ERNST & YOUNG

*Quality In Everything We Do*

# 404 Perspectives

## Issue No. 3
## Case Studies on Testing

# Introduction

The first and second editions of our *404 Perspectives* series looked in detail at the process of compliance with the Sarbanes-Oxley Act of 2002 (SOX). They highlighted the additional guidance issued in May 2005 by the Securities and Exchange Commission (SEC) and Public Company Accounting Oversight Board (PCAOB) on companies' applying a more "top-down" approach to assessments and developing more efficient, "risk-based" testing strategies.

As we continue to explore the subject of testing, we shift our focus to the testing strategies of "real-world" companies that have applied the top-down, risk-based approach. Companies have had a range of unique experiences in response to SOX and the subsequent guidance issued in 2005.

In this paper, we share the unique perspectives of six companies, including their testing approaches, anticipated efficiencies and plans to modify their testing processes. The companies we interviewed represent different industries and include accelerated filers and foreign private issuers. We hope that sharing these experiences will help you as you continue to evolve your strategies for testing internal controls and strive toward efficient and sustainable compliance processes.

**What some 404 program leaders have to say:**

*"SOX has significantly increased the control consciousness of the company. We are very proud of business unit management and the ownership they have taken to monitor their controls. 404 has internalized a lot of the business, and the state of controls is better than it ever was in the past."*

*"We plan to use our two years of experience to build a more rational and efficient approach that we are comfortable with and one that presents a story our independent auditors would find reasonable as well."*

*"We will start to use judgment about where the risks lie and test only what makes good business sense. Rather than looking for what can go wrong, we want to focus our efforts on what can really go wrong."*

*"We plan to reduce our compliance costs by 50% by expanding the scope and increasing the rigor of our self assessment program and cutting down the level of independent testing."*

*"As a foreign private issuer, we believe our approach ought to be risk based from the beginning. However, we recognize we will not be able to gain maximum efficiencies in this first year."*

# Emerging Trends

Accelerated filers are implementing the lessons learned from two years of compliance with the internal control provisions of the Sarbanes-Oxley Act of 2002. They are beginning to see the results of efficiencies they have gained from applying the guidance issued by the SEC and PCAOB in 2005 and developing approaches that are highly customized to the way they do business and control their day-to-day activities.

Based on the six companies that we interviewed, we have summarized some emerging trends in 404 testing approaches:

| Trend | Key Take-Away | Background Summary |
|---|---|---|
| **Standardization of Key Controls** | Cost savings have been made through benchmarking and standardizing key controls across organizations. | Companies that noticed differences in the number of key controls in similar processes across various locations have been able to generate considerable savings by benchmarking controls across different locations using a standard control catalog. |
| **Use of Self Assessment** | Companies are beginning to leverage control self assessment techniques as a key compliance tool, especially for lower risk areas. | Every company is using, or plans to use, self assessment in varying degrees to support management's 404 assessment. Companies that were using self assessment in prior years are looking to expand its coverage as time goes on. Simultaneously, companies are using internal audit to validate the process to make it more reliable and increase the opportunity for independent auditors to use the results. |
| **Role of Internal Audit** | Internal audit is becoming less involved in performing testing in lower risk areas, and more involved in playing an objective, quality assurance role in the process and the self assessment work done by management. | Companies are beginning to more clearly define the objectives for internal audit's involvement in 404 testing. Some companies are limiting internal audit's effort to high risk areas, whereas other companies are focusing internal audit on those areas of lower risk where their independent auditor can most effectively use their work. Nevertheless, companies have reduced the extent of internal audit's involvement in 404 testing from prior years. Companies are also leveraging normal internal audit reviews to gain assurance over key 404 controls in areas included in the scope of the annual audit plan. |
| **Leveraging Existing Supervisory Activities** | Management has yet to work out how best to rely on day-to-day supervisory work as a test of control, although this is a stated aim of many. | Ongoing supervisory activities performed on a day-to-day basis, such as review of account reconciliations, trial balance reviews etc., form an important part of management's monitoring of internal controls. Companies are starting to think about taking advantage of these supervisory activities as tests of controls and have begun to formalize their documentation and follow-up actions. They ultimately plan to use these activities as their 404 tests for a number of their key controls. |
| **Centralization of Processes** | SOX has provided additional stimulus to management's plans to centralize and standardize processes and IT systems. | Companies that had been considering proposals to centralize certain common support processes and IT systems are beginning to implement these projects. The incremental 404 compliance cost savings and need to better manage risks has provided the necessary push to get these proposals approved. Companies that have taken up these centralization projects will be better positioned to increase the effectiveness and efficiency of their assessment process and reduce their 404 compliance costs going forward. |

## Case Study 1

- ***Fortune 100* high-tech company**
- **Highly decentralized business**
- **Multiple IT systems**

*"SOX helped in providing structure to our self assessment program by linking it to financial statement risks and balance sheet coverage."*

**How have you approached testing for 2006?**

This company is well known for its strong governance practices and having a high level of control consciousness throughout the organization. For several years the company has operated a broad self assessment program that goes beyond financial reporting controls and stems from the requirements of the Foreign Corrupt Practices Act. The company has revised this self assessment program to meet its 404 requirements and its strong entity-level and governance controls have provided the foundation for its self assessment-based testing approach.

The company has pushed the responsibility for testing to the senior management and financial controllers of each business and corporate function. One of the key success factors in making this approach work has been the availability of many people with control and audit expertise within the businesses. For several years, the internal audit department has followed the philosophy of regularly migrating its staff into the businesses, particularly the finance function. As a result, many of the resources within the finance function of the businesses possess prior audit experience.

Business unit leadership uses these finance resources to perform and oversee testing of controls in higher risk areas. Controls in other risk areas are covered through self tests performed by process or control owners. To increase the reliability of these tests, business leadership uses finance to review the results of self tests and take accountability for their effectiveness. To further support its self assessment-based approach, the corporate 404 management team initially invested in on-site training and more recently implemented web-based training for control owners across its various locations.

**What other efficiencies are anticipated this year?**

The corporate 404 management team is continuously making the assessment process more efficient. For instance, they are considering leveraging the company's shared service center that processes its general ledger, fixed asset and accounts payable transactions using a single instance ERP to find opportunities for reducing compliance costs. Owing to the routine nature of transactions within the processes, the corporate 404 management team is pursuing putting in place relevant metrics and monitoring reviews as high level financial reporting controls. They intend to place reliance on these high level controls instead of detailed transaction controls to increase testing efficiency.

**What are plans for further modifying the process?**

The company has recently initiated a Six Sigma© project (a process improvement methodology) aimed at improving the composition of its 404-related controls. The Six Sigma team has been tasked with both rationalizing the number of controls as well as increasing the proportion of automated controls required to be tested for management's 404 attestation. The management team plans to continue improving the utilization of automated controls with a long-term target to optimize automated controls and allow for more efficient test strategies.

**Take-Aways**

Take advantage of a control-oriented culture and strong entity-level controls.

Drive responsibility for testing to business unit management.

Increase involvement and accountability of resources within business units with prior audit experience.

Use process improvement tools and resources such as Six Sigma to drive improvements in 404-related controls.

## Case Study 2

- ***BusinessWeek Global 500* materials company**
- **Decentralized business**
- **Multiple IT systems**

*"We have not changed our scope, but modified our testing strategy. By tailoring our testing approach to the level of risk, we have managed to reduce our testing costs by 50%."*

**How have you approached testing for 2006?**

For its third year of compliance with SOX, the company carried out a project to completely reengineer its testing process. Their first priority was to examine the opportunity afforded by the PCAOB's and SEC's May 2005 guidance. As a result of careful analysis of qualitative and quantitative factors influencing the risk to the financial statements, a small project team working with business unit management segregated all "in scope" business units and locations into two categories: Category A for higher risk and Category B for lower risk.

Relying on strong entity-level controls, the team determined that transaction controls at Category B locations could be covered by a self assessment process. Those at Category B locations were tested by control owners, process owners and business unit management. They reviewed changes in the nature of the controls every quarter as part of a periodic sign-off on internal controls and annually performed a walk-through of the operation of the control. On the other hand, for higher risk locations in Category A, more objective testing was carried out by a combination of internal audit and other resources. Internal audit also tested the effectiveness of entity-level controls applicable to all locations. Using this approach, the SOX leader stated, "we were able to reduce the number of locations in scope for objective testing from 373 to 160." This reduced the costs related to 404 testing for the company by approximately 50%.

**What other efficiencies are anticipated this year?**

The company decided to subject the whole testing process to the scrutiny of a Six Sigma/lean manufacturing review. Breaking testing down into a series of logical tasks soon led the project team to conclude there was an opportunity to better align skill levels of the testers. In less complex areas of Category A, higher risk business units, which constitute a majority of the areas within these locations, experienced internal audit professionals were replaced by student interns who carry out many of the more clerical tasks. These tasks are laid out in step-by-step procedures, supported by a tool that takes much of the effort out of managing testing logistics. To make all this work requires significant effort to build quality assurance into the process at the beginning through an intensive training process, effective supervision during the work, and robust review of working papers at the end. The result, however, justifies this investment by further reducing compliance costs. Management also plans to leverage internal audit's normal audit activities to provide assurance for its 404 assessment where these internal audit activities address key controls over financial reporting.

**What are plans for further modifying the process?**

The company plans to continue to add rigor to the self assessment process so that their independent auditors can use more of the results of this work in their integrated audit. This will mean further formalizing some of the work so that the auditors can rely on it and adding an objective quality review by internal audit. In addition, they plan to implement further supervisory controls over less complex and routine areas within Category A locations to further restrict purely objective testing to areas with the highest level of complexity, carrying the very highest risk, and requiring the most judgment.

**Take-Aways**

Stratify locations based on risk.

Restrict objective testing to higher risk locations.

Explore alternative resourcing strategies for testing.

Supplement self assessment with an objective quality review.

Look for efficiencies in the testing process itself.

## Case Study 3

- ***Fortune 200*** **utilities company**
- **Comprised of multiple, autonomously-run subsidiaries**

*"We are prepared to have internal audit validate the quarterly self assessment process and rely on it."*

**How have you approached testing for 2006?**

In its third year of compliance with 404, the company has implemented a quarterly process for monitoring key controls based on management's self assessment. The self assessment includes selected testing procedures over key controls that are executed and documented quarterly. Management has built strong accountability and ownership in the process by embedding responsibilities for controls into the performance plans of control owners and supervisors. Over time, the company plans to adopt an approach that balances the self assessment process with maximizing the opportunity for its independent auditor to use management's testing results. For 2006, internal audit will perform the annual testing required to support management's attestation. Evidence created by internal audit will be provided to the independent auditors to reduce their overall testing effort. The external auditors take reliance on this evidence to the fullest extent allowable under Standard #2. The nature, extent and timing of testing will be adjusted for lower risk processes and controls, thus lessening the time required to gather evidence as to the effectiveness of lower risk controls. This process will be enabled through a risk assessment process that identifies key processes and key controls as either high risk or normal risk. In addition, the company is substantially refining what it includes in its inventory of key controls; that is, fewer controls will be defined as key.

**What other efficiencies are anticipated this year?**

Executive management provides strong sponsorship for standardization and improvement initiatives within the organization. For instance, the company has launched a project to centralize its account payable functions across its various subsidiaries. Management had been considering the proposal for centralization for several years, but anticipated incremental savings in 404 costs made the decision easier. "We had been planning centralization initiatives for years but SOX has been the burning platform to push it over the hill," said the 404 process leader. The business controls group (the corporate function responsible for internal controls) is required to report to the CFO periodically on the status of the centralization project and other improvement opportunities.

**What are plans for further modifying the process?**

In the longer term, the company plans to consider a two-tier approach for testing based on its risk categorization of processes. This will allow the company to evaluate controls in the lower risk areas through its self assessment process and limit internal audit's involvement in testing to the higher risk areas. To increase the reliability of its self assessment process, the company would incorporate validation of self-testing results through objective reviews by internal audit. Ultimately, this would allow the company to continuously expand the number of controls covered by its self assessment process by taking its risk assessment down from a process to a control-by-control level.

**Take-Aways**

Balance a self assessment-based testing program with independent auditor costs.

Focus on centralization and improvement efforts.

Take risk assessment down to a control level.

Implement quarterly monitoring so that it ultimately reduces the amount of annual testing.

Implement meaningful changes to the nature, extent and timing of testing of ICFRs based on risk.

## Case Study 4

- ***BusinessWeek Global 50* telecommunications services company**
- **Numerous independent operating companies**
- **Multiple IT systems**

*"In our first year, internal audit will either execute or supervise all of the operational effectiveness testing, but at the same time focus on migrating the knowledge and experience to the management team to enable them to carry out testing without supervision in future years."*

**How have you approached testing for 2006?**

In its initial year of compliance with SOX, the company has invested time in reviewing the PCAOB and SEC May 2005 guidance and closely tracking the trends with accelerated filers to implement an approach that is risk-based and embedded in the organization from the start. Its top priority has been to get the people in its businesses to take responsibility for controls, including their evaluation. The initial documentation, review of design effectiveness and development of test plans has been done primarily by the process owners with support from external resources. At the same time, the management team has recognized that the process owners lack an audit mindset and the requisite knowledge to perform operational effectiveness testing. As a result, internal audit will perform that testing at locations and areas covered within their audit plan and supervise it in all other areas. Since the internal audit plan is risk-based, testing operational effectiveness of controls over most high risk areas will be performed by internal audit resources. Operational effectiveness testing in areas not covered in the internal audit plan will be performed by management primarily using external resources. The level of supervision by internal audit will vary depending on the knowledge and competence of resources performing the operational effectiveness testing.

**What other efficiencies are anticipated this year?**

By having internal audit either undertake or supervise all of the operational effectiveness testing, the management team enables the independent auditors to place a high degree of reliance on this testing work. Also, the company has a process of reporting on internal controls through a key control self assessment completed by the business leaders of its operating companies. The business leaders annually self-certify on the effectiveness of key controls as part of this process. The management team is considering how best to use this process in lower risk areas to gain assurance that key controls tested earlier in the year continue to operate effectively at year end.

**What are plans for further modifying the process?**

The company plans to continue to increase the responsibility of its operating units in the compliance process by having internal audit mentor, coach and transfer knowledge and competence to process owners through their direct involvement in testing. This will mean that process owners will perform a larger proportion of the 404 testing with reduced support from external resources while internal audit will focus more on ensuring quality and providing assurance on the compliance process as time goes on.

Further, the company has strong budgeting, forecasting and review processes, and the team plans to explore the idea of using these controls to reduce effort at the transaction level. For instance, in lower risk areas the company plans to rely more on these robust higher level controls and test transaction controls using less extensive testing methods such as walk-throughs or smaller testing samples.

**Take-Aways**

Migrate testing competence to operating units.

Use self assessment to update testing results.

## Case Study 5

- ***Fortune 100* aerospace and defense company**
- **12-15 significant locations in scope**

*"Both management and the independent auditor can take credit for the objective testing and review of the self assessment process performed by internal audit."*

**How have you approached testing for 2006?**

The management team has pushed the responsibility for monitoring of controls to the leadership of each business unit. Every quarter the president, CFO and controller of each business unit are required to certify on internal controls. To help business units take up the monitoring responsibilities, the corporate 404 management team has trained people from the finance and IT organizations of each unit as "certified testers." Business units adopt a "risk-based" approach for their monitoring activities. They use the certified testers to perform testing over higher risk areas and rely on self assessments performed by control owners for the lower risk areas.

To provide additional assurance to executive management, internal audit reviews the certification process of business units and performs testing of controls in lower risk areas that have not undergone extensive testing. At the same time, the evidence created by internal audit in lower risk areas forms a sound basis for reliance by independent auditors on management's work. "In addition to internal audit giving us comfort that our self assessment process has enough validity, focusing their efforts in appropriate areas has allowed the independent auditors to take maximum credit for their testing. Using this approach, we were able to reduce independent auditor effort for 404 testing by 44%, and we managed to keep their actual effort below the budget by 2,400 hours," says the SOX process leader.

**What other efficiencies are anticipated this year?**

The process of certification by business units is currently manual, and management has purchased a tool so that the self assessment process can occur online. Management has also developed a standard catalog of key controls and plans to use this with the tool to drive conformity in controls and test scripts across its various locations. This should result in reducing the number of key controls. In addition, the corporate 404 management team is looking to have the certified testers, internal audit and external audit plan their walk-throughs concurrently. This should further reduce the time spent by control owners and decrease the internal effort required at business units.

**What are plans for further modifying the process?**

The company plans to continue having internal audit review the certification process and perform additional testing such that their independent auditors can use more of the results of this work in their integrated audit. The company also plans to add more structure and consistency around testing programs and risk assessments performed by business units. "We are looking for areas that are over-controlled and where cost of compliance does not match the risk," comments the SOX process leader. Ultimately, a more structured risk assessment performed early in the year will help internal audit better plan and schedule their monitoring activities.

In addition, the company is investigating how it can optimize the process for evaluating and aggregating deficiencies. Today, significant management and independent auditor time is being diverted into analyzing inconsequential deficiencies. The corporate 404 management team plans to closely review the definition of key controls and add appropriate tolerances to avoid chasing exceptions that should not be characterized as deficiencies.

**Take-Aways**

Position people from the finance organization as internal control experts and objective testers.

Involve internal audit to reduce external audit effort.

Deploy tools to make self assessments happen online.

Leverage technology to drive consistency and standardization.

## Case Study 6

- ***Fortune 200* business equipment company**
- **Approximately 75 full-time internal control specialists**
- **Multiple IT systems**

*"We believe our operating units are at a level of maturity where they no longer need the help of internal audit to test their controls. Internal audit is a good entity-level control that operates at the corporate level."*

**How have you approached testing for 2006?**

The company maintains a strong focus on internal controls, and has approximately 75 internal control specialists spread across its operating units. The company has leveraged these aspects to continuously drive responsibility for testing to the general managers of each operating unit. The operating unit management uses the internal control specialists to perform independent testing of controls in higher risk areas. In the lower risk areas, testing is performed by independent staff within the process with oversight and limited performance by the internal control specialists.

A significant change in 2006 has been the reduction in the involvement of internal audit in testing. In the first two years of compliance, a significant part of the internal audit budget was devoted to 404 testing. In this third year of compliance, the company has fully transferred the testing responsibility to the operating units. However, the operating units can still obtain the help of internal audit in a limited way, but only where it makes economic sense. For instance, in situations where the operating unit lacks a particular competency or resources to test controls and hiring testers would be more expensive, they can access internal audit staff for performing the tests. "This approach has enabled us to re-deploy 30% of our internal audit time which was used for 404 testing last year, to focus on areas that represent the highest risk for the business, many of which are outside of 404 scope," says the internal audit director. As a result, internal audit has increased its focus on business risks. However, to the extent their audit scope covers financial reporting controls, operating units can leverage internal audit activity to reduce the need for separate 404 testing.

**What other efficiencies are anticipated this year?**

Management is continually focused on improving the efficiency of its testing approach and making it more "risk-based." As a result, in 2006 the company will decrease detailed testing in lower risk processes, utilize more walk-through or inquiry-based techniques and continue to reassess the absolute number of key controls. In several cases the company has involved its lean Six Sigma group in its control remediation process. Rather than focus remediation on control "fixes," the Six Sigma group together with management has re-engineered processes from the ground up, reducing error rates, improving process metrics and reducing overall cost of control. In addition, the Six Sigma review has facilitated savings in testing effort and management time in remediation and tracking of deficiencies. "404 has helped us accelerate improvement projects that would otherwise have competed with other priorities and budget constraints, resulting in improved business efficiency and better customer satisfaction," comments the chief accounting officer.

**What are plans for further modifying the process?**

The company plans to leverage opportunities for automating controls to reduce the extent of repeated manual testing. To support this objective, the company will focus on standardizing systems across the organization to continually increase the proportion of system-based controls. The company will also channel internal audit efforts in areas of change to build efficient controls at the time of implementation.

**Take-Aways**

Use internal control experts to support units in assuming responsibility for testing.

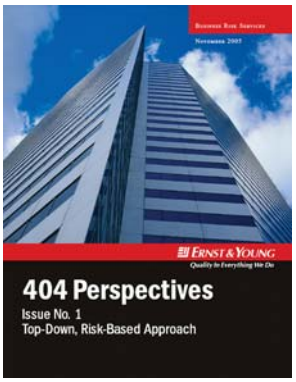
Re-focus internal audit on business risks.

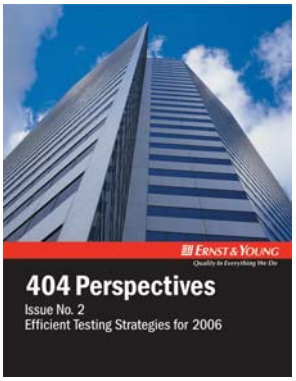
Leverage internal audit's ongoing activity.

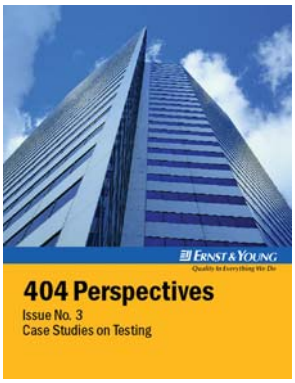
Take a long-term view to fixing control issues.

Use lean Six Sigma to drive control improvements.

Our first three editions of *404 Perspectives* have focused on providing insights in implementing the top-down approach and a risk-based testing strategy. As companies move beyond implementing the PCAOB and SEC May 2005 guidance, they look to invest in appropriate technologies to better enable their approach. Our next edition of *404 Perspectives* will focus on providing you relevant information on the different 404 tools available in the market. Contact your local Ernst & Young office and ask to speak to an EY Business Risk Services professional about obtaining other editions of *404 Perspectives.*



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