



# Implementing Royalty in Kind Business Processes and Support Systems

---

## Road Map to the Future

January 2001



U.S. Department of the Interior  
**MMS** Minerals Management Service  
Minerals Revenue Management

# Implementing Royalty in Kind Business Processes and Support Systems

---

## Road Map to the Future

January 2001

Cover photo: The Genesis Project  
Photo courtesy of Chevron USA, Inc.



U.S. Department of the Interior  
Minerals Management Service  
Minerals Revenue Management



---

## Director's Message

The Minerals Management Service (MMS) is entrusted with ensuring that all Americans receive a fair and appropriate return for oil, gas, and other minerals produced from Federal leased lands. MMS collects, accounts for, and disburses \$5 billion in mineral revenues to its recipients annually. Historically, most of these revenues have been received in the form of royalty in value (RIV) payments made by those interests who lease and develop the minerals. A feasibility study conducted by MMS in 1997 documented that taking royalties in kind (RIK) and marketing the minerals through competitive sales or other means could, under the right circumstances, be revenue neutral or positive and administratively efficient for MMS and its mineral lessees.

More recently, we have been applying the RIK principle on a broader scale through several pilot projects to evaluate the merits of RIK as an integral part of the royalty management process. We are encouraged by the progress made in these pilots. Important knowledge and experience has been gained from managing RIK in a live environment. Along the same timelines, we have been reengineering a new compliance and asset management (CAM) process to support the collection of royalties whether taken in value or in kind.

Based on the early successes of the pilot projects and the substantial progress made in royalty reengineering, we have decided to proceed with RIK as a viable option for management of the Nation's royalty assets. This Road Map to the Future has been prepared to evolve the RIK initiative from its pilot phase to an operational activity over a 3-year period ending December 2003. The Road Map sets forth the strategic direction to design the future RIK asset management process and acquire the technology and tools to effectively operate an ongoing RIK activity. All RIK activities and operations, including implementation of the RIK Road Map to the Future, will be administered by the MMS Minerals Revenue Management (MRM) organization.

The Road Map calls for use of an Operational Model to manage and further evaluate the pilot projects and other RIK operations. Ongoing assessments of pilot operations are expected to provide a much better understanding of when the RIK option is a good business decision and an improvement over the RIV option. Pilot outcomes will also guide the design and evolution of the future RIK operational activity. It is essential that the RIK development effort be aligned with the Federal budgetary process and established schedules for implementation of MRM's CAM development initiative. In order to accomplish this alignment, we must begin the Road Map implementation now.

The RIK Road Map implementation will focus on Gulf of Mexico (GOM) oil and gas production. At present, about 84 percent of the Federal oil and gas revenues are produced from leases located on the Outer Continental Shelf. The GOM offers many advantages to the development of the RIK business activity such as close proximity to market centers, access to extensive systems for the delivery of mineral production to buyers, and a relatively few lease contracts to administer. The Road Map also includes actions designed to improve the MMS Small Refiner Program and guidance for the continuation of RIK projects for onshore Federal leases including the successful Wyoming RIK initiative. Efforts to identify further RIK opportunities for onshore Federal leases will be pursued in close consultation with affected States. RIK opportunities for Indian lands will be explored with Indian Tribes upon their request.

Implementation of an RIK business activity within the MMS can improve and simplify the overall royalty management process. Expected benefits include ensuring fair market values for the mineral assets, increasing the certainty of royalty payments, shortening the compliance cycle, accelerating revenue collection, and reducing administrative and operational costs for both industry and government. Upon completion of the Road Map, MMS should be well positioned to identify and evaluate opportunities and implement the RIK option when it is determined to be the applicable and better asset management decision.

Employees of the MMS have worked very hard to advance the RIK and reengineering projects. I appreciate their support and encourage other MMS employees to participate in this important improvement process. It is a real opportunity for employees to learn new skills and expand their knowledge of royalty management. We also value the partnerships with our customers, State governments, the minerals industry, and our contractors. These working partners have contributed significantly to our early successes. The Road Map's action elements will ensure the continuous outreach and communication with all stakeholders and affected parties.

I am pleased to issue this RIK Road Map to the Future and look forward to its implementation with enthusiasm and excitement. As we move the initiative along the implementation path, the continued support and participation of our employees, customers, and stakeholders is vital. I know that working together we can build a future RIK operational activity for which we can all be proud.

---

**Director, Minerals Management Service**

---

## Table of Contents

Executive Summary .....	1
Section 1    Royalty in Kind -- Managing the Royalty Asset .....	1-1
1.1    Background – Royalty in Kind and Reengineering....	1-1
1.2    Royalty in Kind Feasibility Study.....	1-3
1.3    Piloting Royalty in Kind.....	1-4
1.4    Small Refiner Program .....	1-6
1.5    Developing the Future RIK Activity.....	1-6
1.5.1    Business Processes and Organization .....	1-8
1.5.2    Automation Infrastructure.....	1-9
1.5.3    Information Requirements.....	1-9
1.5.4    Outreach and Communications.....	1-10
1.6    Preparing for the Transition .....	1-10
Section 2    Royalty in Kind -- Road Map to the Future .....	2-1
2.1    Building Core Business Processes and Organization	2-3
2.1.1    Planning and Control Framework .....	2-4
2.1.2    Portfolio Analysis and Segmentation .....	2-5
2.1.3    Operational Model Phase.....	2-5
2.1.4    New Processes and Capabilities.....	2-6
2.1.5    Future RIK Organization Structure .....	2-7
2.1.6    Human Resource Development .....	2-7
2.1.7    Partnerships .....	2-7
2.2    Acquiring Technology Solutions.....	2-9
2.2.1    Contracting Strategy .....	2-9
2.2.2    Managing Risk .....	2-11
2.3    Changing Information Reporting Requirements.....	2-12
2.4    Outreach and Communications.....	2-14
2.5    Summary of Action Elements.....	2-15
Appendix A    Royalty in Kind, Reengineering and Related Studies.....	A
Appendix B    Glossary.....	B

---

## Executive Summary

### **RIK: A View to the Future**

Since 1995, the Minerals Management Service (MMS) has been conducting feasibility studies and pilot projects to determine if royalty in kind (RIK) is in the Nation's best interests and, if so, to build the business case and framework for making RIK an integral part of the royalty management process. Based on experiences to date, senior MMS management has decided to proceed with the development and implementation of RIK as a viable option for managing the Nation's royalty assets. This Road Map sets forth the vision and strategic direction to implement, over a three year period, the operational RIK activity within MMS' Minerals Revenue Management (MRM) organization.

Senior management defined the following business objectives for the future RIK activity:

- Implement RIK where applicable and when it is an improvement over royalty in value (RIV)
- Leverage the MRM position as an asset holder
- Take advantage of potential inter-agency synergies
- Minimize the cost of royalty administration
- Reduce business cycle time
- Accelerate timing of revenue collections
- Adopt energy industry business practices and controls wherever feasible

MMS senior management also established the following performance objectives to be met when the RIK option is exercised:

- Confirm and reconcile within 90 days all production royalties taken in kind
- Accelerate the timing of revenue receipt by 5 days over the RIV approach

MMS senior management designated the Gulf of Mexico (GOM) as the core strategic area for the evolution of the RIK activity. For onshore Federal leases, MRM will pursue a strategy of identifying high potential RIK opportunities, which will be pursued only with the support and participation of the affected States. Regarding Indian lands, MRM will work with Tribes when they express an interest in exercising the RIK option.

**Benefits**

The MRM is currently reengineering its business processes to support taking royalties in kind or in value. Through the introduction of the RIK activity, MMS and its customers will capitalize on the innovations developed by the Reengineering Initiative and realize other significant benefits including:

- Accelerated cash flows will provide positive time value of money to the Treasury and program beneficiaries.
- A 90-day business cycle will provide early certainty and reduce MMS and industry costs.
- Simplified regulatory reporting will reduce industry cost and improve MRM's operations.
- Directly accessing information used by the industry to transact business will reduce MRM operating costs.
- Increased revenues to the Treasury through strategic use of the RIK asset management approach.
- Reduced overall business costs due to the inherent efficiency of the RIK approach in reducing valuation disputes.

**RIK and the MMS**

The MRM is responsible for ensuring that all revenues from Federal and Indian mineral leases are efficiently, effectively, and accurately collected, accounted for, and disbursed to recipients. These revenues amount to approximately \$5 billion annually. MRM collects these royalties both in value and in kind. In value royalties are paid in cash to the MRM. In kind royalties are paid, at the discretion of the Government, by delivery of oil and gas production to the MRM for sale in the marketplace. The Outer Continental Shelf Lands Act and the Mineral Leasing Act authorize the collection of oil and gas royalties either in value or in kind. Furthermore, virtually all Federal and Indian oil and gas leases provide for royalties to be paid in value or in kind at the discretion of the lessor.

In April 1997, the MMS began an MRM-wide Reengineering Initiative to design new business processes and support systems for the 21<sup>st</sup> century. The ensuing process design and pilot work determined that MRM's future business operation should be focused on two core end-to-end business processes—the financial management process and the compliance and asset management (CAM) process. The financial management process will ensure the proper receipt and timely processing of money and information. The CAM process will ensure that all revenues, whether received through in-kind or in-value royalties, are accurately reported and paid and that the compliance status of all leases is known.

The CAM process represents a fundamental change in MRM's business strategy for managing mineral revenues. With this new process, the MRM will structure and focus its organization and analytical capability on producing leases and the physical infrastructure used for transporting, processing and marketing mineral production. The new process will substantially reduce existing business cycle

times for validating royalty payments. Key to the new process is the creation of the foundational capability to gain sufficient understanding of the production and marketing environment to make asset management decisions regarding whether to take royalty in kind or in value.

Early on in the Reengineering Initiative the MMS understood that considerable work needed to be done to understand the economic feasibility and other implications of managing an ongoing royalty in kind business activity. In 1997 the MMS' Office of Policy and Management Improvement (PMI) was tasked with initiating a RIK feasibility study. The feasibility study was driven by the MMS' quest for continuous improvement in its mineral royalty management program. The study also responded to a Congressional directive that urged the MMS to conduct additional pilot projects for both onshore and offshore Federal oil and gas leases. The final report, "1997 Royalty-in-Kind Feasibility Study", was issued in August 1997.

The study aimed to determine if the implementation of a Federal RIK program or programs appeared to be in the best interest of the United States, and, if so, under what circumstances. The scope of the study included an examination of other governmental RIK programs, public workshops and a survey of natural gas marketing companies.

The RIK Feasibility Study Team concluded that, under the right circumstances, RIK could be workable, revenue neutral or positive, and administratively more efficient for the MMS and industry. The Study Team recommended that RIK pilot projects be initiated to test these conclusions. In 1998, the first pilot was initiated with the State of Wyoming. The second pilot began in the same year and involved the State of Texas General Land Office (GLO) and Federal 8(g) leases offshore Texas. The MMS has since expanded the pilot projects both in Wyoming and in the GOM. In addition, Federal royalty oil is being used in the Small Refiner Program and for the Strategic Petroleum Reserve (SPR).

## **Road Map to The Future**

This Road Map to the Future has been prepared to evolve the RIK Initiative from a pilot phase to an operational activity over a 3-year period ending December 2003. Section 1 of the Road Map describes MMS' evolution of the RIK approach, documents the numerous studies and pilot projects, and presents the framework for the future RIK activity. Section 2 of the Road Map further describes the RIK business approach and sets forth action elements to develop and implement an operational RIK activity. The action elements have been designed to accomplish specific objectives in the following implementation focus areas: (1) Building Core Business Processes and Organization, (2) Acquiring Technology Solutions, (3) Information Reporting Requirements, and (4) Outreach and Communications.

The MRM Royalty in Kind Office is responsible for the administration of all pilot projects and ongoing operations. This Office will provide overall management and coordination of the Road Map implementation. An overall Road Map management plan will provide specific project management attention and tracking for each area of implementation focus. For each action element, detailed planning and implementation documents will be developed for approval



and integration into the overall Road Map management plan. The management plan will emphasize close coordination and integration with the MRM Reengineering Initiative.

**Business Processes and Organization**

Evolving the RIK Pilots to the future RIK activity will require processes, business skills and support infrastructure typical of producers and their affiliates that market their own oil and gas production. From an industry perspective, specific supply and marketing activities are generally organized and categorized into front office (agreements and logistics), mid office (contract administration, control, and risk management) and back office (settlement and accounting). This industry-proven approach will be evaluated and refined as a framework for evolving RIK operations within MRM.

As a part of its Reengineering Initiative, the MRM is creating a new Planning and Control process that will guide future asset management activities. This process will formulate a “top-down” view of the MRM asset universe to plan and control the execution of the RIK and RIV asset management options. It will create the capability to measure the effectiveness of both options to achieve expectations of fair market value for the MMS royalty share.

Employing this new planning and control framework, the MRM will develop a performance baseline that incorporates a fair market value revenue objective. Evaluation of RIK and RIV program performance versus their performance baseline will be an ongoing process. Implementation of the envisioned operational RIK activity, supported by the reengineered CAM process, will establish the MRM as a complete royalty asset manager. Upon completion of the Road Map, MRM will be well positioned to identify opportunities and implement the RIK option when it is determined to be the applicable and better asset management decision.

MMS will utilize the Operational Model approach to further evolve the RIK pilots and develop the future RIK business processes in a live environment. The Model will include the full range of operational activities and performance evaluation, and will adopt, to the extent practicable, common oil and gas industry business practices and process capabilities. In establishing and operating the Model, MMS will take advantage of the significant intellectual capital already developed by its workforce in conducting the pilot projects.

Senior MMS leadership for RIK operational activities will be provided by the Associate Director for MRM, in close consultation with the Associate Director for Policy and Management Improvement (PMI), and the Associate Director for Administration and Budget. The Associate Director for MRM will assure that overall resource requirements are provided to support the RIK activity.

**Automation Infrastructure**

The MMS is implementing systems infrastructure to support reengineered business processes. Accenture (formerly Andersen Consulting) has been engaged to develop two new royalty management systems – a Financial system and a CAM system. A relational database, data warehouse and a variety of technology tools will be developed to support both systems. Delivery date for the current development work is September 2001.

In a number of respects these new systems will deliver common functionality or capabilities that can be utilized to support RIK processes. However additional technology investments will be needed to support a fully operational RIK activity. The new business applications needed by RIK include a gas management system, an oil/liquids management system, and a trading/risk management system. These RIK systems will integrate and share data with the Financial and CAM systems.

**Information Requirements**

As a part of the further evolution of the RIK activity, MMS is seeking improvements in information collection. One of the key objectives of data gathering for RIK is to provide a less intrusive regulatory system, utilizing documents and systems that industry participants use in working between and among themselves. To accomplish this objective, the MRM will strive to: (1) eliminate reports that are solely intended for government reporting purposes, and (2) utilize standard industry reporting such as allocation statements, pipeline statements, and imbalance reports, rather than establishing new governmental reporting requirements. Furthermore, MRM will achieve streamlined information collection by capturing published information via electronic means.

**Outreach and Communications**

Proactive outreach and communication is critical to the successful implementation of an operational RIK activity. This Road Map to the Future sets out actions for the development of strategies and timelines to ensure that employees, program clientele, and the public are fully informed on the implementation process. MRM senior managers will play an active role in developing and implementing a comprehensive outreach and communications plan.

**The Future MRM**

The MMS is preparing to transition the RIK pilot activities to the future MRM RIK activity. The path for transition and implementation will involve significant changes in business process and focused integration with the reengineered core business processes of the MRM. Investments in information technology will also be needed to support the future business processes. Improvements in information collection will also be critical to maximize efficiency of operations and integration with industry business practices. Through these changes, the MRM will be well positioned to meet its vision of becoming a consummate royalty asset manager.

# 1

## Royalty in Kind -- Managing the Royalty Asset

Natural gas, oil and other minerals constitute some of our Nation's most important natural resources. Congress has entrusted the Department of Interior's MMS with ensuring that the Nation receives a fair and appropriate return from interests that lease or develop them. As the designated steward of our Nation's mineral resources on the Outer Continental Shelf (OCS), which contains nearly one-third of our Nation's natural gas and oil resources, the MMS strives to achieve the proper balance between providing energy for the American people and protecting unique and sensitive coastal and marine environments.

The MMS' MRM (formerly Royalty Management Program) is responsible for ensuring that all revenues from Federal and Indian mineral leases are efficiently, effectively, and accurately collected, accounted for, and disbursed to recipients. These revenues amount to approximately \$5 billion annually.

### 1.1 Background – Royalty in Kind and Reengineering

In April 1996, the MRM began a Reengineering Initiative to improve the business processes in its compliance operations. During the early stages of the initiative, MRM began to consider expanding the scope of the initiative to maximize benefits and to address the implications of automated systems that had aged well beyond their expected life cycle.

Then, on August 13, 1996, the Federal Oil and Gas Royalty Simplification and Fairness Act (RSFA) was enacted into law. RSFA amended the Federal Oil and Gas Royalty Management Act, the Outer Continental Shelf Lands Act, and the Mineral Leasing Act. In so doing, RSFA introduced a host of new requirements that significantly changed many of the MRM's historical operating assumptions and revenue processing methods. Processes and systems would need to be changed in the near term in order to comply with the law. However, MRM senior managers also realized that longer-term strategies dealing with fundamental business processes and aging computer systems had to be developed to remain cost-effective and responsive to customer needs.

In April 1997, the MRM expanded the compliance reengineering initiative to address all core business processes and support systems. Senior management articulated a vision for MRM to become a consummate royalty owner able to actively manage the royalty asset whether taken in value or in kind. MRM managers defined the design parameters and the stretch goals to guide the process design and development work. Specifically, the future processes and support systems needed to:

- Support the collection of royalties both in value and in kind
- Support delegated activities related to royalty administration
- Permit the use of a variety of methodologies to value production

Performance stretch goals were also established to challenge the design team as it explored new processes and new ways of doing business. In order to accomplish the stretch goals, the MRM needed to undergo dramatic change. The stretch goals are to:

- Ensure compliance with applicable laws, lease terms, and regulations for all leases in the shortest possible time, but no later than 3 years from the due date.
- Provide revenue recipients access to their money within 24 hours of the due date.

The ensuing process design and development work supported the recommendation adopted by senior management that MRM's future business operation be focused on two core, end-to-end business processes: the financial management process and the CAM process.

The financial management process will ensure the proper receipt and timely processing of money and information. The process will be centralized and will focus on payors, operators, Federal and State agencies, Tribal governments, and Indian allottees for information and money flow.

The CAM process will ensure that all revenues, whether received through in kind or in value royalties, are accurately reported and paid and that the compliance status of all leases is known. Regional basin groups will focus on defined producing areas and the properties located therein. The regional basin groups will manage a full range of compliance and asset management activities, including product valuation, verification and audit. The groups will structure analytical capability at the same level on which the industry operates--the property and the producing area.

Accenture has been engaged to develop two new royalty management systems needed to support the reengineered business process -- a Financial system and a CAM system. A relational database, data warehouse and a variety of technology tools will be developed to support both systems. Delivery date for the current development work is September 2001. The new financial and CAM processes and support systems will provide the foundation to help support the collection of royalties both in value and in kind.

At the outset of the Reengineering Initiative, MRM well understood how to manage the royalty asset when taken in value. However, considerable work needed to be done to gain the same understanding for managing the royalty asset in kind. As a consequence of this and other factors, an intense effort began in 1997 to analyze and evaluate the RIK asset management approach and to pilot a variety of RIK scenarios in a live environment.

## 1.2 Royalty in Kind Feasibility Study

In 1997, the MMS' PMI office initiated a feasibility study of the U. S. Government taking its oil and gas royalties from Federal leases in kind rather than in value. The study was conducted to evaluate the merits of RIK as an integral part of the royalty management process. The study was also responsive to a congressional directive to consider royalty in kind scenarios. The Congressional directive, included in MMS' Fiscal Year 1997 Budget Appropriations Committee Reports, urged MMS to consider additional pilot projects for both onshore and offshore Federal oil and gas leases. The final report, titled "1997 Royalty-in-Kind Feasibility Study" was issued in August 1997.

The primary objective of the study was to determine if the implementation of an RIK activity for Federal oil and gas leases appeared to be in the best interest of the United States, and, if so, under what circumstances. The study included an examination of three government RIK initiatives: 1) MMS' 1995 Royalty Gas Pilot; 2) Texas GLO RIK programs; and 3) the oil RIK program of the Canadian Province of Alberta. In addition, the study team conducted workshops to obtain public comment on RIK feasibility and surveyed natural gas marketing companies to understand this aspect of the business and to determine implications and potentials for marketing U.S. royalty gas production. Key observations, findings, conclusions and recommendations of the Study follow.

**MMS' 1995 Royalty Gas Marketing Pilot.** This early pilot effort documented that taking royalty gas at or near the wellhead is feasible and has merit. MMS gained important knowledge about RIK concepts and interactions with gas marketers.

**Texas General Land Office RIK Programs.** The Texas GLO takes a significant amount of its oil and gas production in kind. The GLO's gas RIK program provides gas to State facilities as an alternative to services provided by local utilities. The GLO staff reported that RIK revenue for oil and gas was five to seven percent more than in value revenues. On average, the GLO felt the program resulted in an overall revenue enhancement for the State.

**Canadian Province of Alberta RIK Program.** The Province of Alberta has managed a large-scale oil RIK program since 1974. According to the Province of Alberta, their program realizes a net increase in value and a reduction in administrative costs.

**Public Workshops on RIK Feasibility.** The MMS RIK public workshops were well attended, mostly by producers, gathering and transportation companies, marketers, and trade group representatives. Those at the workshops discussed and provided input on new ways to utilize RIK approaches for onshore and offshore oil and gas. The groups discussed a spectrum of potential RIK scenarios ranging from conservative to aggressive.

Based on the results of the workshops, MMS concluded that there was widespread support for MMS to take its oil and/or gas production in kind. The two primary reasons for the support were: 1) there appears to be a bona fide potential to reduce valuation disputes, increase certainty in royalty obligations, and decrease administrative burdens; and 2) evidence exists that an intelligently-developed RIK program could be revenue positive.

**Survey of Natural Gas Marketing Companies.** The survey of natural gas marketing companies provided convincing theoretical evidence that forming an alliance with one or several gas marketers could result in revenue enhancement for the U.S. Treasury. The survey also left MMS with questions to pursue regarding the various aspects of costs, pricing, assumption of risk, and authority to enter into an RIK program involving an energy marketer.

**Study Conclusions and Recommendations.** The RIK Feasibility Study Team concluded that, under the right circumstances, RIK could be workable, revenue neutral or positive, and administratively more efficient for MMS and industry. The Study Team recommended the following:

- Development of a long-term OCS pilot program with input from the States of Texas and Louisiana for the marketing of substantial volumes of U.S. royalty gas.
- Establishment of a joint MMS/Wyoming team to examine the viability of an oil RIK program in Wyoming.
- Establishment of a joint MMS/Texas team to identify and assess a range of possible RIK programs involving OCS 8(g) leases offshore Texas.
- Evaluate the potential for additional RIK pilot programs upon the successful implementation of any pilot project.

### **1.3 Piloting Royalty in Kind**

In response to the recommendations of the Study Team, MMS aggressively initiated a series of pilot projects with the following goals:

- To determine the circumstances (market conditions) in which RIK makes sense and identify those key success factors.
- To determine if the government (and industry) can save money by reducing the cost and burden of collecting royalties.
- To determine if RIK can provide accurate, simple and certain royalty collection.
- To determine if RIK can create value (revenue enhancement or neutrality) for the taxpayer.
- To integrate successful pilot projects into MRM operations.

The MMS commenced its first pilot with the State of Wyoming in 1998 and has continued expanding the initiative with pilots on the OCS. A discussion of the pilots, including a unique challenge MMS met in using RIK strategies to fill the SPR, follows.

**Royalty in Kind Oil from Federal Leases in Wyoming.** In 1998, MMS and the State of Wyoming initiated the first RIK Pilot Project. The pilot involved the sale of crude oil of different qualities produced from Federal leases in the Powder River and Big Horn Basins of Wyoming. The first competitive sale was for a six-month period. MMS held three additional competitive sales. For the subsequent sales, the State of Wyoming included royalty oil from State oil and gas leases. After the fifth competitive sale, RIK volumes exceeded 6,000 barrels per day. The State of Wyoming and MMS are currently conducting a performance evaluation of the Pilot Project.

**Royalty in Kind Natural Gas from Federal 8(g) Leases, Offshore Texas.** In 1998, MMS in partnership with the Texas GLO initiated the second RIK Pilot Project involving natural gas production from Federal oil and gas leases in the Texas 8(g) zone of the GOM. The primary goal of this pilot was to mutually explore ways to market Federal RIK gas from the 8(g) zone and State natural gas. Competitive sales began in June 1999 and initially focused on monthly spot market sales. Current monthly sales volumes are about 55 million cubic feet per day.

**Royalty in Kind Natural Gas from Federal Leases in the Gulf of Mexico.** In October 1999, MMS began the GOM Region Natural Gas Pilot by posting an Invitation for Bid (IFB) for royalty gas. Two successful bidders entered into contracts with MMS to take approximately 200 million cubic feet per day of royalty natural gas from specified locations near certain offshore Federal properties. In return, the bidders deliver natural gas volumes and qualities of equivalent value to a specified location.

On January 21, 2000, MMS posted two IFBs which, when combined, offered 465 million cubic feet per day of royalty gas. One of the successful bidders is taking royalty gas produced from offshore Federal leases and, in return, delivering natural gas to the General Services Administration (GSA) at an onshore pooling point. GSA uses the gas to meet energy needs of federal facilities. The other successful bidder is delivering gas from the Bluewater System to an onshore delivery point. The most recent offering was posted August 25, 2000. Currently, approximately 270 million cubic feet per day is sold through this pilot.

On August 1, 2000, MMS began taking 25 million cubic feet per day of royalty gas produced from Federal leases connected to the Matagorda Offshore Pipeline System and competitively selling it at onshore delivery points.

With an October 2000 IFB, MMS began marketing about 40 million cubic feet of royalty gas per day that is delivered to offshore pooling points. The gas is being offered in competitive public sales from the Tennessee and Columbia Gas Louisiana pools for the 2000/2001 winter heating season.

**Royalty in Kind Oil from Federal Leases in the Gulf of Mexico.** In August 2000, MMS posted its first IFB for the competitive sale of oil produced from offshore Federal leases in the GOM. This pilot project involves approximately 8,000 barrels of oil per day. Deliveries commenced on November 1, 2000.

**Use of Federal Royalty Oil to Refill the Strategic Petroleum Reserve.** On February 11, 1999, Energy Secretary Bill Richardson and Interior Secretary Bruce Babbitt announced an initiative to refill the SPR. The initiative took advantage of low oil prices at the time to rebuild the SPR, thereby enhancing national energy security. The strategy was for MMS to take royalty in kind from selected Federal leases in the GOM and use the oil to direct deliveries to the SPR. The total target volume was 28 million barrels to be delivered to four SPR sites located at Bayou Choctaw and West Hackberry in Louisiana and Big Hill and Bryan Mound in Texas. MMS completed deliveries in December 2000.

#### **1.4 Small Refiner Program**

The MMS and its predecessor agency, the U. S. Geological Survey (USGS), have, for many years, operated a Small Refiner Program whereby oil royalties are taken in kind from Federal leases and sold to qualified small refiners. The objective of the program is to help assure adequate supplies of crude oil are available at equitable prices to eligible refiners. The Small Refiner Program has been an important part of MMS and USGS royalty management operations. The business processes followed in operating the program have historically been complicated and labor intensive. The MMS has worked with parties affected by the Small Refiner Program in the last several years to bring about a number of improvements. These improvements include:

- Charging a fair market value through competitive bidding for its royalty share achieves the RIK program intent of providing small refiners with a reliable supply of inventory at equitable prices.
- MRM nominating oil volumes with operators eliminates many of the imbalance problems of the past.
- Refiners paying on actual deliveries they receive resolves many of the over/under delivery problems experienced in the past.
- Operators no longer reporting RIK sales on royalty reports other than to report transportation deductions and gravity bank adjustments.

In October 1999 and February 2000, MMS held small refiner sales for oil produced from offshore Federal leases in the GOM and Pacific. Both sales were successful, with over 60,000 barrels per day being committed under contract. The Small Refiner Program continues to be an important part of the MRM and will be integrated with the future RIK operational activity. This program will be administered by MRM's RIK Office.

#### **1.5 Developing the Future RIK Activity**

MMS continues to demonstrate through its RIK Pilots that the asset management concepts developed through the Reengineering Initiative present a viable approach to meeting MRM's vision of being a consummate asset manager in pursuit of fair market value and cost effective mineral revenue collection and disbursement services.

Based on the successes to date, senior MMS management made the decision to evolve the RIK initiative from its pilot phase to an operational activity. The



MRM's RIK Office will be responsible for managing the evolution of the RIK activity through implementation of the RIK Road Map to the Future. Senior management defined the following business objectives for the future RIK activity:

- Implement RIK where applicable and when it is an improvement over RIV
- Leverage the MRM position as an asset holder
- Minimize asset-related costs
- Reduce business cycle time
- Accelerate collections
- Adopt standard energy industry business practices and controls wherever feasible
- Take advantage of potential inter-agency synergies

MMS senior management also established the following performance objectives to be met when the RIK option is exercised.

- Confirm and reconcile within 90 days all production royalties taken in kind and sold by the MMS
- Accelerate the timing of revenue receipt by 5 days over the RIV approach.

Lastly, MMS senior management decided that the GOM will be the core strategic area for the evolution of the RIK activity. Regarding onshore Federal leases, MRM will pursue a strategy of identifying opportunities where the RIK asset management approach can be successful. These efforts will be pursued only with the support and participation of the affected States. For Indian lands, RIK opportunities will be explored with Tribes upon their request.

Through the implementation of the RIK activity, MRM and its customers stand to capitalize on the innovations introduced by the Reengineering Initiative and realize further significant benefits including:

- Accelerated cash flows will provide positive time value of money to the Treasury and program beneficiaries.
- A 90-day business cycle will provide early certainty and reduce MMS and industry costs.
- Simplified regulatory reporting will reduce industry cost and improve MRM's operations.

- Directly accessing information used by the industry to transact business will reduce MRM operating costs.
- Increased revenues to the Treasury through strategic use of the RIK asset management approach.
- Reduced overall business transaction costs to MMS and industry due to the inherent efficiency of the RIK approach in reducing valuation disputes.

Development of the future RIK activity will focus on refining business processes and organizational structure; acquisition of needed technology support; and definition of information requirements.

**1.5.1  
Business  
Processes and  
Organization**

Evolving the RIK Pilots to an operational RIK activity will require the further development of the processes, business skills and support infrastructure typical of oil and gas producers and their affiliates that market their own oil and gas production. Through the RIK Pilots, MMS has made a significant investment in its workforce business skills and infrastructure. However the depth and breadth of these skills and infrastructure will need to be enhanced over time, requiring investments in process design, information technology, workforce training and development, and transition specific to RIK operations.

As identified in Exhibit 1, oil and gas companies that market production typically organize and categorize their operations into front office (agreements and logistics), mid office (contract administration, control, and risk management) and back office (settlement and accounting). This industry-proven approach will be evaluated and refined as a framework for evolving RIK operations within MRM.

**Exhibit 1. Industry Framework for Marketing Oil and Gas**



MMS will establish an Operational Model to evolve the RIK initiative from its pilot phase to the future operating RIK activity. This Model will be used to further evaluate RIK pilot results, refine business processes, gain a more thorough understanding of the information technology requirements, and develop the future organizational structure, staffing, and training requirements.

The Operational Model is a vehicle for developing RIK business processes and systems in a live environment. The Model will include the full range of operational activities and performance evaluation, and will adopt, to the extent practicable, common oil and gas industry business practices and process capabilities. In establishing and operating the Model, MMS will take advantage of the significant intellectual capital already developed by its workforce in conducting the pilot projects.

### **1.5.2 Automation Infrastructure**

The MMS is now in the process of modernizing its systems infrastructure to support reengineered business processes. MMS engaged Accenture to develop two new royalty management systems – a Financial system and a CAM system. A relational database, a data warehouse, and a variety of technology tools will be developed to support both systems. Delivery date for the current development work is September 2001.

The technology solutions needed to support the RIK activity will integrate with the new Financial and CAM systems. The RIK support systems will share data with the new CAM system and utilize some of the functionality of the new Financial system. In addition, the MRM's new client/server relational database and technical infrastructure is expected to provide the right technical foundation for RIK.

However additional technology investments will be needed to support a fully operational RIK activity. The new business applications that are needed to support the RIK activity include a gas management system, an oil/liquids management system, and a trading/risk management system.

### **1.5.3 Information Requirements**

As a part of the further evolution of the RIK activity, MMS is seeking major improvements in information collection. A key objective of data gathering for RIK is to provide a less intrusive regulatory system, utilizing documents and systems that industry participants use in working between and among themselves. To accomplish this objective, the MRM will strive to: (1) eliminate reports that are made solely for the purpose of sending to the government, and (2) utilize standard industry reporting such as allocation statements, pipeline statements, and imbalance reports, rather than establishing new governmental reporting requirements.

Furthermore, MRM expects to achieve information collection improvements by capturing published information through electronic means. This approach to information collection will be more efficient and less burdensome to the MRM and industry.

**1.5.4  
Outreach and  
Communications**

As the RIK Road Map moves along the implementation path, it is vital that MMS employees, customers, and other stakeholders are fully engaged and participate in the transition. To accomplish this, high level strategies and associated timelines will be developed to guide MRM through the transition from an RIK pilot phase to operational RIK activities. The MRM has already engaged State governments as partners in its RIK Pilots. A comprehensive plan will be developed and implemented by MRM Managers to assure continuous outreach and communications with all interested parties during the transition.

**1.6  
Preparing for  
the  
Transition**

The path for pilot transition and implementation of the future MRM RIK activity will involve the development of new RIK business processes, support systems and organizational structures. The RIK development effort will align and fully integrate with MRM's financial and CAM operations. Improvements in information collection will be critical to maximize efficiency of operations and provide more direct access to data sources used by the industry. Through these changes, the MRM will be well positioned to meet its vision of becoming a consummate royalty asset manager.

To clearly define the transition and implementation path, the MMS has prepared the RIK Road Map to the Future.

# 2

## Royalty in Kind – Road Map to the Future

The MRM will transition the RIK Pilots into an operational RIK activity over a three-year period ending December 2003. Driving this transition will be a continuous and progressive increase in the scope and capabilities of the RIK Pilot Projects. Critical to the development and implementation of the future RIK business processes, organizational structures and support systems will be the Operational Model phase of the transition. Upon completion of this phase, the MMS will understand the full implications of the RIK business objectives, and will be well positioned to advance the pilot activities into the operational RIK activity.

This Road Map charts the activities and tasks that must be managed and coordinated along the path to evolve the future RIK activity. It presents clearly defined action elements, along with the associated timing and management accountability.

The Road Map calls for use of an Operational Model to manage and further evaluate the pilot projects and other RIK operations. Ongoing assessments of pilot operations are expected to provide a much better understanding of when the RIK option is a good business decision and an improvement over the RIV option. Pilot outcomes will also guide the design and evolution of the future RIK operational activity. It is essential that the RIK development effort be aligned with the Federal budgetary process and established schedules for implementation of MRM's CAM development initiative.

The remainder of this section describes the RIK Road Map.

### **RIK Management**

MMS senior leadership for the RIK initiative will be provided by the Associate Director for MRM, in close consultation with the Associate Director for PMI, and the Associate Director for Administration and Budget. The Associate Director for MRM will assure that overall resource requirements are provided to accommodate the expanding RIK Pilots and Operational Model. Overall management and coordination of Road Map implementation will be provided by the MRM RIK Office. An overall Road Map project management plan will be developed and maintained to provide specific project management focus, tracking, and integration for each area of implementation focus and each action element.

Critical to the development and implementation will be close coordination and integration with the MRM's Reengineering Initiative. The current development of the CAM process is providing a critical foundation for the envisioned future RIK activity. It will be essential that MRM managers involved in the CAM and RIK development efforts communicate and coordinate activities closely to achieve the MMS asset management objectives.

## **Elements of the Road Map**

This Road Map groups action elements into four major areas that focus implementation steps toward achieving specific objectives. Many of the action elements will have interdependencies that will be specifically addressed and monitored at a detailed level by program management. In addition, the MRM leadership will manage interdependencies between these RIK action elements and related Reengineering activities underway and ongoing in the financial management and CAM operational areas.

The major areas of implementation focus are:

- 2.1** Building Core Business Processes and Organization
- 2.2** Acquiring Technology Solutions
- 2.3** Changing Information Reporting Requirements
- 2.4** Outreach and Communications

## **Implementation at a Global Level**

Exhibit 2 depicts the overall time lines for the major areas of implementation focus. The remainder of this section describes the specific action elements within each major area. Exhibit 5 contains a summary of these action elements. Many of these elements will require further detailed plans that will be approved by senior management. The MRM RIK Office will utilize these additional detailed plans to execute and coordinate work efforts and track progress against critical path time lines

**Exhibit 2 – RIK Road Map Timeline**

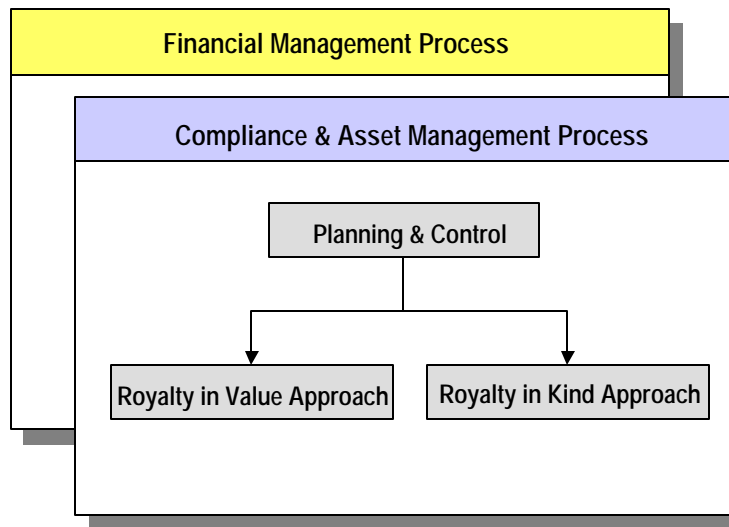
Implementation Focus Area	2001	2002	2003
<i>Building Core Business Processes and Organization Structure</i>	<ul style="list-style-type: none"> <li>Mobilize Operational Model Organization</li> <li>Perform Portfolio Analysis</li> <li>Conduct Property Data Acquisition Activities</li> </ul>	<ul style="list-style-type: none"> <li>Design RIK Planning &amp; Control Process</li> <li>Develop RIK Performance Baseline</li> <li>Develop Process/Technology Infrastructure Requirements</li> </ul>	<ul style="list-style-type: none"> <li>Conduct Operational Model to Manage/ Evaluate RIK Pilots &amp; Activities</li> </ul>
<i>Acquiring Technology Solutions</i>	<ul style="list-style-type: none"> <li>Develop Requirements &amp; Modify Contract</li> <li>Install Technology Solutions</li> </ul>		
<i>Changing Information Reporting Requirements</i>		<ul style="list-style-type: none"> <li>Transition</li> </ul>	<ul style="list-style-type: none"> <li>Modify Reporting</li> <li>Obtain OMB Approval</li> </ul>
<i>Outreach and Communications</i>	<ul style="list-style-type: none"> <li>Prepare Outreach/Communications Plan</li> <li>Ongoing Communications</li> </ul>		

**2.1 Building Core Business Processes and Organization**

In the November 1998 “Road Map to the 21<sup>st</sup> Century,” the MRM presented its plan for reengineering MRM’s business processes and support systems. The Reengineering Road Map called for development and operation of two end-to-end, core business processes – financial management and CAM. These new asset management processes will be highly integrated, focused on outcomes and less costly to operate. MRM is developing and implementing two systems to support the asset management processes. The Financial and CAM systems are scheduled for completion in September 2001.

The CAM process will encompass two business approaches – RIV asset management and RIK asset management. The 1998 Reengineering Road Map focused primarily on the design and development of business processes to support the RIV asset management approach. At that time it was understood that considerable work still needed to be done to design and fully integrate the RIK approach into the overall CAM process. The addition of the RIK approach is essential to fully implement the envisioned CAM process. The RIK Road Map is the vehicle to achieve this implementation.

In this section we describe how the RIK approach will fit into the overall asset management framework currently under development, as well as the additional functionality needed to operate the future RIK activity. Exhibit 3 below depicts this framework.

**Exhibit 3. The Future MRM Asset Management Framework****2.1.1  
Planning &  
Control  
Framework**

The MRM will create a new top-down Planning and Control process that will guide future asset management activities. This process will formulate a “top-down” view of the MRM asset universe to plan and control the execution of the RIK and RIV options. It will also measure the effectiveness of both options to achieve expectations of fair market value for the MMS royalty share of produced oil and gas.

This new process will create a comprehensive view of the MMS property portfolio. It will utilize detailed property reference data, royalty results and other information captured in MMS databases by CAM operations. The planning and control process will:

- Allow the efficient creation of royalty revenue expectations at various key organizational and geographic areas in advance of oil and gas production.
- Facilitate a structured analysis of such expectations versus prior forecasts.
- Enable a prioritization of resources and further detailed asset management activities.
- Integrate directly with the CAM process at the property level.
- Permit the continuous improvement and enhancement of these expectations as additional property knowledge is gained.



**2.1.2  
Portfolio  
Analysis and  
Segmentation**

Implementation of the new Planning and Control framework for asset management requires a portfolio analysis to segment the MRM universe into areas of interest and their component Minerals Management Units (MMU's). MMU's represent logical groupings of properties considering controlling geographic, geological, geopolitical, commodity or logistical factors.

Individual MMU's will be aligned with the RIK or RIV business approaches. Filtering criteria, reflecting RIK pilot lessons learned to date, will be employed to identify those MMU's with positive RIK attributes. Those RIK candidates will be ranked to establish a priority for inclusion in the RIK activity. The filtering and prioritization criteria will be revised over time based on new knowledge and experience. Once properties are placed into the operational RIK activity, those properties will remain in an RIK status until portfolio analysis supports RIV.

**2.1.3  
Operational  
Model Phase**

The Operational Model phase is the next logical step to further evolve the RIK pilot projects and develop the future operational RIK activity. The Model will build upon previous RIK pilot successes and experiences and elevate RIK operations to a level of higher visibility and strategic importance within the MRM.

The purpose and objectives of the Model are to:

- provide a vehicle for the management and continuous evaluation of the RIK pilot projects
- manage other RIK operations and projects
- design and implement core RIK business processes
- actively manage an expanding RIK portfolio
- define information technology requirements and support the development of needed automated support systems
- address organization, staff development and training requirements

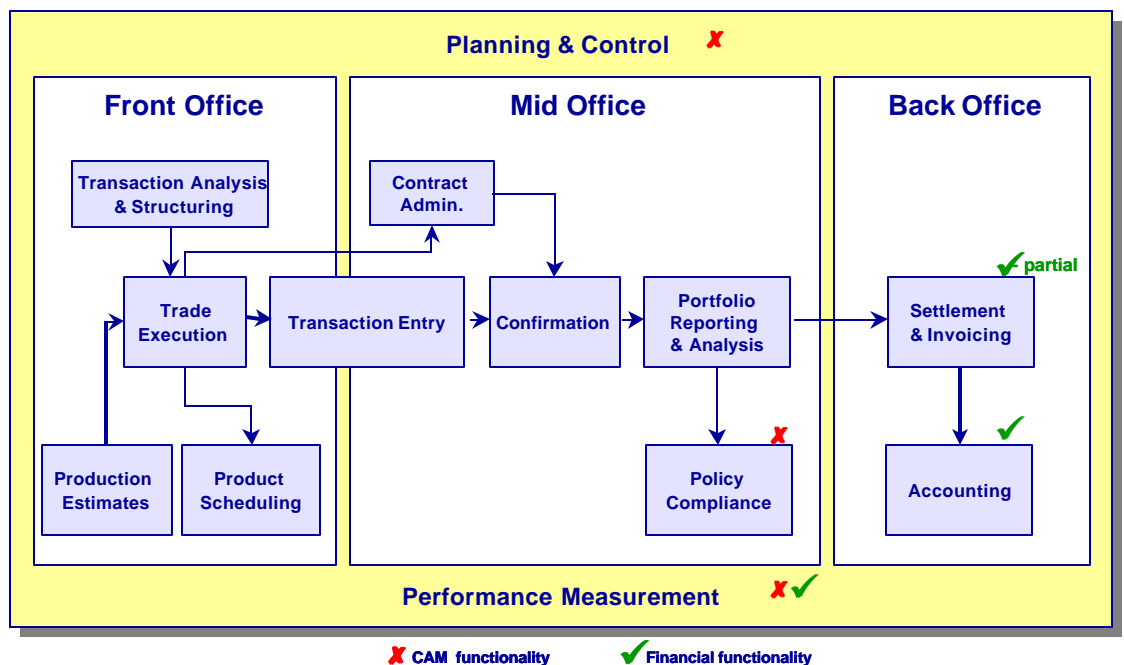
The RIK Road Map implementation will focus on GOM oil and gas production. At present, about 84 percent of the Federal oil and gas revenues are produced from OCS leases. The OCS offers many advantages to the development of the RIK business activity such as close proximity to market centers, access to extensive systems for the delivery of mineral production to buyers, and a relatively few lease contracts to administer. The Road Map also includes actions designed to improve the MMS Small Refiner Program and guidance for the continuation of RIK initiatives for onshore Federal leases such as with the States of Wyoming and Texas. Efforts to identify further RIK opportunities for onshore Federal leases will be pursued in close consultation with affected States. RIK opportunities for Indian lands will be explored with Indian Tribes upon their request.

**2.1.4  
New Processes  
and Capabilities**

Implementing the RIK business activity will require the MRM to acquire the skills and support infrastructure typical of oil and gas producers that market their own oil and gas production. The depth and breadth of these skills and infrastructure will increase over time, requiring additional investments in process design, information technology and work force training and transition specific to the RIK business activity.

Within the oil and gas industry specific supply and marketing skills and organizational infrastructure are typically categorized into front office, mid office and back office components as identified in the chart below. New process capabilities must be built to effectively identify RIK opportunities. Other capabilities will be required to execute and effectively administer the RIK option. These activities include pricing and agreement structuring, production estimation and scheduling, contract administration, risk analysis, and a full range of billing and accounting functions. In some cases, the Financial and CAM systems will deliver common functionality or capabilities that can be utilized in RIK operations. These are principally related to planning and control, performance measurement and financial accounting as indicated by Exhibit 4.

**Exhibit 4. Financial and CAM Systems Support for the Future RIK Activity**



In the initial phases of the Operational Model, processes will continue to be largely manual. Development of enhanced RIK processes and technology infrastructure will be responsive to the progression of the RIK development effort.

**2.1.5  
Future RIK  
Organization  
Structure**

The MRM was created through a major reorganization of the Royalty Management Program. As a part of the reorganization, an RIK Office was created that would be led by a manager reporting directly to the Associate Director for MRM. The RIK organization structure was anticipated initially to support the existing Small Refiner Program and several existing RIK pilot contracts. This organization structure will need to evolve to fully support the operational RIK activity.

The MRM RIK Office is envisioned to be organized around an Asset Portfolio Management Concept. This Office will directly manage the envisioned front-office and mid-office activities, and coordinate supporting back office activities to be performed by other organizations within the MRM.

**2.1.6  
Human  
Resource  
Development**

The future RIK activity will require MMS staff training in current business approaches and practices related to the sale and other dispositions of oil and gas production. These activities fall in the areas of contracting for sale, volumetric tracking, sales invoicing, production nominations, scheduling and balancing. Considerable experience has been gained in these areas by MMS staff through the RIK Pilot Projects. MMS will rely, in part, on this experience base to further develop the MMS workforce who will support the future RIK activity. Further workforce training, transition and development is a specific action element in the Road Map and will be addressed through the Operational Model. Ongoing staff development plans will continue to be critical to the long-term success of the RIK activity.

**2.1.7  
Partnerships**

The continued involvement and cooperation of our industry and State partners will be essential to the further development of the RIK activity. A key critical path enabler is the availability of logistics and processing information applicable to candidate RIK properties. In many cases, this operational information does not currently exist within the MMS and must be obtained from operators or other external sources. The RIK Office will plan for and focus its efforts to obtain this critical start-up information on its RIK portfolio in the most efficient manner.

Implementation of the RIK business approach will establish the MMS as a key participant in business activities for which standard or customary business practices have emerged over the years. The MRM will adopt, to the extent practicable, standard industry business practices in its dealings with operators, customers and other stakeholders. The MRM will identify opportunities for and recommend changes in law, regulations and government policy to permit the adoption of standard, prudent industry business practices. As mentioned in the next section, the technology solutions supporting RIK business operations will consider current energy industry strategic direction, including the adoption of e-Commerce.

MMS has established successful RIK partnerships with the States of Wyoming and Texas, and will pursue partnerships with other States. The MRM will also pursue opportunities for inter-agency synergies, such as its current arrangement with the General Services Administration whereby Federal facilities are supplied with RIK gas.

### Major Action Elements, Time Lines, and Accountability

The major action elements, time lines, and accountable parties for this implementation focus area follow:

1. Mobilize Operational Model Organization.
 

Time Line:	2/01
Accountable:	RIK Manager
  
2. Conduct Evaluation of Wyoming and Texas 8(g) RIK Pilot Effort.
 

Time Line:	1/01 - 3/01
Accountable:	AD, PMI/RIK Manager
  
3. Perform portfolio analysis of GOM, utilizing filtering criteria developed from past pilots; develop prioritized listing of high RIK-potential properties.
 

Time Line:	3/01 - 6/01
Accountable:	RIK Manager/CAM Managers
  
4. Advance near-term opportunity for GOM crude oil.
 

Time Line:	2/01 - 8/01
Accountable:	RIK Manager
  
5. Develop a process for and conduct ongoing MRM efforts to obtain property, logistics and processing information on high potential RIK properties.
 

Time Line:	4/01 - Beyond
Accountable:	RIK Manager/CAM Managers
  
6. Develop the RIK performance baseline addressing key operational preferences and external performance metrics.
 

Time Line:	4/01 - 9/01
Accountable:	RIK Manager
  
7. Complete CAM detailed design of the top-down planning and control process and the framework for the RIK performance measurement.
 

Time Line:	1/01 - 6/01
Accountable:	RIK Manager/CAM Managers

8. Align MRM resources consistent with the RIK pilot scale and scope.
 

Time Line:	1/01 - Beyond
Accountable:	AD, MRM
  
9. Conduct Operational Model operations, evaluate pilots, refine business processes, and support development of technology solutions in a live environment.
 

Time Line:	3/01 - 9/03
Accountable:	RIK Manager
  
10. Develop functional requirements for RIK core business processes and technology infrastructure, fully integrated with CAM and financial management operations, processes, and systems.
 

Time Line:	4/01 - 12/01
Accountable:	MRM Managers
  
11. Develop and execute plan for human resource transition, training and development.
 

Time Line:	4/01- 12/03
Accountable:	RIK Manager/Center for Excellence Manager

## 2.2 Acquiring Technology Solutions

Implementation of an operational RIK business activity will require the acquisition of enabling automated systems support. The technology solutions needed to support the RIK activity will integrate with the new Financial and CAM systems now being developed by MRM. The RIK support systems will share data with the new CAM system and utilize some of the functionality of the new Financial system. In addition, the MRM's new client/server relational database and technical infrastructure will provide the right technical foundation for RIK.

The information systems needed for RIK include a gas management system, liquids management system, and a trading/risk management system. Commercial off-the-shelf (COTS) solutions are available in each of these areas. These applications are real-time and web-based.

Each of the needed applications will be tailored to fit the RIK business activity and integrated or interfaced with the MRM Financial system, CAM system, and technical infrastructure. Further, the nature of oil and gas transportation and trading markets requires a flexible application architecture to support timely changes in response to market shifts. The industry's contracting, trading, scheduling, and invoicing processes have evolved significantly in the past, and will continue to change over the next five years. The RIK information systems will need to be rapidly updated to respond to these future changes.

### 2.2.1 Contracting Strategy

Development of the MRM RIK activity has been identified as the logical next step beyond the Reengineering Initiative to achieve the asset management objectives of the MMS. The RIK activity presents new business processes and new technology solutions are needed to support those processes. Current Financial and CAM systems development will create several elements of the technical infrastructure and database foundation needed to support the future RIK activity. It will be critical in the acquisition strategy that MMS assure that RIK solutions will integrate with MRM's reengineered systems. The asset management business processes related to determining if royalty should be taken in kind, and the subsequent monitoring of the physical and financial activities of ownership, sale and revenue generation are different but directly linked to activities associated with MRM's financial and CAM business processes and support systems.

The acquisition strategy to be pursued will be predicated on the determination that RIK software and hardware requirements and integration services are within the scope of the current Accenture contract. This includes the operation and support of any RIK implementations during the term of the current contract. As both the financial and asset management components of the new information technology environment are being developed and tested, the RIK Office will continue to use manual processes and procedures. Manual processes and outputs will be managed to conform to the current customized software environment. As both the financial and CAM requirements are evolved through detailed system design and build activities a concurrent evaluation will be conducted to determine the similarities and differences of the RIK and RIV data and system requirements. This evaluation will be critical to determining how the current Financial/CAM systems implementation can commonly serve both RIK and RIV in the most efficient and effective manner, and at the same time establish the framework for defining those data and system requirements needed to support the future RIK activity.

It is anticipated that acquisition of RIK support systems will be accomplished through the task order provisions of the current Accenture contract. Task orders will be issued to both evaluate and implement solutions, with an emphasis on maximizing the use of standard industry practices, web-enabled technology, and integration with the new software and hardware environment being established under the Reengineering Initiative.

Task orders will reflect the incremental growth and the experience gained through the RIK Operational Model efforts. Initial focus will be on the gas and the liquids management systems that are needed. These systems will be developed concurrently but in separate phases. Trading/risk management systems will be pursued as the business need advances. A best-of-breed methodology will be used to evaluate COTS gas, liquids, and trading/risk management systems. The systems to be installed will be scalable and proportional to the sales volume activities and business practices developed by the Operational Model and will have sufficient capacity and capability to support the permanent RIK activity.

It is expected that the initial set of parameters for the gas and the liquids management systems will be established by December 2001. Development of

the base functionality of the management systems is expected to begin April 2002 and be completed September 2003.

### **2.2.2 Managing Risk**

To ensure that the project achieves its goals, several performance-based measurements are included as part of the overall project plan. These measurements are designed to ensure that deviations from the plan are identified, progress is monitored, and milestones are met. These measurements include the use of modular builds to mitigate the risk of the systems development effort, internal reviews by an Integrated Project Team (IPT) to ensure the project is on schedule and on budget, and the use of quality review sessions with the contractor to ensure functionality and customer satisfaction is delivered. In addition to IPT milestone reviews, the RIK system implementation project will undergo internal reviews by the MRM RIK Office. Specific performance goals to be evaluated include schedule, costs, contractor performance, and deliverable quality evaluations.

Upon implementation, RIK performance measures will be assessed, including the timeliness of receipts and disbursements, accuracy of receipts and payments, and the achievement of expected fair market values. These performance measures will be tracked to support operational RIK/RIV decisions.

#### **Major Action Elements, Time Lines, and Accountability**

The major action elements, time lines, and accountable parties for this implementation focus area follow:

1. Develop preliminary acquisition strategy, including sequencing of deliverables, and identify funding approach.

Time Line: 1/01  
Accountable: IPT/RIK Manager

2. Prepare Office of Management and Budget (OMB) 300(b) and related documentation for budget submission and approval.

Time Line: 1/01  
Accountable: IPT/RIK Manager

3. Obtain Department of the Interior Information Resource Management Review Council Approval to proceed.

Time Line: 3/01  
Accountable: IPT/RIK Manager

4. Conduct ongoing detailed analysis of RIK pilots and Operational Model and develop preliminary designs for gas, liquids, and trading/risk management systems.

Time Line	4/01 – 12/01
Accountable	IPT/RIK Manager/ Information Technology Center (ITC) Manager

5. Request proposals and modify contract for software development, integration, and operations.

Time Line	10/01 – 3/02
Accountable	IPT/RIK Manager/ITC Manager

6. Prepare and implement contract management plan, including requirements, design and implementation of solutions, integrated with the CAM and Financial systems.

Time Line	4/02 – 9/03
Accountable	IPT/ITC Manager/RIK Manager

### 2.3 Changing Information Reporting Requirements

The principal objectives of action elements in this area of implementation focus are to complete the definition of future information requirements, identify the most efficient method to collect information, develop capability to capture the information, and transition to the new information reporting requirements. Major improvements are being sought for the capture of published information through electronic means, making the information gathering process more efficient and less burdensome to the MRM and industry. Continued improvements are being sought for reporting requirements of payors and operators. These changes include the elimination and streamlining of existing regulatory reporting forms and the utilization of alternative data sources.

One of the key objectives of data gathering for RIK asset management is to provide a less intrusive regulatory system, utilizing documents and systems that industry uses. To accomplish this objective, the MRM will strive to: (1) eliminate reports that are made solely for the purpose of sending to the government, and (2) utilize standard industry reporting such as allocation statements, pipeline statements, and imbalance reports, rather than establishing new governmental reporting requirements.

The opportunities for improvements in information collection that will be sought include:

- Eliminate the Report of Sales and Royalty Remittance Form (MMS-2014) and associated reporting requirements for properties with royalties paid in kind.
- Identify alternative data sources for gathering production-related information for the OCS to support RIK operations. Further simplify



data collected from the Oil and Gas Operations Report (MMS-4054), while still meeting the production data requirements of the MMS' Offshore Minerals Management Program and the Bureau of Land Management's Inspection and Enforcement Program.

- Review and identify opportunities for production information sharing in States where RIK is being utilized. To the extent practicable, establish data sharing processes and eliminate duplicative reporting requirements.
- Review and identify alternative data sources for obtaining data through electronic means. Within industry practices, transactional data, such as pipeline movements, are published via electronic means as a manner of informing affected parties.

Making the regulatory reporting changes a reality will require careful planning for transition and implementation. The tasks must include further outreach and consultation with affected constituencies, obtaining regulatory approvals, getting necessary changes for electronic commerce/electronic data interchange, and establishing a logical and doable transition schedule for shifting to new reporting schemes.

### **Major Action Elements, Time Lines, and Accountability**

The major action elements, time lines, and accountable parties for this implementation focus area follow:

1. Define production data elements and report formats.

Time Line: 4/01 - 9/01  
Accountable: MRM Managers

2. Define RIK transactional data elements and alternative means for obtaining data.

Time Line: 4/01 - 12/01  
Accountable: MRM Managers

3. Prepare proposed forms changes (and related regulation changes) conduct customer and constituency outreach, and submit changes for OMB approval

Time Line: 4/02 - 9/02  
Accountable: MRM Managers

4. Provide OMB approved reporting formats to industry for systems modifications.

Time Line: 1/03  
Accountable: MRM Managers

5. Prepare and issue new operator reporting handbooks to industry.

Time Line:           4/03 – 6/03  
Accountable:       MRM Managers

6. Complete operator reporting training for revised forms and requirements.

Time Line:           7/03 – 10/03  
Accountable:       MRM Managers

7. Conduct MRM in-house training on new production reporting forms.

Time Line:           6/03 – 9/03  
Accountable:       MRM Managers

8. Institute new reporting requirements.

Time Line:           12/03  
Accountable:       MRM Managers

9. Develop systems capability to capture alternative data sources

Time Line:           12/03  
Accountable:       RIK Manager/ITC Manager

## **2.4 Outreach and Communications**

Effective outreach and communications is essential to the success of any project. Outreach and communications on the RIK Initiative will play a critical role in the dissemination of information throughout the MMS, Congress, MMS constituents and industry.

Organization and people changes will be among the more difficult and complex challenges MMS will face as MRM integrates an RIK business activity into its operations. MMS must provide its own employees as well as the public with the right information at the right time. To accomplish this, high level strategies and associated timelines must be developed to guide MRM through the transition from an RIK pilot phase to operational RIK activities.

As with any new initiative, increased levels of both internal and external communications are a necessity. As the initiative progresses towards full implementation it is essential that employees, customers, and constituencies are kept informed through a variety of media such as internal and external outreach sessions, employee forums, and senior management updates. As the RIK Initiative progresses, it will be imperative that MRM senior managers, supervisors, and future leaders play an active role in developing and executing the outreach and communications strategy.

MMS senior management is committed to building a MRM of the future that focuses on both RIV and RIK business approaches to provide the maximum benefit for the American taxpayer. A fundamental commitment to outreach and communications is vital to ensure the success of both the RIV and RIK activities.

### **Major Action Elements, Time Lines, and Accountability**

The major action elements, time lines, and accountable parties for this implementation focus area follow:

1. Prepare comprehensive outreach and communications plan to integrate with MRM Reengineering communications strategy.

Time Line: 4/01 – 6/01  
Accountable: MRM Managers

2. Conduct ongoing outreach and communications with customers, clientele, and MMS employees.

Time Line: 7/01 – 12/03  
Accountable: MRM Managers

### **2.5 Summary of Action Elements**

Exhibit 5 presents in summarized form the action elements that need to be completed to accomplish a successful implementation of RIK business processes and support systems.

**Exhibit 5. Summary of Implementation Action Elements**

<b>Focus Area and Action Elements</b>	<b>Time Line</b>	<b>Accountable</b>
<b>2.1 Building Core Business Processes and Organization Structure</b>		
1. Mobilize Operational Model Organization.	2/01	RIK Manager
2. Conduct Evaluation of Wyoming and Texas 8(G) RIK Pilot Efforts.	1/01 – 3/01	AD, PMI/ RIK Manager
3. Perform portfolio analysis of GOM, utilizing filtering criteria developed from past pilots; develop prioritized listing of high RIK-potential properties.	3/01 – 6/01	RIK Manager/ CAM Managers
4. Advance near-term opportunity for GOM crude oil.	2/01 – 8/01	RIK Manager
5. Develop a process for and conduct ongoing MRM efforts to obtain property, logistics and processing information on high potential RIK properties.	4/01 – Beyond	RIK Manager/ CAM Managers
6. Develop the RIK performance baseline addressing key operational preferences and external performance metrics.	4/01 – 9/01	RIK Manager
7. Complete detailed design of the top-down planning and control process and the framework for the RIK performance measurement.	1/01 – 6/01	RIK Manager/ CAM Managers
8. Align MRM resources consistent with the scale and scope of the RIK activity.	1/01–Beyond	AD, MRM
9. Conduct Operational Model Operations, evaluate pilots, refine business processes, and support development of technology solutions in a live environment.	3/01 – 9/03	RIK Manager
10. Develop functional requirements for RIK core business process and technology infrastructure, fully integrated with CAM and financial management operations.	4/01 – 12/01	MRM Managers
11. Develop and execute plan for human resource transition, training, and development.	4/01 – 12/03	RIK Manager/ Center for Excellence Manager

<b>2.2 Acquiring Technology Solutions</b>		
1. Develop preliminary acquisition strategy, including sequencing of deliverables, and identify funding approach.	1/01	IPT/ RIK Manager
2. Prepare OMB 300(b) and related documentation for submission and approval.	1/01	IPT/ RIK Manager
3. Obtain Department of the Interior Information Resource Management Review Council Approval to proceed.	3/01	IPT/ RIK Manager
4. Conduct ongoing detailed analysis of RIK pilots and Operational Model and develop preliminary designs for gas, liquids, and trading/risk management systems	4/01 – 12/01	IPT/ RIK Manager/ ITC Manager
5. Request proposals and modify contract for software, integration, and operations.	10/01 – 3/02	IPT/ ITC Manager/ RIK Manager
6. Prepare and implement contract management plan, including requirements, design and implementation of solutions, integrated with the CAM and Financial systems.	4/02 – 9/03	IPT/ ITC Manager/ RIK Manager

<b>Focus Area and Action Elements</b>	<b>Time Line</b>	<b>Accountable</b>
<b>2.3 Changing Information Reporting Requirements</b>		
1. Define production data elements and report formats.	4/01 – 9/01	MRM Managers
2. Define RIK transactional data elements and alternative means for obtaining data.	4/01 – 12/01	MRM Managers
3. Prepare proposed form changes (and related regulation changes), conduct customer and constituency outreach, and submit changes for OMB approval.	4/02 – 9/02	MRM Managers
4. Provide OMB approved reporting formats to industry for systems modification.	1/03	MRM Managers
5. Prepare and issue new operator reporting handbooks to industry.	4/03 – 6/03	MRM Managers
6. Conduct operator reporting training for revised forms and requirements.	7/03 – 10/03	MRM Managers
7. Conduct MRM in-house training on new production reporting forms.	6/03 – 9/03	MRM Managers
8. Institute new reporting requirements.	12/03	MRM Managers
9. Develop system capability to capture alternative data sources.	12/03	RIK Manager/ ITC Manager

<b>2.4 Outreach and Communications</b>		
1. Prepare comprehensive outreach and communications plan to integrate with MRM Reengineering Communications strategy	4/01 – 6/01	MRM Managers
2. Conduct ongoing outreach and communications with customers, clientele, and MMS employees.	7/01 – 12/03	MRM Managers



---

## **Royalty in Kind, Reengineering and Related Studies**

Reengineering Royalty Management Program Business Processes and Support Systems Road Map to the 21<sup>st</sup> Century, November 1998

Preliminary Design Concepts of the RMP Reengineering Team, March 1998

RMP Technical Assessment; Performance Engineering Corporation, January 1998

MMS Oil RIK Value and Volume Reporting Recommendations, September 1997

1997 Royalty in Kind Feasibility Study, August 1997

MMS/PMI State Benchmarking Study, August 1997

RMP Reengineering Design Team Benchmarking Summaries

---

# B

## Glossary

CAM	Compliance and Asset Management
COTS	Commercial Off-The-Shelf
GLO	Texas General Land Office
GOM	Gulf of Mexico
GSA	General Services Administration
IFB	Invitation for Bid
IPT	Integrated Project Team
ITC	Information Technology Center
MMS	Minerals Management Service
MMU	Minerals Management Units
MRM	Minerals Revenue Management (formerly Royalty Management Program)
OCS	Outer Continental Shelf
OMB	Office of Management and Budget
PMI	Policy and Management Improvement
RIK	Royalty in Kind
RIV	Royalty in Value
RSFA	Federal Oil and Gas Royalty Simplification and Fairness Act
SPR	Strategic Petroleum Reserve
USGS	U. S. Geological Survey