OFHEO
Office of Examination and Oversight

Examination Guidance

Issuance Date: Dec-31-1998 Doc. #: EG-98-01
Subject: Risk-based Examinations - Evaluation Criteria

To: All OFHEO Examining Personnel

OFHEO conducts its risk-based examination work in each of the ten program areas by using examination objectives, assessment factors and evaluation criteria. These examination objectives, assessment factors and evaluation criteria form the standards used in the examination program to assess each Enterprise's financial safety and soundness. By sharing these standards with its examiners and the Enterprises, OFHEO provides the transparency necessary to ensure the fair and equitable application of the program. The discrete aspects and interplay of these standards are important to understand the program and the context of the judgements that accrue from their application.

The following brief descriptions summarize the importance and interplay of these standards.

> **Examination objectives** are broad in scope. For each program area there are four to six examination objectives. These are the broad statements of what OFHEO's examiners will determine through their work and are substantially similar across the ten program areas. The examination objectives are the foundation for all activities and work plans in OEO. The objectives allow OFHEO's examination oversight to be focused and efficient. They also help OFHEO to ensure consistent and appropriate application of policy and resources. Because of their breadth and role, examination objectives are not subject to frequent revision. (A more detailed discussion and a listing of the examination objectives in each of the ten program areas are found in OFHEO's Examination Handbook.)
>
> Together with the examination objectives, the **assessment factors** form the basis for OEO's evaluating the qualitative and quantitative features of risk and risk management in the Enterprises. In fact, OEO's examination and oversight activities are centered on the assessment factors. There are between six and thirteen assessment factors for each program area. The assessment factors link directly to one or more examination objectives, and are the means OEO uses to achieve the examination objectives. Before OEO can make a determination on an examination objective, examiners must make judgements on each of the assessment factors supporting that examination objective. Assessment factors are subject to periodic review, but they are not expected to change frequently.

(A more detailed discussion and a listing of the assessment factors in each of the ten program areas are found in OFHEO's Examination Handbook.)

Underlying the assessment factors are the **evaluation criteria**. For each assessment factor, OEO has developed evaluation criteria. These evaluation criteria are designed to assist the examiners and to ensure that the examination work done across the Enterprises is consistent. The evaluation criteria detail items that examiners may consider when making decisions about the assessment factors. There are hundreds of evaluation criteria. Examiners will be guided by the evaluation criteria when rendering judgments on the assessment factors. It is neither expected nor appropriate for examiners in all cases to perform or document examination activities on every one of the evaluation criteria. Depending on the condition of the Enterprise, the industry and the economy, such examination work may be unnecessary and/or inconsistent with the fundamentals of the risk-based approach to examination and oversight. Because the evaluation criteria are more likely to change over time than either the examination objectives or the assessment factors, the evaluation criteria are included in the appendix to the Examination Handbook as *examination guidance.*

The following pages detail the evaluation criteria to be considered by OFHEO's examiners in conducting the risk-based examinations at the Enterprises.

Mark A. Kinsey, Acting Director
Office of Federal Housing Enterprise Oversight

G. Scott Calhoun, Director
Office of Examination and Oversight

OFHEO Examination Program
Credit Risk

ASSESSMENT FACTOR	EVALUTION CRITERIA
1. Determine the degree and trend of diversification of credit risk. Determine whether there are any noteworthy concentrations. For the concentrations identified, determine the nature of any identifiable trends. Determine whether the actual profile of credit risk is in compliance with prescribed limits or guidelines.	• Distribution of mortgage portfolio by LTV range • Distribution of mortgage portfolio by FRM versus ARM; long versus medium/short term • Distribution of mortgage portfolio by UPB and geographic region • Distribution of serious delinquencies by geographic region; product type; origination year; occupancy status; and at-risk versus shared-risk • Percentage of mortgage portfolio in peak default years (3-5 years from the year of origination) • Distribution of sources of credit-related losses by geographic region; origination year, and product type • Distribution of mortgage portfolio by applicable score • Distribution of REO acquisitions and sales by region • Provision for loan losses • Foreclosure forecasts and REO activity • Distribution of mortgage portfolio by seller/servicer • Distribution of mortgage portfolio by TPO and non-TPO • Concentrations in exposures to mortgage insurance companies • Concentrations in forms of credit enhancements Multifamily-specific criteria: • Distribution of mortgage portfolio by DSCR ranges • Distribution of serious delinquencies by geographic region; DSCR; product type; origination year; and at-risk versus shared-risk • Distribution of portfolio by asset quality rating • Percentage of portfolio (by UPB) maturing within 18 months • Percentage of portfolio (by UPB) no longer subject to yield maintenance requirements • Distribution of portfolio by geographic region; DSCR; product type; origination year; and at-risk versus shared-risk
2. Determine the quality of policies, procedures, internal controls, and management reporting for the credit function. Share determinations with the examination teams responsible for internal controls, management process, management information, and board governance.	• Credit-related policies and procedures reflect management's considered judgment and are appropriately comprehensive to meet management's needs. • Credit-related policies and procedures are formalized when the activity and professional standards warrant formalization. • Management identifies and addresses deviations from established policy/procedures that could introduce financial safety and soundness concerns. • The internal controls related to credit risk management are comprehensive, developed by management responsible for the business activity, and validated periodically. • Management reporting within the credit risk management framework includes the appropriate Board and management committees, and provides comprehensive, timely, and detailed credit-related information.

3. Determine whether the Enterprise is adequately compensated for the credit risk it assumes. Determine whether credit models produce accurate and reliable results.	• The Enterprise receives compensation commensurate with the credit risk it assumes, and consistent with corporate objectives. • Management incorporates the Enterprise's return on equity and other relevant financial performance objectives into its pricing models and practices. • Management confirms that credit enhancements actually provide the protection they are intended to provide. • Management ensures that data input into models are reliable and accurate. • Management periodically revisits and revalidates the assumptions on which model logic relies. • Management periodically revisits and revalidates the methodology/logic embedded in its models. • Management periodically analyzes model outputs for accuracy. • Management maintains appropriate documentation for each model
4. Determine whether management prudently manages counterparty exposure.	• Management has established eligibility requirements for counterparties to ensure that counterparties maintain financial capacity commensurate with their obligations to the Enterprise. • Management analyzes seller/servicer financial capacity in relation to the Enterprise's exposure to the seller/servicer. • Management can identify seller/servicers that do not adhere to applicable eligibility requirements, and take appropriate corrective action when necessary. • Management identifies seller/servicers that deliver loans of substandard quality; and identifies seller/servicers with shortcomings in servicing operations. • Management detects fraud in the loans it purchases and guarantees. • Management identifies loan quality problems attributable to third party originators (TPOs), and identifies and tracks TPOs that consistently originate poor quality loans. • Management monitors the financial capacity of each mortgage insurance company (MI), the Enterprise's exposure to each MI, and each MI's claims payment history. • Management tracks each counterparty's compliance with applicable contractual agreements.
5. Determine the manner and extent to which new products, programs, or initiatives impact the credit risk profile.	• Management analyzes the potential impact on the Enterprise's overall credit risk profile of new loan products (i.e., prior to the date a product becomes a standard product offering). • Management conducts appropriate pilot programs to evaluate actual credit performance of products prior to implementation. • Management analyzes the potential impact on the Enterprise's overall credit risk profile of new programs (as defined under section 1303 of the Federal Housing Enterprises Financial Safety and Soundness Act of 1992 Act, as amended). • Management analyzes the potential impact on the Enterprise's overall credit risk profile of new initiatives (defined for purposes of these evaluation criteria as activities that constitute a noteworthy change in corporate strategy or outlook).

ASSESSMENT FACTOR	EVALUATION CRITERIA
6. Determine the adequacy of the reserve determination process.	• Management follows a formal and consistent approach to determining loan loss reserves and allowances. • The reserve determination process comports with applicable professional standards. • The reserve determination process considers the Enterprise's actual and expected mortgage performance experience in determining reserves and allowances. • The reserve determination process reflects a level of sophistication commensurate with the Enterprise's business and credit risk profile.
7. Determine whether credit risk management tools are effective. Share determinations about proprietary risk management programs and systems with the examination team responsible for management processes.	• The Enterprise's underwriting standards effectively define the Enterprise's desired credit risk parameters. • The underwriting development process ensures the involvement of appropriate Enterprise personnel. • Management periodically supplements, amends, and interprets the Enterprise's underwriting standards to communicate current practice to seller/servicers. • Management has a formal process for granting and tracking waivers of underwriting standards. • Credit risk management tools detect significant differences between actual credit performance and desired or expected credit performance. • Credit risk management tools detect significant differences in credit performance between manually underwritten loans and AUS-underwritten loans. • Credit risk management tools detect significant deviations from the Enterprise's underwriting requirements. • Credit risk management tools minimize credit losses. • Credit risk management tools identify, track, and address early payment defaults. • Credit risk management tools identify opportunities to request loan repurchases, and track pending repurchase requests. • Credit risk management tools identify excessive delays in loan repurchases. • Credit risk management tools allow management to analyze the Enterprise's credit risk profile (e.g., using proprietary scores and asset quality ratings) • Credit risk management tools can identify credit losses attributable to mortgage fraud. • Property valuation tools produce reliable property values. • The internal audit function provides substantive analysis of credit risk management tools. • BOD authorizations/delegations are in place, and management policies are in place for nonmortgage investments. • Credit-related models produce reliable results. • The Enterprise follows a defined and documented model review protocol.

8. Determine the effectiveness of risk sharing strategies.	• Risk-sharing strategies and tools meet management's expectations to reduce the Enterprise's credit risk exposure. • Management tracks the value of the credit enhancement instrument against the applicable credit risk exposure. • Management obtains timely recovery under the credit enhancement instrument when appropriate.
9. Determine the quality of the Enterprise's methodology for identifying and quantifying credit risk exposure.	• The Enterprise has an appropriately sophisticated portfolio management system that allows management to quantify the credit risk of the loans purchased and guaranteed by the Enterprise. • Management analyzes the Enterprise's portfolio to estimate the potential impact on credit risk resulting from different economic, industry, and other relevant forecasts. • Management identifies high risk loans. • Management identifies and measures changes and trends in portfolio concentrations that may adversely impact earnings and capital. • Management identifies TPO-related loans as a percentage of total deliveries, and tracks related performance trends for TPO-related loans. • The Enterprise's internal asset grading tools provide early detection of potential problems and noteworthy trends. • Management identifies and quantifies appropriate credit quality and performance measures. • Management measures the efficiency of loss mitigation activities.
10. Determine the quality of the Enterprise's tracking of risk exposures.	• The Enterprise's credit risk exposure tracking framework ensures that the appropriate levels of management receive appropriately detailed information regarding credit risk exposures. • The Enterprise's tracking framework ensures that relevant items that management and/or the internal (or external) audit function have identified as weaknesses or otherwise substandard are tracked. • The credit risk exposure tracking framework provides management with the information necessary to track credit risk exposures in all pertinent areas.
11. Determine the effectiveness of technology and controls supporting the credit risk management function. Share determinations with the examination team responsible for information technology and internal controls.	• Management integrates the evaluation of information technology needs in its consideration of business objectives and activities. • Management's control framework ensures that information technology supports business needs. • Management evaluates technology performance in relation to the Enterprise's business needs.
12. Determine whether management effectively reconciles differences between actual and expected credit portfolio performance.	• Management collects and evaluates statistical and other information to identify material differences between actual and expected credit portfolio performance.

13. Determine whether management has an effective means for following up on credit-related issues. Share determinations with the examination teams responsible for audit, management information, management process, and internal controls.	• Management committees (e.g., a credit policy committee) routinely evaluate and address credit risk-related issues. • Management committees include the appropriate personnel responsible for managing the Enterprise's credit risk. • The management reporting framework provides the applicable committees with appropriately comprehensive and detailed information to identify and follow-up on significant credit-related issues.

ASSESSMENT FACTOR	EVALUTION CRITERIA
1. Determine the quality of policies, procedures, internal controls, and management reporting relating to interest rate risk. Share determinations with the examination teams responsible for internal controls, board governance, management process and management information.	• Current policies and procedures should exist for all departments that manage interest rate risk. • Policies and procedures should detail the lines of authority for managing interest rate risk. • Policies and procedures should describe the functions of all departments that manage interest rate risk. • Personnel involved with interest rate risk know policies and procedures, and comply with them. • Risk limits are clearly communicated. • Desired appetites for risk are clearly communicated. • The interest rate risk analysis functions are separate from the transaction functions. • Management reports for interest rate risk should present the balance sheet and projected earnings in sufficient detail to allow one to identify the sources of interest rate risk.
2. Determine whether management has established a meaningful methodology for quantifying and monitoring the level and nature of interest rate risk and determine whether management routinely evaluates the impact of events or alternative environments.	• Measures to quantify interest rate risk should include ➢ Duration estimates ➢ Convexity estimates ➢ Market value sensitivity ➢ Estimates of sensitivity to prepayment speed ➢ Estimates of sensitivity to volatility ➢ Estimates of sensitivity to changes in the shape of the yield curve ➢ Stochastic net interest income estimates ➢ Tests of earnings and capital under extreme rate shifts and numerous rate scenarios.
3. Determine management's effectiveness in following up on issues related to interest rate risk. Share determinations with the examination teams responsible for audit, management information, management process and internal controls.	• Management frequently reviews reports relating to interest rate risk and takes prompt and appropriate action whenever risk limits are approached or breached. • Actions to alter the Enterprise's risk/reward relationships are thoroughly analyzed and discussed by appropriate members of management.
4. Determine the manner and extent to which new products, programs or initiatives impact the interest rate risk profile. Share determinations with the examination team responsible for business process controls.	• New products, programs, or initiatives are adequately researched before being implemented. • New products, programs, or initiatives receive appropriate senior management and board review. • Management and the board establish appropriate limits on new products, programs and initiatives. • Management and the board regularly assess the impact of new products, programs, and initiatives on the Enterprise's interest rate risk profile.

ASSESSMENT FACTOR	EVALUATION CRITERIA
5. Determine the effectiveness of technology and controls supporting the interest rate risk management function. Share determinations with the examination teams responsible for information technology and internal controls.	• The Enterprise supports the asset/liability management function with specialists who ➢ Develop new tools for IRR and investment analysis ➢ Maintain a reliable hardware infrastructure ➢ Enhance and maintain existing applications • Controls are in place to assure the integrity of data used in IRR and portfolio management models. • Controls exist for adjustments to model parameters by end-users. • Business continuity plans adequately provide for the continuous monitoring of interest rate risk in emergency situations.
6. Evaluate the quality of the tools used to model interest rate risk and the strategies to alter the exposures to interest rates. Share determinations about proprietary risk management programs and systems with the examination team responsible for management processes.	• The Enterprise has tools to evaluate the effect of changing interest rates on all areas of the balance sheet, including guarantee fee income and MBS float. • The Enterprise's prepayment models include the effects of ➢ The refinancing component (the difference between the mortgage coupon rate and the market rate) ➢ The seasoning ramp ➢ Burnout ➢ Seasonal components ➢ Current LTVs • Prepayment models are specific to all asset categories (i.e., 30-year fixed, 15-year fixed, balloon mortgages, ARMs, asset-backed REMICs) for which there are material volumes on the balance sheet. • For ARMs, market value and duration/convexity models appropriately account for the effects of periodic and lifetime caps. • IRR models incorporate call rules that are consistent with the Enterprise's procedures for calling debt. • Interest-rate generation models incorporate appropriate mean reversion parameters and provide for changes in the shape of the yield curve. • Volatility parameters appropriately account for changes in volatility along the yield curve. • Market value and duration/convexity models provide sensitivity estimates for changes in prepayment speeds and interest rate volatility. • Model assumptions and parameters are reviewed for reasonableness. • Models are calibrated to appropriate benchmarks. • Appropriate documentation for models exist.
7. Determine management's effectiveness at incorporating tactical and strategic issues into the management of interest rate risk. Share determinations with the examination team responsible for management processes.	• Forecasts of net interest income derived from the IRR modeling process are regularly compared to corporate earnings forecasts. • Tools used to measure IRR sensitivity are consistent and compatible with those used for strategic planning forecasts. • Management routinely discusses the earnings and regulatory capital implications of its asset/liability strategies.

ASSESSMENT FACTOR	EVALUTION CRITERIA
8. Determine whether the appropriate separation of responsibilities exists between the strategy and analytics function and the execution function.	• Divisions that analyze and craft portfolio strategies are separate from those that execute portfolio transactions. • Traders and portfolio analysts do not code software used for portfolio management.
9. Identify the various derivative instruments being used and determine whether these derivative instruments are used prudently.	• Derivatives are identified by ➢ Type ➢ Notional amount ➢ Index (floating-rate swap) ➢ Pay/receive rates ➢ Strike prices (caps/floors) ➢ Counterparty ➢ Market value ➢ Linked asset/liability • Derivatives are used in a manner consistent with the Enterprise's risk management policies. • Derivatives are marked-to-market at least weekly. • All derivatives are included in the Enterprise's IRR sensitivity analyses and cash management forecasts. • Data for derivatives used in the Enterprise's asset/liability models are accurate. • Master agreements should be used to document existing and future derivative transactions. • Derivative transactions are undertaken by an appropriate number of professionals with sufficient expertise in risk management. • Adequate systems for data capture, processing, settlement, and management reporting are in place. • Derivative transactions and subsequent gains and losses are accounted for in accordance with GAAP. • Management has analyzed derivative transactions to determine the quality of execution.
10. Determine whether management governs the use of derivatives in accordance with the standards used by other large financial intermediaries.	• Both market risk measurement and credit risk measurement are performed independently of the portfolio management function. • Credit risk is estimated based upon current exposure (i.e., market value) as well as potential exposure based on estimates of future replacement costs. • Credit exposure should be aggregated, taking into consideration enforceable netting agreements. • Credit exposure should be calculated regularly and compared to credit limits. • Policies and procedures address the selection of counterparties. • The credit quality of counterparties is routinely monitored. • Counterparty risk is appropriately diversified. • Authority to commit the Enterprise to derivative transactions is clearly specified in its policies and procedures.

ASSESSMENT FACTOR	EVALUTION CRITERIA
11. Determine the quality of policies, procedures, internal controls, and management reporting relating to liquidity management. Share determinations with the examination teams responsible for internal controls, board governance, management process and management information.	• Management of liquidity risk is embedded/articulated in current policies and procedures. • P&P clearly describe how liquidity risk is managed. • Risk limits and lines of authority are clearly communicated. • Liquid investment policies limit investments by ➢ Type ➢ Maturity ➢ Credit quality ➢ Issue • Liquid investments are consistent with the goals and strategies of the Enterprise. • Operating management is aware of and complies with current policies. • Liquidity management is consistent with corporate asset/liability management strategies. • Internal controls are adequate and operate as intended. • Management promptly addresses internal control issues. • Management reports are timely, accurate, and provide meaningful information on liquidity. • Management reports are distributed to the appropriate personnel. • Frequency of reporting supports management's ability to incorporate information into tactical and strategic decisions.
12. Determine whether management has established an effective methodology for quantifying and monitoring liquidity and determine whether management routinely evaluates the impact of events or alternative environments and develops appropriate contingency plans.	• Management reviews short-term cash needs, purchase commitments, and funding costs daily • Management reviews liquidity risk for the entire Enterprise as well as for appropriate business units. • Management continuously reviews compliance with exposure limits. • Management has a method for assessing the liquidity of its derivatives portfolio. • Management assesses the adequacy of its liquidity in simulated interest rate environments.
13. Evaluate the quality of the planning process for liquidity management including tactical, strategic, and contingency planning.	• Plans consider short-term cash needs, access to capital markets, cost of capital and the ability to liquidate market positions. • Liquidity risk is reviewed and compared to corporate limits, goals and strategies. • Current market conditions are reviewed and analyzed. • Capital allocation strategies are set at the business unit level and reflect the board's capital allocation decisions.
14. Determine the manner and extent to which new products, programs or initiatives impact liquidity. Share determinations with the examination team responsible for business process controls.	• New products, programs, or initiatives are adequately researched before being implemented. • New products, programs, or initiatives receive appropriate senior management and board review. • Management and the board establish appropriate limits on new products, programs and initiatives. • Management and the board regularly assess the impact of new products, programs, and initiatives on the Enterprise's liquidity.

ASSESSMENT FACTOR	EVALUATION CRITERIA
15. Determine management's effectiveness in following up on issues or initiatives that influence liquidity.	• Liquidity issues are effectively communicated between business units. • There is appropriate audit coverage and follow-up of liquidity issues. • Management tracks and promptly follows up on any audit findings relating to liquidity. • Management's self-assessment of risk reflects consideration of liquidity risk issues.
16. Determine the effectiveness of technology and controls for the liquidity management program. Share determinations with the examination teams responsible for information technology and internal controls.	• The Enterprise supports the liquidity management function with specialists who ➢ Develop new tools for liquidity management ➢ Maintain a reliable hardware infrastructure ➢ Enhance and maintain existing applications • Information technology systems provide timely and accurate liquidity management information. • Business continuity plans adequately provide for the continuous monitoring of liquidity in emergency situations.
17. Evaluate the quality of the tools used to manage and monitor liquidity, and the quality of tools used to perform scenario analyses. Share determinations about proprietary risk management programs and systems with the examination team responsible for management processes.	• Management assesses the effect of liquid investments in its interest rate risk modeling. • Net interest income models account for the effect of reduced liquidity (e.g., wider bid-ask spreads, adverse debt spreads) in alternate rate environments.
18. Determine whether the appropriate separation of duties exists between the strategy and analytics function and the execution function.	• The corporate organizational structure supports separation. • There is clear definition of the roles and responsibilities for strategy and analytics and risk-taking functions • Regular analysis of the underlying markets is performed independent of the traders.
19. Determine trends and/or anomalies in funding spreads.	• Management regularly reviews and assesses spreads for ➢ Discount notes ➢ Medium-term notes ➢ Benchmark/Reference Notes ➢ Callable Debt ➢ Interest Rate Swaps ➢ Mortgages and non-mortgage investments relative to funding benchmarks • Management appropriately uses spread information in its management of liquidity.
20. Determine the quality of integration between liquidity management and other management and financial performance issues.	• Liquidity risk and other risks are incorporated in Enterprise-wide and business unit plans. • Liquidity risk is reflected in the management of derivatives (e.g., counterparty credit rating downgrades may result in reduce liquidity for derivatives).

ASSESSMENT FACTOR	EVALUATION CRITERIA
1. Determine whether operating processes are in place to ensure secure, effective and efficient data center processing and problem management.	• Policies and procedures relevant to operations management are documented • Comprehensive system documentation is maintained and secured • Job processing procedures are fully documented and secured • User procedures are fully documented and secured • Network management and capacity planning tools are utilized in operations management • Capacity planning and performance monitoring includes, but not limited to: ➢ Systems downtime ➢ CPU usage ➢ Availability of disk space ➢ Identification of processing bottlenecks ➢ CPU availability or future growth requirements ➢ Reliability of disks or tapes ➢ Software problems ➢ Systems reliability • Documented procedures to control the issuance and maintenance of tapes, cartridges, etc. • Documented procedures for report handling and distribution • Shift turnover logs are maintained • Documented policies and procedures for third party contract management • Documented policies and procedures related to database management and security • Documented policies and procedures relevant to problem management and incident reporting • Problem reports are reviewed regularly to correct deficiencies and improve the level of services to users • Documented escalation procedures for addressing high impact issues • Incidents are automatically reported and logged • Policies and procedures are adequate for facilities management, physical security and safety, fixed asset inventory, and capital acquisition/leasing • Security of the building is appropriate to the activities of the organization • Management regularly reviews the list of persons with physical access to the computer room and tape libraries • A record is maintained of all visitors • Service maintenance visits are scheduled, authorized, and, as practical, monitored • Controls exist to prevent the loss or disruption of communications—secure cable pits, locked PBX room • Environmental controls implemented within the building and computer area(s) (e.g., existence of an alternative power supply) are appropriate • Fire precautions and evacuation procedures posted in all departments are adequate • Fire practices are regularly held and fire fighting equipment is regularly serviced • A maintenance contract for environmental control hardware exists and is current

ASSESSMENT FACTOR	EVALUATION CRITERIA
2. Determine whether there are effective policies and processes in place to ensure that data, information and computing resources are secure and accessed only by authorized users.	• Formal computer security policy that clearly defines the responsibilities of users, management, and security administrators • Security policy is supported by documented standards and procedures • There is a security committee or similar body that is responsible for establishing, maintaining and reviewing security standards and guidelines • There is a security administration function and the organizational placement of this function allows for adequate segregation of duties • Security violations are monitored and there are documented follow-up procedures for correcting identified weaknesses • Access control software packages are used • All application systems have designated owners and ownership is clearly documented • User access is established on the basis of a written request approved by management and the application system owners • Procedures for emergency or temporary access are documented • Procedures for contractor (non-GSE employee) access are documented • Unique user-ids are assigned to end users • Password parameters are reasonable (e.g., automatic expiration) • Inactive user accounts are monitored and removed when not needed • User-ids or passwords are promptly removed from the system when an employee leaves • Employees' access rights are changed when they are relocated internally • Allocation, authorization, and use of powerful user-ids or passwords are controlled and monitored • Appropriate security measures have been implemented to restrict users' access to sensitive or critical data and programs • Development staff are prevented from accessing data and software in the QA and production environment • Adequate procedures to control the use of dial-up access • Documented procedures that outline the actions required in the event of a penetration • Organization conducts self-assessments of security weaknesses • Computer-generated logging file is used to maintain an audit trail of security-related events and data • Data is encrypted when being transmitted over communications links to ensure integrity and confidentiality • Adequate access controls over users' access to the network
3. Determine whether there are effective policies and processes in place to ensure the timely and appropriate resumption of business in the event of a disaster.	• Backup copies of data files' databases and programs are performed regularly • System and data backups are synchronized with one another • Backup versions are taken off-site regularly to include, but not limited to: ➢ Data files ➢ Programs ➢ System software ➢ System documentation ➢ Operating procedures ➢ User procedures ➢ Disaster recovery plan ➢ Environmental and physical security information

ASSESSMENT FACTOR	EVALUATION CRITERIA
Cont'd.	• Off-site storage has been tested to ensure that the backup copies are reusable • Access to the backup copies is limited to specific individuals • Access to the backup copies is available 24 hours a day • There is a computer equipment maintenance contract • Business critical systems and data files have been identified • Users have specified their recovery requirements • Disaster recovery plan has been developed, documented and tested (note frequency of testing) • Current emergency contact list • All critical business units are included in the testing process. Testing should include: ➢ Setting of goals in advance ➢ Realistic conditions ➢ Use of actual backup systems and files from off-site storage ➢ Participation and review by internal audit ➢ Post-test analysis reports and review process that includes comparison of test results with original goals ➢ Development of corrective action plans that are incorporated into the next test • Current hardware requirements are conveyed to the recovery site provider (note frequency) • Network components are identified in the recovery plan
4. Determine whether management has an adequate process to ensure information technology plans effectively address business unit and corporate objectives.	• Overall responsibility for the IT function has been allocated to a director of the board or senior manager • Senior management level IT steering committee exists • Formal IT organizational structure—organizational charts, job descriptions, etc. • IT management has adequate standards and procedures governing: ➢ Personnel administration ➢ Budgeting and costing of information technology projects ➢ Systems development and support functions ➢ Computer operations ➢ Telecommunications network operations ➢ Computer and information security ➢ Contingency planning and disaster recovery ➢ Information architecture ➢ IT and business risk assessments • There is an architecture model • Formal IT strategy covering the next 1-3 years • Formal IT budget showing planned hardware costs and software development costs • Reports used by senior management or relevant management committees to supervise and monitor IT activities are effective • Compliance with the IT aspects of statutory and regulatory requirements • Segregation of duties is adequate • There are training and development plans for all staff—training budget • Insurance coverage is adequate

ASSESSMENT FACTOR	EVALUATION CRITERIA
5. Determine whether effective processes are in place to ensure appropriate controls are implemented and documentation is complete for system development and maintenance.	• Business sponsors are leading projects • Business requirements are clearly defined • Documented policies and procedures that govern the acquisition, implementation and maintenance of hardware and software • There is a formal change request process • All systems software upgrades are tested before they are implemented • All systems software upgrades are properly authorized • All programs and data files (compilers, assemblers, link editors, macro libraries, source libraries, etc.) used to construct and maintain system software are adequately protected • Documented policies and procedures that govern the database administration function • Database administration function is separate from the systems and programming and operations functions • Violation reports are produced for the database environment • Complete backup copy of the database is performed regularly • Fully documented restore procedures for the database • Restore procedures for the database are regularly tested • Standard methodology exists for in-house developed systems • Feasibility study is performed and approved prior to the development of new systems • Adequate internal controls and audit trails are specified for the system (i.e., access, application and user controls) • Adequate training and technical support is provided by the vendor/suppliers • Comprehensive systems and program documentation is produced or provided by the vendor/suppliers • Requests for program changes are formally approved by authorized users • Program updates to the production environment are specifically authorized by IT management • Development staff are prevented from implementing new program versions into the production environment • Documented procedures for controlling any emergency changes made by systems development staff • Formal sign-off is required after system testing • Regression testing is carried out when failures have been rectified • Documented file conversion procedures • Post-implementation review occurs to ensure that the system has achieved its objectives • Users receive training on the features of new systems before implementation • User manuals are current and secured • Operating manuals are current and secured • Documented policies and procedures relevant to project management • Application systems are tested and approved before they are put into operational use • Quality assurance function exists • Users of the systems sign-off at critical points in the development process • Comprehensive and structured approach to testing exists, including clearly defined test procedures and appropriate documentation and analysis of test results

ASSESSMENT FACTOR	EVALUATION CRITERIA
Cont'd.	• Users are involved in user and acceptance testing • Overall systems and program documentation adheres to standards • Standards and procedures for end user computing exist • Documentation produced for end user computing systems (e.g., models, spreadsheets) is adequate • Risk assessments are performed for end user computing systems
6. Determine whether effective processes have been implemented for the processing of data and information to ensure accuracy and timeliness.	*Input:* • Written procedure statements that explain the manner in which data is to be converted and entered • Data control procedures specify the: ➢ Proper authorizations for each application ➢ Edits to be used during the initial input of the data ➢ Error messages for each application ➢ Establishment of control logs that record errors and exceptions ➢ Procedures for clearing errors and exceptions ➢ Controls that ensure that all input data is reviewed by appropriate personnel prior to processing ➢ Controls over master file changes and updates ➢ Appropriate routing for approval or return routing to the originator for correction of electronic documents • Data input controls are used (e.g., record counts, predetermined control totals) • Source documents used in data conversion or entry processes are marked to protect against the duplication or re-entry of the data or the relevant applications are designed to prevent the duplication of entries • Controls are in place for managing the authorization of access to on-line transactions and their associated record • Controls are in place to manage batch access to data files • Preprogrammed keying formats exist to ensure that data is entered in the proper field and format • Procedures exist to assure that incorrect data are identified, rejected, and not allowed to be entered into the system or to update the master file • Data validation and editing procedures are used (e.g., check digits on all identification keys, valid field sizes, signs, cross-footing) • Data input procedures permit data validation and error editing routines to be overridden or bypassed • All instances where supervisors are allowed to override or bypass the data validation and error editing routines are logged and reviewed • Maintenance of a log of source document numbers entered to ensure that all of these documents are accounted for • Data entered is included in an audit trail record • Where master files are updated directly, the data validation and editing procedures produce before-image and after-image versions of the record being updated • Procedures exist for the identification, correction, and resubmission of rejected data containing errors • Error messages that are generated are stated clearly and easily understood by the terminal or workstation operator • Rejected data is automatically written onto suspense files • Corrections are reviewed and approved independently by supervisors • Only authorized personnel who can remove entries from the suspense file

ASSESSMENT FACTOR	EVALUATION CRITERIA
Cont'd.	*Processing:* • Procedures exist that document the calculations generated by this application • There are standardized default options built into the program logic • Output control totals are reconciled to input control totals to ensure that calculations are accurate • There are programmed controls to verify that the proper versions of the data files are used • There is a logging facility (examination trail) in the application to assist in reconstructing damaged or destroyed data files • Controls are in place over the processing of unusual items (e.g., the entering of special console data like dates and bypass commands) • Run-to-run control totals are checked and printed to ensure completeness and accuracy of processing • Edit routines within programs cross-check the accuracy of arithmetic computations • Application generates control totals and/or performs reconciliations to check for completeness of processing • Trailer records contain control totals to provide a check that all records are on the file • File completion checks exist to ensure that both the transaction file and the master file have been processed completely • Transaction dates on input are compared to system controlled month-end cutoff dates to ensure consistency • There are controls present to ensure the accuracy of values in any tables used within the application *Output:* • Reports contain clear identification information and end of report message • Pages are numbered and forms are counted • There are controls in place for the distribution of reports • An IS Department control group has responsibility for reviewing all data processing output reports for their general acceptability and completeness • Written procedures exist for balancing and reconciling output produced by data processing application programs • Output batch totals are reconciled with input batch totals before the output report is transmitted to ensure that no data was added or lost during the processing activity • Report processing procedures provide for user reconciliation of the current system balances with the previous day's or run's balance • User departments have procedures that they use to ensure the accuracy and completeness of all output • Written procedures for output distribution exist • The relevant distribution lists are changed whenever any change is made in the data processing output distribution requirements • Controls over on-line output control software prevent the unauthorized reading, copying, deleting, or redirecting of output • A log of application output errors is maintained by various control groups to assure that the errors are corrected • There are written procedures that provide listings of output that are classified as critical or sensitive and outlines the process for securing this output

ASSESSMENT FACTOR	EVALUATION CRITERIA
7. Determine whether there is an effective plan for identifying, renovating, testing and implementing solutions for the Year 2000 issue.	• The Enterprise has conducted an assessment of its use of information technology, including preparing an appropriate inventory, and adequately addresses potential and specific Year 2000 issues ➢ The assessment includes all applications, hardware and systems software ➢ The Enterprise's assessment includes computer-controlled systems such as telecommunication devices, audio response systems, and other environmental systems with embedded microchips (e.g., security and alarm systems, elevators, telephones, fax machines, and HVAC systems) • The enterprise has established a plan for ensuring that their systems will be Year 2000 compliant and has provided sufficient time for implementation ➢ The plan is complete, reasonable, achievable, and appropriately monitored with periodic reports to management and the Board ➢ The plan includes appropriate testing and validation, including a complete systems test, and appropriate testing of remote interfaces and communications ➢ The enterprise has ensured that software license agreements permit them to use the software at alternate sites for Year 2000 testing ➢ The enterprise has developed specific plans to address legacy systems which may not have sufficient documentation or source code to enable their modification to become Year 2000 compliant ➢ The plan includes computer-controlled devices such as doors, alarms, elevators, security codes, passes, fax machines, etc. ➢ The use of `99' defaults (i.e., 99365 to specify non-delete retention of archived files) has been appropriately addressed ➢ Leap year processing has been appropriately addressed ➢ The plan addresses Year 2000 legal and liability issues ➢ Year 2000 specific contingency plans have been developed and tested • Internal Audit is actively monitoring the Year 2000 compliance efforts ➢ Assessment of internal controls surrounding the Year 2000 efforts ➢ Monitoring of Year 2000 project management for effectiveness ➢ Reporting of issues to management and the Board of Directors • Progress of Year 2000 efforts is reported to senior management and the Board of Directors
8. Determine whether the Year 2000 processing capabilities are effectively coordinated with customers, vendors and business partners.	• All current software and hardware license agreements specify Year 2000 compliance and/or a Year 2000 compliance target date has been specified by the vendor ➢ Software contract review to assess risks associated with licensing and maintenance agreements pertaining to Year 2000 processing • The enterprise has adopted a policy requiring all new software to be certified Year 2000 compliant • Business partners are required to report on their Year 2000 efforts, and are required to test and certify Year 2000 compliance with the Enterprise ➢ Outsourcing agreements have been reviewed for Year 2000 maintenance obligations ➢ On-going communications with vendors and servicers to determine progress toward implementing Year 2000 solutions • A process to certify Year 2000 compliance has been established ➢ Electronic interfaces with suppliers will be Year 2000 compliant, and records of certification are maintained

ASSESSMENT FACTOR	EVALUATION CRITERIA
9. Determine the effect of Year 2000 efforts on strategic and operating plans.	• The Enterprise has sufficient resources to undertake and complete the planned Year 2000 initiatives, including validation testing, in the required timeframe ➢ A program has been developed to address the retention of current IT staff resources ➢ If the Enterprise is to rely on outside resources to complete their Year 2000 plan, such resources are already under contract • The adequacy of computer resources for testing Year 2000 solutions in addition to day-to-day processing ➢ Establishment of “time machine environment”

ASSESSMENT FACTOR	EVALUATION CRITERIA
1. Determine after consulting with the other examination teams, whether management has an accurate and reliable process for identifying risks to business processes and implementing the appropriate controls.	• Process is fully documented with roles and responsibilities identified • Process is risk- and control-focused • Process occurs frequently enough to be useful in timely identifying risks and the controls needed • Management assumes responsibility for assessing risks and implementing an adequate control environment
2. Determine after consulting with the other examination teams, whether implemented controls properly address the risks assessed by management.	• There is a process that evaluates the controls to ensure that identified risks are appropriately mitigated • Process is risk-focused to ensure that the controls are adequate to address the risks and are not excessive or redundant
3. Determine after consulting with the other examination teams, whether management has a reliable process for ensuring timely resolution of control-related issues.	• Adequate reporting mechanism to ensure that senior management is aware of the risks and corrective actions to be taken to address these risks • Process occurs frequently enough to be useful in timely implementing corrective actions • Process is fully documented with roles and responsibilities identified (including Internal Audit) • The process can be validated by a third party • Adequate reporting mechanism to ensure that senior management is aware of any issues
4. Determine after consulting with the other examination teams, whether Internal Audit appropriately identifies and communicates internal control deficiencies to management and the Board of Directors. Share determinations with the examination team responsible for audit and board governance.	• Internal Audit's role is fully documented with appropriate lines of communication established • Adequate reporting mechanism to ensure that senior management is aware of the status of all unresolved issues, as well as the nature of the deficiencies and the potential impact on operations
5. Determine after consulting with the other examination teams, whether there are established policies and procedures that delineate internal control process and standards for the control environment.	• Existence and reasonableness of the policies and procedures that delineate the process and controls • Policies and procedures delineate individual roles and responsibilities • Policies and procedures are current—reflect the current business practices • Adequate reporting mechanism to ensure that senior management is aware of any potential legal issues and areas of noncompliance with applicable laws and regulations

ASSESSMENT FACTOR	EVALUATION CRITERIA
6. Determine after consulting with the other examination teams, whether management ensures compliance with established internal controls.	• Existence of a process to ensure compliance with established policies and procedures. For example: ➢ Approval limits established within policies and procedures ➢ Authorized signatures required for certain transactions (e.g., overrides) ➢ Review and approval of documents by legal counsel ➢ Review and approval of certain transactions or initiatives by senior management

ASSESSMENT FACTOR	EVALUTION CRITERIA
1. Determine if the Audit Functions have the appropriate independence	• Placement of the internal audit function in the management structure. • Internal audit's reporting line. • Internal audit manager's business operations responsibilities. • Who develops objective performance criteria used to evaluate the work of internal audit? • IA managers have no responsibilities for operating the business. • External audit engagement negotiated at arms-length. • The external audit engagement letter reviewed by audit committee. • External audit's reporting line. • IA has the opportunity to discuss with the Board audit findings without management present.
2. Determine if the auditors performing the work posses the appropriate professional proficiency	• Educational and professional background (certification) of the internal audit staff. • Continuing education opportunities for internal audit staff. • Professional background and expertise of external audit staff.
3. Determine after consulting with the other examination teams, if the scope of the work performed is appropriate	• Consistent with the nature, complexity, and risk in the Enterprise's on- and off-balance-sheet activities. • Consistent with risk assessment. • Consistent with approved audit plan. • Appropriate reliance on work of outsourcing vendor, external audit (for internal) and internal audit (for external). • Scope expands if significant issues arise or when significant changes occur in the Enterprise's environment, structure, activities, risk exposures or systems including: a) new management; b) areas or activities experiencing rapid growth; and c) new lines of business, products or technologies. • Consistent with the long-range goals of the Enterprise. • Responsive to the Enterprise's internal control needs.
4. Determine after consulting with the other examination teams, if the performance of the audit work has been complete	• Consistent with audit plan. • Describes the objectives of the audit work and lists the procedures that will be performed. • Includes a summary of key internal controls within each significant business activity. • Evaluates the information received. • Communicates results. • Follows up on findings. • Full scope audit work complies with professional standards. • Workpapers adequately document the work performed and support conclusions.
5. Evaluate the quality of the management of the Internal Audit Department.	• Background or experience provides an understanding of the audit function. • Ensures appropriate risk assessments are developed and maintained. • Ensures that audit plans are met, programs are carried out, and results of audits are promptly communicated to managers and directors. • Appropriate budget. • Establishes, updates, enforces policies and procedures to guide audit staff.

ASSESSMENT FACTOR	EVALUATION CRITERIA
6. Determine after consulting with the other examination teams, the appropriateness of executive management's involvement and follow-up of identified auditing issues. Determine the quality of the Board of Directors' involvement and follow-up of identified audit issues.	• Reviews and is appropriately informed of the internal audit manager's risk assessment. • Reviews and is appropriately informed of the scope of the audit plan. • Periodically reviews internal audit's adherence to the audit plan. • Considers requests for expansion of basic internal audit work when appropriate. • Fosters forthright communications and critical examination of issues. • Keeps informed of issues. • Tracks issues for follow up, including operating management's solutions. • Significant issues promptly brought to direct attention. • Significant issues promptly addressed. • Meets with management and the manager of internal audit. • Assesses whether internal control weaknesses or other exceptions are being resolved appropriately. • Promotes the internal audit manager's impartiality and independence. • Gives the manager of internal audit the opportunity to discuss findings without management being present. • Uses reasonable standards when assessing the performance of internal audit.
7. Determine after consulting with the other examination teams, the quality of the auditor's risk assessment process.	• Documents the understanding of the significant business activities and their associated risks. • Analyze the risks inherent in a given business line and potential risk due to control deficiencies. • Updated as need to reflect changes to the system of internal control or work processes, and to incorporate new lines of business. • Is appropriate for the institution's activities.
8. Determine after consulting with the other examination teams, the appropriateness of internal audits in new products and new initiatives. Share determinations with the examination team responsible for business process controls.	• Stage at which internal audit is first involved/apprised of new product. • Any internal audit review prior to going live with new product. • Timing of internal audit work after new product introduced. • Scope of work conducted during design, development and implementation of new products. • Internal audit's risk assessment of new products. ➢ Operational impact (policies, procedures, systems) ➢ Financial statement impact ➢ Compliance and regulatory impact. • Degree of integration and communication with other key stakeholders.

<table>
<tr><th>ASSESSMENT FACTOR</th><th>EVALUATION CRITERIA</th></tr>
<tr><td>1. Determine if the Enterprise executive management and the Board of Directors receive necessary reports on the Enterprise’s performance relative to established goals and objectives</td><td>• Do the executive management team and the Board of Directors have adequate sources of information? Are the channels in place for information to be communicated timely and effectively, without infiltration?
• Do the executive management team and the Board receive the right kinds of information, both with respect to performance and future prospects?
• Do the executive management team and the Board of Directors receive information to evaluate Enterprise’s performance against established goals and objectives?
• Is the information relevant, timely and accurate? Determine if it is overwhelming in quantity.</td></tr>
<tr><td>2. Determine if management reporting provides the levels of management with the necessary information to carry out their responsibilities efficiently and effectively, and to gauge the quality of their decision making.</td><td>• Determine if mechanisms are in place to obtain relevant external information such as market conditions, legislative and regulatory developments and economic changes.
• Determine if management receives the appropriate analytical information and reports that enable them to identify what actions need to be taken.
• Determine if information is provided at the right level of detail.
➢ Pertinent data is summarized.
➢ Reports are designed to eliminate clutter.
• Determine if information is available on a timely basis to allow effective monitoring of events and activities (internal and external) and prompt reaction to economic and business factors.
➢ Information systems are designed to expedite reporting of information and are able to collect and edit data, summarize results, adjust and correct errors quickly.
• Determine if management reports support and are aligned with the Enterprise’s strategic and business unit goals and objectives, key performance measures and risk management plans.
➢ Reports are used to identify, monitor, measure, limit and manage risks</td></tr>
<tr><td>3. Determine if information systems are linked to the Enterprise’s overall strategy, and if information systems are developed and refined pursuant to a strategic plan for information systems.</td><td>• Determine if mechanisms are in place for identifying emerging information needs.
• Determine if information needs and priorities are determined by executives with sufficiently broad responsibilities.
• Determine if a long-range information technology has been developed and linked with the Enterprise strategy.</td></tr>
<tr><td>4. Evaluate after consulting with the other examination teams, the accuracy of reports used by management for its decision-making.</td><td>• Do the systems generating reports edit data?
• Can errors in reports be adjusted or corrected promptly?
• What is the process by which data is transferred from the source to report.
• Do control procedures ensure that information is correct and relevant.
• Is there a sound system of automated and manual internal controls.
• Subject to comprehensive internal and external audit reviews.
• Information systems are developed according to a sound methodology.
• Collection points and times to send updated information are established.
• Source of information originates from expected business area.
• Flow of information /reports is consistent with org chart.
• Identify and note points where adjustments to data occur.
• Processes are followed as data is acquired, merged, manipulated and up-loaded from systems.</td></tr>
</table>

5. Determine after consulting with the other examination teams, the effectiveness with which Enterprise strategy and roles and responsibilities are communicated	• Determine the extent of formal and informal communication plans. • Determine if effective communication vehicles – formal and informal – are sufficient in effecting communication related to roles and responsibilities. • Key personnel understand how their duties affect and are affected by , duties of other employees.
6. Evaluate the effectiveness of channels of communication available to employees to provide feedback, report suspected improprieties, and suggest enhancements	• Determine if there are mechanisms to communicate upstream through someone other than direct superiors, such as an ombudsman or corporate counsel. • Determine if there are realistic mechanisms for employees to provide suggestions for improvement. • Determine if management acknowledges good employee suggestions.
7. Determine after consulting with the other examination teams, the adequacy of communication across the organization	• Determine if communication mechanisms promote sharing of Enterprise knowledge. • Determine if effective communication mechanisms are in place to promote communication and resolution of corporate issues that cross organizational lines.

ASSESSMENT FACTOR	EVALUATION CRITERIA
1. Evaluate the comprehensive nature of the strategic planning process	• Determine how the strategic and business plans are formulated and developed. • Determine if all key stakeholder groups are involved in the planning process. • Determine the timeframe of the planning process and that the process is iterative, rather than periodic. • Determine if the strategic plan states the strategic intent and purpose. • Determine if the strategic plan is realistic in the current economic and secular/political environment. Examples of analysis performed by the Enterprise to support this conclusion could include: ➢ SWOT Analysis ➢ Situational Analysis ➢ Financial analysis / projections ➢ Market assumptions • Determine if the Enterprise uses a consistent business plan in developing and refining its strategic plan. • Determine if strategic goals are specific, measurable, time-bound, and results-oriented. Also, determine if these goals support the vision and mission of the Enterprise. • Determine if the level of congruence among strategic goals is appropriate (i.e. is the level of emphasis and prioritization) • Determine if critical success factors have been incorporated. ➢ Factors that have brought success in the past. ➢ Factors for success in 5 year's time? • Determine if goal champions or teams have been assigned to monitor the achievement of goals. • Determine if the strategic goal adequately addresses resource allocation issues. ➢ Are the budgets, capital deployments and operating plans consistent with the strategic plan? Does capital allocation include an appropriate risk vs. reward analysis?
2. Determine after consulting with the other examination teams, the effectiveness of business unit goals, implementation plans and programs to achieve the corporate plan	• Determine if clear guidelines are communicated to develop goals and objectives in business units. • Determine if business unit goals and objectives are aligned with the Enterprise strategic plan. ➢ Linked to the strategic plan ➢ Linked to long-term budgets and annual budgets • Determine if business unit goals are specific, measurable, time-bound, and results-oriented. • Determine if implementation and action plans support and are aligned with the strategic and business unit plans. • Determine if champions or teams have been assigned to monitor the achievement of business plans. • Determine what type of framework or process is used to prioritize implementation / action plans; e.g. risk vs. reward framework.

3. Determine after consulting with the other examination teams, management's ability to monitor and manage change	• Determine if mechanisms exist to anticipate, identify and react to routine events or activities that affect achievement of entity or activity-level objectives. • Determine if mechanisms exist to identify and react to changes that can have a more pervasive effect on the Enterprise.
4. Determine after consulting with the other examination teams, if key performance measures are appropriate, effective, and align with strategy for key performance measures	• Determine how the achievement of strategic and business goals is measured, monitored and reported. • Determine if performance measures have been established to measure / evaluate the Enterprise's achievement toward strategic and business unit goals and objectives. • Determine if the performance measures are linked directly with the Enterprise's strategy and support the Enterprise's actions, people / culture and critical success factors. • Determine if the performance measures are relevant, meaningful and balanced.
5. Determine after consulting with the other examination teams, if the behavior management programs are designed to achieve corporate goals and objectives	• Determine if accountability measurement system includes corporate objectives and goals. • Determine if compensation or incentives are linked to achieving goals, both long and short term. • Determine if performance hurdles are tied to corporate goals and objectives.
6. Determine if the Enterprise has an effective program for career and management development	• Determine if the criteria for selecting or evaluating individuals address: delivery of results; customer satisfaction; technical proficiency; ability to formulate/implement plans; demonstrated leadership/professionalism; ability to work with others; contributions to the company's objectives. • Determine if there is a plan for succession for key management positions within the Enterprise. • Determine if there is a process for identifying individuals throughout the Enterprise who possess growth potential. Determine if management has an inventory of the talent pool and has established developmental plans for those individuals. Are the plans followed and developmental assignments given?
7. Determine if the Enterprise has effective programs for recruiting competent people	• Determine that personnel policies, procedures and practices result in recruiting or developing competent and trustworthy people necessary to support an effective internal control system. • Determine that employee retention and promotion criteria are aligned with codes of conducts and other behavioral guidelines.
8. Determine after consulting with the other examination teams, the effectiveness of proprietary risk management programs or systems	• Determine if there is a process for identifying, analyzing and prioritizing risk. Determine if it is subject to internal and external audit review. • Determine if the risk management process is aligned with and supports the Enterprise strategy and is measured against standards or plans. • Determine if adequate mechanisms are in place to identify risks from external sources. • Determine if adequate mechanisms are in place to identify risks from internal sources. • Determine the thoroughness and relevance of the risk analysis process, including estimating significant risks, assessing the likelihood of their occurrence and determining required actions.

9. Determine after consulting with the other examination teams, whether management effectively conveys an appropriate message of integrity and ethical values	• Ascertain if codes of conduct are comprehensive, addressing conflicts of interest, illegal or other improper payments, etc and are period acknowledged. • Verify the establishment of the tone at the top including explicit moral guidance about what is right and wrong. • Determine if everyday dealings with employees, investors, customers, creditors, insurers, competitors and auditors are based on honesty and fairness. • Determine if management responds to violations of behavioral standards. • Determine if management has stringent policies towards overriding internal established internal controls. • Ascertain that deviations from policies are investigated and documented. • Ascertain that there are no conditions, such as extreme incentives or temptations, that exist that can unnecessarily and unfairly test people's adherence to ethical values. ➢ Determine if controls are in place to reduce temptations that might otherwise exist
10. Determine after consulting with the other examination teams, if management's philosophy and operating style have a pervasive effect on the Enterprise.	• Determine that there are regular interaction between levels of management. • Ascertain that management avoids focus on short-term reported results. • Determine if managers respond to signs of inappropriate practices.
11. Determine after consulting with the other examination teams, if the organization structure and the assignment of responsibility provide for accountability and controls. Share determinations with the examination team responsible for internal controls.	• Determine if the Enterprise's organizational structure is appropriately centralized and decentralized. • Determine if the responsibilities and expectations for the Enterprise's business activities are communicated clearly to the executives in charge of those activities. • Determine if established reporting relationships – formal or informal, direct or matrix - are effective. • Determine that the executives of the business activities have access to communication channels to senior operating executives. • Determine if management periodically evaluates the entity's organizational structure, particularly when there are changes in the business or industry. • Determine that delegated authority in relation to assigned responsibilities is appropriate and is related to the Enterprise's goals and objectives.

ASSESSMENT FACTOR	EVALUATION CRITERIA
1. Determine whether the Board has been engaged in the development of a strategic direction for the Enterprise.	• Does the Board communicate its direction to management? • Does the Board review the strategic direction? How frequently? • Does the Board's review address: goals and benchmarks for the Enterprises to achieve; and time frames? • Is the Board's compensation tied to meeting the strategic goals?
2. Determine whether the Board ensures that executive management appropriately defines the operating parameters and risk tolerances of the Enterprise consistent with the strategic direction; and legal standards; and ethical standards	• Does the Board regularly review the operating parameters and risk tolerances? • Does the Board require management to report to it on how activities and operations, individually or in concert, impact the Enterprise's operating parameters and risk tolerances? • Is there an appropriate Code of Conduct? • Does the Board receive periodic reports on compliance with the Code of Conduct? • Is there a policy that defines responsibilities for compliance with laws and regulations? • Does the Board receive periodic reports on compliance with that policy?
3. Determine whether the Board has a process for hiring and maintaining a quality executive management team	• Is there a suitable nomination process? • Does the board review each candidate's competence, knowledge, understanding prior to approval?

4. Determine whether the Board holds the executive management team accountable for achieving the defined goals and objectives.	• Does the Board have a role in identifying the qualities desired in key members of senior management, particularly the CEO? Does the Board review the written job descriptions for key members of senior management, particularly the CEO?
	• Has the Board defined the CEO / executive management plans for training, development and succession for other positions?
	• Does the Board evaluate the CEO's performance on a regular/ongoing basis?
	  ➢ Determine the CEO's performance against short-term objectives and long-term initiatives.
	  ➢ Have clear objectives been set for the future?
	• Does the Board provide the CEO with a performance evaluation? Is it written?
	• Does the Board have the ability to act timely if it needed to replace the CEO?

5. Determine after consulting with the other examination teams, whether the Board remains appropriately informed of the condition, activities and operations of the Enterprise	• Does the Board receive appropriate information about all significant areas of operations, activity and risk to the Enterprise? • What are the sources of the information? Are they all internal sources? • Does the Board effectively utilize committees to obtain information? • Does the Board receive non-financial information about the Enterprise? • Does the Board receive information about the progress being made towards achieving its strategic plans? • Are Board members offered opportunities to obtain/maintain an appropriate knowledge base?

ASSESSMENT FACTOR	EVALUATION CRITERIA – BOARD GOVERNANCE
6. Determine whether the Board has sufficient well-organized time to carry out its responsibilities	• Assess the frequency of Board meetings • Does the Board have adequate time to prepare for meetings? • Does the Board have adequate time to deliberate significant issues? • Does the Board use its meeting time effecively? • Does it receive information in advance? • Does it spend the meeting time discussing significant issues? • How many other boards do Board members sit on simultaneously?