Competency models, assessment and verification tools, compliance regulations, and training resources all in one place.

• **Comprehensive reporting**  
  Customized reports on assessment results, individual learning plans, course completion and reassessment tracking, time and resource estimation, and compliance status.

• **Easily accessible management views**  
  Management views within the system range from macro to micro: from the entire workforce, to a job area, to a single individual.

• **Employee views**  
  Individuals can see their job requirements, assessment results, Individual Learning Plan, learning and development schedule, and career growth path.
CMS Online provides management reporting capabilities to help organizations meet competency and regulatory compliance requirements. The Succession Planning report allows managers to identify the most competent candidate for a selected position. Built on IHRDC’s career path capabilities, it also provides employees with a career development roadmap. The Regulatory Report is used to plan and manage staff rotations while ensuring country-specific regulations are met.
CMS Online reports competency levels clearly and concisely according to job area and job title. Clients use the **Job Area Gap Report** across large data sets to identify patterns, mitigate risks, and more effectively plan their development activities. The **Training Matrix** helps managers to identify the type and volume of training required across the business and make more efficient use of training budgets.

**JOB AREA GAP REPORT**

**COMPETENCIES**

<table>
<thead>
<tr>
<th>Foundation</th>
<th>Fundamentals</th>
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<tr>
<td>Fundamentals of the Oil and Gas Industry (Support)</td>
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<tr>
<td>Report Writing</td>
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<td>Non-technical</td>
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<td>First Aid</td>
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<td>Confined Space Entry</td>
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<tr>
<td>Defensive Driving</td>
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</tbody>
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**TRAINING MATRIX**

**COURSES**

**Control Systems**

E-Learning (e-L) | 1
---|---
CONTINUOUS PROCESS: Field Devices: Pressure | 1
CONTINUOUS PROCESS: Introduction to D... | 2
CORE: Introduction to Control and Data... | 2
CORE: Principles of Control | 2
**Maintenance**

E-Learning (e-L) | 1
---|---
HYDRAULICS: Pumps | 3
PUMPS: Centrifugal Pump Basics and Troubleshooting | 2
TOOLS: Precision Measurement Instruments | 1
**Process Operations**

E-Learning (e-L) | 1
---|---
DISTILLATION: Control Systems | 1
PLANT SCIENCE: Process Equipment | 2
PUMPS: Basic Hoses and Operation | 3
PUMPS: Fundamentals of Centrifugal Pumps | 3
PUMPS: Performance and Inspection | 3
Petroleum Online | 1

**JOB AREA REPORTING**

CMS Online reports competency levels clearly and concisely according to job area and job title. Clients use the **Job Area Gap Report** across large data sets to identify patterns, mitigate risks, and more effectively plan their development activities. The **Training Matrix** helps managers to identify the type and volume of training required across the business and make more efficient use of training budgets.
CMS Online conveys real-time information on the state of workforce competency and compliance. With this comprehensive view, upper-level managers can be assured that the organization has the right people performing the right jobs across the entire organization. In addition, CMS Online helps to identify the ideal forms of learning for their individual workforce to prioritize development goals within budget guidelines. It allows managers to plan and budget future workforce development needs, including succession planning.
An individual's competency profile displays a concise, visual summary of the individual's assessment results. It identifies an overall competency status percentage and a visual representation of competency gaps—both large and small. In addition, the employee can find recommended training to close the competency gaps and a full assessment history that includes the initial, baseline assessment, and subsequent individual, gap closure re-assessments.
IHRC's standard assessment process includes assessments by the employee, supervisor, and a third party verifier or qualified assessor. Each user can upload evidence and comments during the assessment to assure an employee's competency level for that specific competency unit. This evidence upload capability ensures a fair, objective assessment process that can be subsequently audited and verified. Using CMS Online's configuration settings, each organization can modify the assessment workflow to meet their unique process.
LEARNING AND DEVELOPMENT

After an employee completes the assessment process, the employee, supervisor, mentor, and/or training coordinator work within CMS Online to build an actionable, individual learning plan targeting a discrete subset of competency gaps. By concentrating on three to five competencies at a time, the employee stays focused on a small set of specific, blended development activities. Once the employee learns and applies the new knowledge and skills in the work environment, they are re-assessed on that specific competency unit to close the gap. At that time, further competencies can be assigned to their learning plan, thus creating a continuous training loop.
CMS Online Configuration

CMS Online provides a flexible software system to assess the competency levels of existing and new employees, match training resources, and accelerate the development of your workforce. CMS Online clients all use the same commercially available version of the software; however, by utilizing its configuration parameters, each client is able to tune the system to meet their own, unique needs. This capability allows clients to have a system that is customized to their specifications while enjoying the benefits of using a system that is constantly evolving as part of a commercial software product.

CMS Online's configurable settings include:

- Industry-leading, dynamic dashboard reporting driven by User-defined data attributes
- Number of competency levels, from four to nine, for each Competency Unit
- Definable assessment workflows including employee self-assessment, supervisor assessment, qualified assessor, multiple supervisor assessment, and peer assessment
- Display current or past assessment data to assessors in current cycle
- Super-user defined Compliance Question Wizard to assign compliance requirements
- Learning plan workflows to create and approve learning plans and drive learning

Case Study:

NATIONAL OIL COMPANY USING CMS ONLINE
TO CREATE A COMPETENT WORKFORCE

Seeking to accelerate new hire competency development and overall workforce competency levels, the E&P division of a fully integrated national oil company made a strategic decision to implement a competency management system. With a workforce involved in domestic upstream oil and gas projects and an expanding portfolio of overseas projects, having a workforce that possesses the technical requirements to successfully operate international E&P projects was vital. IHRDC implemented a full-scale competency management system by building competency models, developing employee and supervisor assessments, and creating learning plans for 500 employees, for both technical and business positions. Two years after the initial project, IHRDC completed a re-assessment of the workforce. By using CMS Online for both rounds of assessments, senior management could clearly determine its current competency levels, measure its progress in eliminating competency gaps, identify the competencies that needed further development, and update individual learning plans.
Managing, monitoring, and ensuring compliance with the increasingly complex manpower regulations that exist around the world is essential for oil and gas companies. IHRDC's Compliance Module streamlines the process and keeps compliance status current, organized, and readily available.

The Compliance Module reports the extent to which a company complies with its mandatory regulations, including the status of each employee's individual compliance requirements and the training required to achieve and sustain that compliance. We work with companies to identify compliance requirements for each job and each facility, and the various forms of training required to meet compliance standards and avoid penalties.

The Compliance Module can be used on its own, or in combination with a competency project. We provide a fully integrated solution that can interface with existing learning management and human resource information systems. The module is easily updated and expanded to respond to new and changing regulations, and is applicable to all job functions.

The dashboard provides a snapshot of compliance levels and can be sorted using our smart lists and additional reporting capabilities that allows clients to build people-on-board or shift reports to help meet government regulations and internal policy requirements.
DIVISION OF A MAJOR OIL COMPANY
MANAGING COMPLIANCE FOR A LARGE WORKFORCE

A division of a major international oil company was searching for a way to streamline the compliance management process for about 2,500 U.S. employees. Its existing system was cumbersome, and required employees to fill out a paper questionnaire, the results of which were manually entered into a spreadsheet. Because the compliance monitoring system was unwieldy, managers were not able to take responsibility for their direct reports. Given the size of the workforce and the need to manage, track, and report compliance status to avoid penalties, the business unit realized that it needed to develop an automated management process.

Using CMS Online’s Compliance Module, the company’s supervisors finally had an easy tool to assign, manage, and administer compliance training requirements across a broad population of employees. The employees, who previously found their compliance requirements confusing and often completed the wrong training, now had a straightforward system to understand their training requirements and directly launch training via the data interface between CMS Online and their Learning Management System (LMS). As an added benefit, the Compliance Module helped senior management rationalize the compliance training across the business units to ensure an efficient use of resources—both time and money—to meet their compliance requirements. One senior leader remarked, “This is the first time in my 30 years of employment that I can see all my compliance training status—and that of my direct reports—in one place.”
PROJECT PLANNING AND PROCESS DESIGN
IHRDC initiates the engagement process with the planning and design phase where we identify our client’s strategic goals and learn about our client’s culture and workforce objectives. During this phase we create the work plan, design an integrated competency management approach, assign resources, and develop a communication strategy.

JOB ANALYSIS AND COMPETENCY MODEL DEVELOPMENT
IHRDC’s competency specialists work in partnership with our client’s technical leaders to perform a job analysis of current positions by reviewing relevant information pertaining to the job, including: existing competency models, job descriptions, equipment lists, process descriptions, operating manuals, and information from job interviews with supervisors and job incumbents. Utilizing IHRDC’s Competency Library, our specialists build and customize job-specific competency models and match training resources to each competency unit.

ASSESSMENT
IHRDC’s competency assessment process typically is a three-step process that includes an employee Self-Assessment, Supervisor Assessment, and Qualified Assessor Assessment or Verification. It is designed to involve employees so they understand how the process works; ensure supervisors, who are in the best position to assess the employee, give input; allow a qualified assessor to provide an objective third opinion and help normalize statistical variance across the organization. At each assessment step, users can upload evidence and comments to assure and substantiate an individual’s competence level.

LEARNING AND DEVELOPMENT
After an employee is assessed and skills gaps identified, a customized individual Learning Plan is developed and implemented to close identified gaps. Each Learning Plan, accessed through CMS Online, contains a combination of actionable learning methods, including e-Learning, classroom, workshop, on-the-job training (OJT), and coaching. Once an employee learns the new skills and applies them to the job, they are re-assessed to ensure gaps are closed and, subsequently, their competency profiles are updated to close the gap.
IHRDC’s professional services utilize our breadth of experience, disciplined processes, and network of experts to deliver talent management solutions that satisfy each client’s unique needs. Our competency project personnel are distinctly qualified, with deep specialist backgrounds in a variety of subject matter areas, competency expertise, cultural literacy, and strong team leadership and project management skills.

Whether providing full time consulting support for an integrated competency management project, qualified assessors to perform on-site assessments, or competency specialists to review an existing competency management system, IHRDC offers a wide range of services to address a company’s learning and development challenges, covering:

- Competency Management Process
- Competency Model Development
- Assessment and Verification
- Change Management and Communication
- Recruitment and Training Strategy
- Succession Planning and Career Ladders
- Training and Development System
- Content development for both traditional and web-based learning systems

**Case Study:**

**SOUTHEAST ASIAN E&P COMPANY IMPLEMENTING A COMPETENCY MANAGEMENT SYSTEM FROM THE GROUND UP**

A mid-sized Southeast Asian E&P company was facing a number of staffing pressures including an aging workforce, rapid growth in the sector, and a large number of inexperienced new hires. Senior management and investors needed assurance that its geotechnical staff possessed the necessary competencies to perform their jobs. In a short time, IHRDC developed a competency management approach for 50 key positions in the functional area and completed employee assessments, which revealed that the target population met less than 50 percent of the desired competency level for the selected jobs. Every employee was provided with an individual development plan consisting of a mix of learning interventions including e-Learning, on-the-job training, and classroom training. Two years later, after reviewing and updating the competency models, we assessed the target population again and saw an increase of more than ten percent in competency levels. New individual development plans were created and we expanded the scope of the project to the field operations and business support functions.
IHRDC’S COMPETENCY LIBRARY

During IHRDC’s 40 years of experience, we have developed a comprehensive, industry-standard competency library that describes the skills, knowledge, and experience needed to perform a wide range of industry functions. It is the most extensive competency library available in the oil and gas industry today, and covers petro-technical, business, and field and plant operations job areas from upstream to downstream.

Our library of job competencies enables companies to establish consistent job standards across their global operations. They can be used as the foundation of our competency model development projects or licensed to clients to load into their own software systems. By licensing our Competency Library, companies are able to develop their own job competency models with the confidence that they reflect industry standards.

Competency Library quick facts:

- 1,600+ competency definitions covering all industry job areas from Upstream to Downstream
- Four-level proficiency scale: Awareness, Knowledge / Basic Application, Skilled Application, and Mastery
- Four to seven skill definitions per proficiency level per competency unit to create robust standards
- Updated and revised bi-annually to ensure alignment with industry standards
- Can be customized to a client’s unique needs or used off-the-shelf to reduce implementation time
- Used in IHRDC’s CMS Online or uploaded into client’s existing software systems (i.e. LMS)

**Case Study:**

A large exploration and production company with operations in North America and Africa was growing rapidly, adding hundreds of employees a year. They needed to develop a structured training program to establish globally consistent job requirements tied to the overall corporate strategy. Having already licensed and deployed a Learning Management System (LMS) with competency assessment capability, the Company decided to license IHRDC’s established Competency Library to build a standard foundation.

After loading the IHRDC Competency Library into the client’s LMS, IHRDC helped it create customized competency models and match them with the appropriate training resources. By using IHRDC’s Competency Library to populate an existing system and linking these competencies to training, the company was able to save costs in training, staffing, and IT support.

**Technical**

- 350 Competency Units
  - Geology and Geophysics
  - Drilling and Completion Engineering
  - Process and Production Engineering
  - Reservoir Engineering
  - Formation Evaluation / Petrophysics
  - Facilities Engineering
  - Project Management
  - Geotechnical Support

**Field & Plant Operations**

- 525 Competency Units
  - Production and Plant Operations
  - Maintenance - Electrical, Mechanical and Instrument
  - Health, Safety, Security and Environment
  - Gas Processing, GTL and LNG
  - Refining and Petrochemical
  - Power Generation
  - Drilling Operations
  - Marine
  - Medical

**Business & Common**

- 725 Competency Units
  - Accounting and Finance
  - Behavioral and Leadership Skills
  - Business Operations and Administration
  - Human Resources
  - Information Technology
  - Legal
  - Sales and Marketing
  - Strategy, Commercial and New Business
  - Supply Chain and Procurement

TO LEARN MORE EMAIL US AT COMPETENCYMANAGEMENT@IHRDC.COM
LICENSING
IHRDC provides clients with two licensing options for implementing CMS Online to meet their unique needs. For clients who want to get started rapidly, IHRDC’s Managed Service provides an efficient entry into competency management. For those clients who need to create internal data interfaces with existing systems the Client Hosted solution provides the best alternative.

IHRDC managed Service:
• Annual software license
• Cloud-based access from IHRDC’s secure, state-of-the-art, co-location data center
• Server and instance management included
• Secured browser access
• Support, maintenance, and upgrades included in annual fee

Client Hosted:
• Perpetual software license
• Deployed on client servers behind firewall
• Data interfaces created with other client systems (i.e. LMS or HRIS)
• Single-sign-on authentication
• Support, maintenance, and upgrades included in annual contract

TRAINING
During the implementation process, IHRDC consultants provide extensive on-the-job training to ensure you get the most from CMS Online. In addition, IHRDC offers a five-day CMS Online Administrator Training workshop, both publicly and privately, for those who plan to administer CMS Online once deployed. For client-hosted solutions, CMS Online Technology Training provides the client’s IT team with the skills required to manage and upgrade the system on their own servers.

DEVELOPMENT AND SUPPORT
IHRDC’s Competency Management Group is continuously developing and improving the CMS Online software, with new releases every one to three months guided by client user-group meetings and industry direction. Our technical support team provides global coverage to answer functional and technical questions promptly to our user community.
Competency Management Clients

AKhafji Joint Operations (KJO)
Bahrain Petroleum Company – BAPCO
Bayer MaterialScience LLC
Brass LNG
Cairn Energy India
Cairn Energy PLC
Cenovus
Chevron
  • Appalachian/Michigan (AMBU)
  • Australia (ABU)
  • Canada (CBU)
  • Deepwater (DWE)
  • Environmental Management Company (EMC)
  • Global Upstream & Gas
  • Indonesia Company (IBU)
  • Mid-Continent (MCBU)
  • Nigeria Mid-Africa [NMA]
  • Oronite
  • San Joaquin Valley (SJV)
  • Pipeline Company (CPL)
  • Thailand E&P
China National Offshore Oil Corporation (CNOOC)
  • SES Indonesia
  • Uganda
ConocoPhillips
Cuu Long Joint Operating Company
Dana Gas Egypt
Dragon Oil
Equatorial Guinea LNG Operations
Ghana National Petroleum Corporation (GNPC)
ion Geophysical
Kuwait Oil Company (KOC)
Marathon Oil Corporation
Marathon Equatorial Guinea Procuion Ltd. (MEGPL)
Mubadala Oil & Gas
Oando Exploration and Production Ltd.
Occidental Petroleum Corporation
Oil Search (PNG) Ltd.
OMV (Tunisia) Production GmbH
Orlen Upstream
Pacific Rubiales
Pertamina Hulu
Petronas Carigali Sdn. Bhd.
PetroVietnam Exploration & Production Corporation
Phillips 66
Pioneer Natural Resources
Premier Oil
Qatar Liquefied Gas Company (QATARGAS)
Range Resources Corporation
RasGas
SAFER E&P Operations Co.
State Oil Company of Azerbaijan Republic (SOCAR)
Total
  • Angola
  • Indonesia
  • Nigeria
  • United Kingdom
IHRDC provides complete services to help you achieve your training and development goals:

Our Instructional Programs offer you outstanding workshops that teach management and petroleum business essentials using challenging business games.

Our e-Learning and Knowledge Solutions provides your employees with innovative learning resources that offer accelerated, low cost, effective, and on-demand learning devoted all functional areas of the international oil and gas industry.

Our Competency Management offers you industry-leading competency and compliance products and services that lead to a fully competent workforce and help our clients meet increasing levels of government regulations.

To learn more about how IHRDC can help you build a world-class workforce please visit www.ihrdc.com.

About IHRDC

IHRDC was founded in 1969 with a commitment to offer international oil and gas companies excellent products and services to train and develop their workforce. In the four decades since then – from both our Boston headquarters and our offices in Houston, London, Amsterdam, Dubai, Kuala Lumpur, Jakarta, and Lagos – we have set a worldwide standard of excellence through our Instructional Programs, e-Learning and Knowledge Solutions, and Competency Management. Our offerings are used daily by thousands of industry leaders.

For more information visit www.ihrdc.com.

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