



## Today's Program

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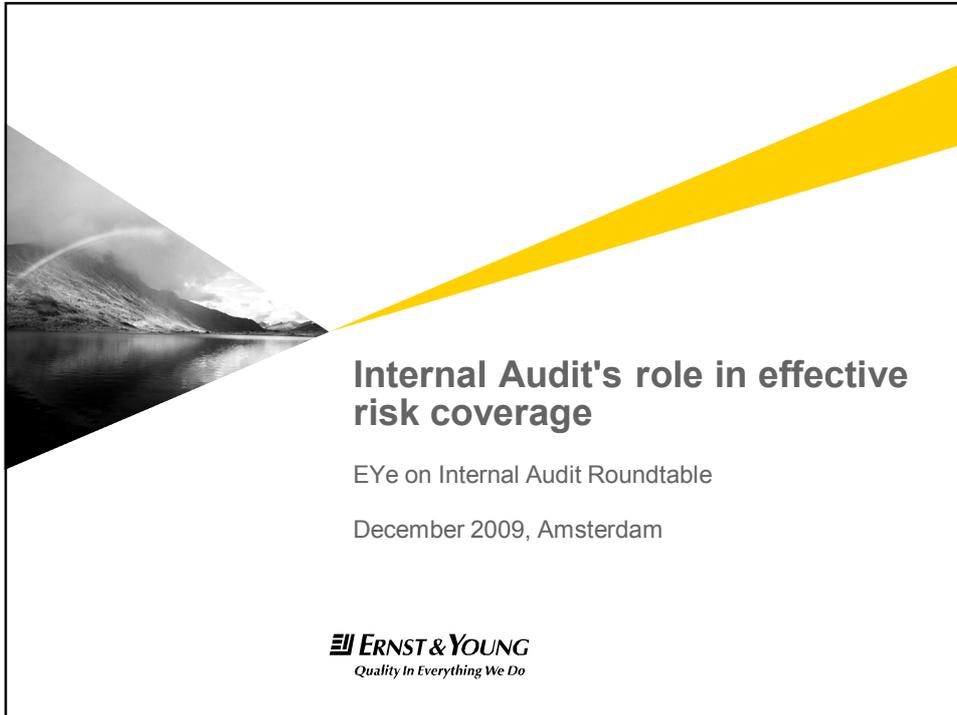
- ▶ Introductions
- ▶ Internal Audit's role in effective risk coverage
- ▶ Break
- ▶ Capital project assurance
- ▶ Summary and Wrap-Up
- ▶ Drinks

## Objectives

- ▶ Networking opportunity
- ▶ Share knowledge and experiences
- ▶ Internal Audit Directors

## Brief introduction

Company	Participant
ABN Amro	Joop van Gennip
Akzo Nobel	Marjo van Ool
Allianz verzekeringen	Korstiaan Kegel
Avery Dennison	Paul Pollard
Binck Bank	Bas van Meegeren
Gasterra	Rob Schalker
ING	Johan Buitenga
Nederlandse Gasunie	Tineke van der Meij
Nuon	Marcel Bongers / Elles Staats
Philips	Marischa van Zantvoort
Shell	Steve Kremnitzer
SHV	Kees Dekker
Ziggo	Steve Ellis



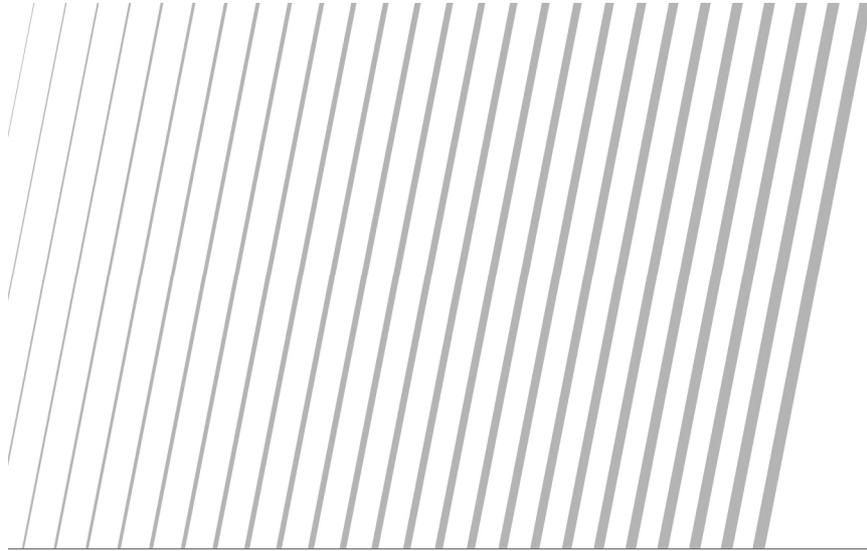
**Internal Audit's role in effective risk coverage**

- ▶ Risk management developments
- ▶ Internal Audits involvement in Risk Management

Internal auditors have a significant opportunity to help audit committees and senior management enhance their organization's risk management activities

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## Risk management developments



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## Risk management publications

- ▶ Internal Auditing and Risk management, IIA Knowledge Alert (Oct 09)
- ▶ Strengthening ERM for strategic advantage, COSO (Nov 09)
- ▶ The future of risk , Ernst & Young
- ▶ Risicomanagement een hype?, Nivra (Dec 09)
- ▶ Risicomanagement in tijden van crisis, Leen Paape (Dec 09)
- ▶ Meeting today's financial challenges, Ernst & Young
- ▶ Inform nr 4: Risicomanagement, Ernst & Young
- ▶ .....

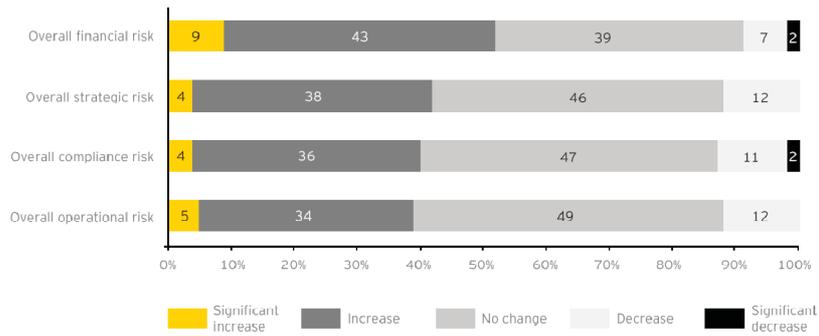
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## Hot topics on risk

Over the past 12 months how has risk increased or decreased for your organization in the following risk areas?



Source — Ernst & Young Risk Survey conducted in June and July 2009 by the Economist Intelligence Unit

## Observations on risk — Economist survey overview

The number of risk functions has increased to keep pace with the many compliance requirements and in response to key events.

- ▶ 73% of companies have seven or more separate risk functions.

The coverage and focus of risk functions have become increasingly difficult to manage.

- ▶ 67% of companies reported that they have overlapping risk coverage with two or more risk functions.
- ▶ 50% of companies reported gaps in their coverage between risk functions.
- ▶ 96% of companies agree that there are opportunities to improve their risk management efforts.

Most companies believe efficiencies can be gained in their risk activities.

- ▶ 62% of companies believe they can get more risk coverage for less spend.



Source — Ernst & Young Risk Survey conducted by the Economist Intelligence Unit — Based on 507 responses through 17 July 2009

## A new landscape for risk (1/2)

The top 10 strategic business risks for global leading firms (2008 rankings in parentheses)

- 1 The credit crunch (2)
- 2 Regulation and compliance (1)
- 3 Deepening recession (**New**)
- 4 Radical greening (9)
- 5 Non-traditional entrants (16)
- 6 Cost cutting (8)
- 7 Managing talent (11)
- 8 Executing alliances and transactions (7)
- 9 Business model redundancy (**New**)
- 10 Reputation risks (22)



\* Source : Ernst & Young's 2009 Global Business Risk Report

## A new landscape for risk (2/2)

- ▶ According to risk professionals\*, the financial crisis and its aftermath have raised the necessity to change the approach to risk :
  - ▶ The approach to risk must be more holistic
    - ▶ Internal risks must not only focus on finance and compliance
    - ▶ External risks, including macro-economic and systemic risks, now have critical impacts on the business model
  - ▶ Company's perspective to risk must be more dynamic
    - ▶ Key strategic risks can rapidly change
    - ▶ Management must understand the magnitude and probability of the risk
  - ▶ The risk horizon must extend further into the future
    - ▶ Risk must be considered across an entire economic circle
    - ▶ Risk and opportunity management have to be seen through a long term lens

The crisis has evidenced the need to have a broad vision of risks and to anchor risk management in the strategic decision-making process

\* Source : InSights for European Audit Committee Members – Issue 7 – April 2009 (Tapestry Network)

## New / increased regulatory requirements

In most European countries regulators are enacting new supervisory laws and associated corporate governance regulations such as EU 8th directive legislation and Solvency II (Pillar II) with increased requirements over Corporate Governance, Risk Management and Control functions. These regulations have common objectives:

- ▶ Efficient risk and capital management
- ▶ Improved risk management
- ▶ Strengthened internal controls
- ▶ More reliable financial reporting
- ▶ Improved transparency
- ▶ Clear management responsibility
- ▶ Improved investor trust

- ▶ The reality is that companies have only limited resources to devote to the relevant projects. In addition, project managers lack the multidisciplinary expertise to perform these tasks in a comprehensive and hence efficient and effective manner.

## New expectations from stakeholders

- ▶ The economic and regulatory framework has dramatically changed during the last few months and this new context puts more emphasis in stakeholders' expectations :
  - ▶ Need for ethical behavior and more transparency
  - ▶ Need to consider Risk management as "a management competency", and no longer as a process
  - ▶ Need for enhanced relationships between management, the audit committee and external auditors.
- ▶ A new stakeholder to consider : rating agencies
  - ▶ In 2009, Standard & Poor's (S&P) will improve its rating process for non-financial companies, including the quality of ERM. Other agencies such as Moody's and Fitch now also include the risk dimension in their appreciations.
  - ▶ This will have the following impacts :
    - ▶ Increase transparency level
    - ▶ Strengthen the notation process
    - ▶ Better differentiate solvency notations

Discussions with S&P about ERM will focus on :

- ▶ the historical accuracy of financial elements produced by the management
- ▶ the credibility of strategies, forecast and execution
- ▶ the risks linked to governance strategy and its structure

## Focus areas for improvement



Source — Ernst & Young Risk Survey conducted by the Economist Intelligence Unit — Based on 507 responses through 17 July 2009

## Considerations for balancing risk, cost and value



- ▶ Do we understand the risks that our company faces?
- ▶ Do we know our key risks?
- ▶ Do we have effective risk reporting for executive management and the board?
- ▶ Are we accepting the right level of risk?
- ▶ Do we know if our risks are being properly managed?
- ▶ Do we have a comprehensive risk framework in place?



- ▶ Are we focused on the risks that matter?
- ▶ Do we have duplicative or overlapping risk functions?
- ▶ Are we leveraging automated controls versus manual controls?
- ▶ Do we have the right mix of skills at the right cost?
- ▶ Have we optimized the use of technology to manage risk?
- ▶ Can we use alternative sourcing strategies to reduce costs?



- ▶ Are the risks we take aligned to our business strategies and objectives?
- ▶ Are we getting the right return on our risk investment?
- ▶ Are we getting process improvement ideas?
- ▶ Are we taking the right risks to achieve competitive advantage?
- ▶ Is risk management slowing me down or helping me go faster?

## Insights on today's leading risk practices



- ▶ Risk culture is sponsored from the top and cascaded throughout the organization
- ▶ Comprehensive risk assessment performed to identify all key risks – responsibility for risk coverage is clearly defined
- ▶ Gaps in risk coverage are identified
- ▶ Common risk management platform aligns all risk functions
- ▶ Risk reporting is provided to stakeholders to support decisions and enable performance

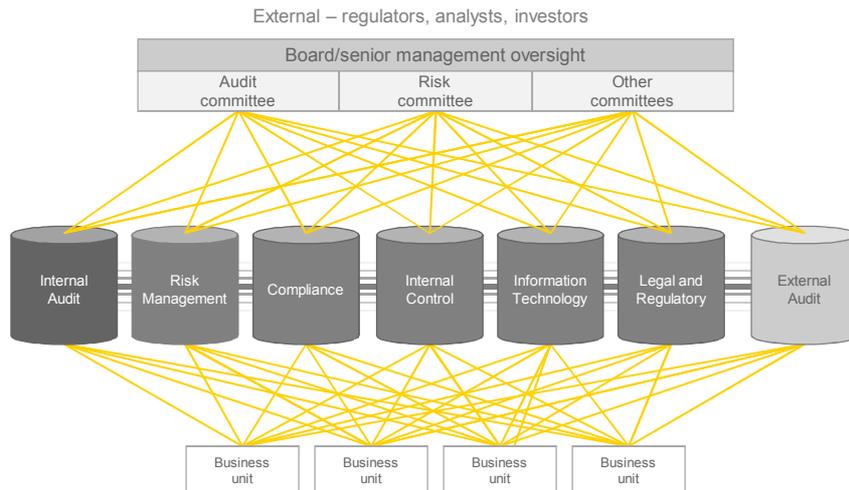


- ▶ Risk overlaps and redundancies are rationalized or eliminated
- ▶ Risk coverage focused on high priority risks versus low risk areas
- ▶ Outsourcing / off-shoring used to get the right skills at the best cost
- ▶ Technology and knowledge management is leveraged to improve productivity
- ▶ Technically proficient resources minimize the time required to assess, test and report risks

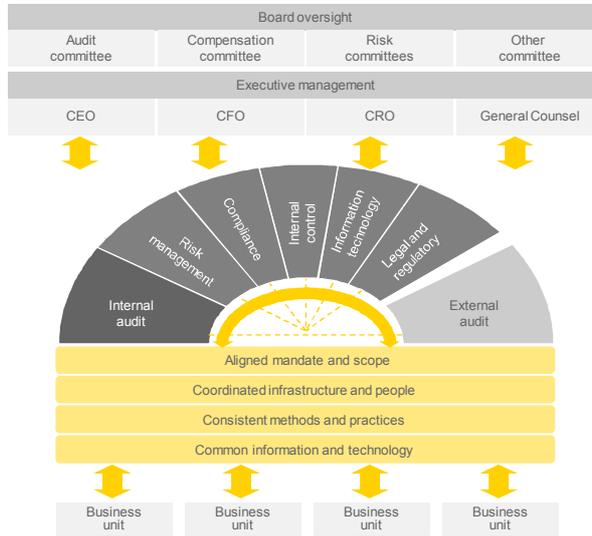


- ▶ Risk function provides the confidence to take risk as opposed to avoid risk
- ▶ Risk function provides process improvement suggestions
- ▶ Risk function provides identification of risks and assists in determining boundaries and tolerances
- ▶ Risk function contributes to the oversight and ongoing assessment of the company's most strategic initiatives (e.g., capital programs, acquisition integration, etc.)

## How do risk and control activities impact your organization?



## What is the future of risk for your organization?



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## Internal Audits involvement in risk management



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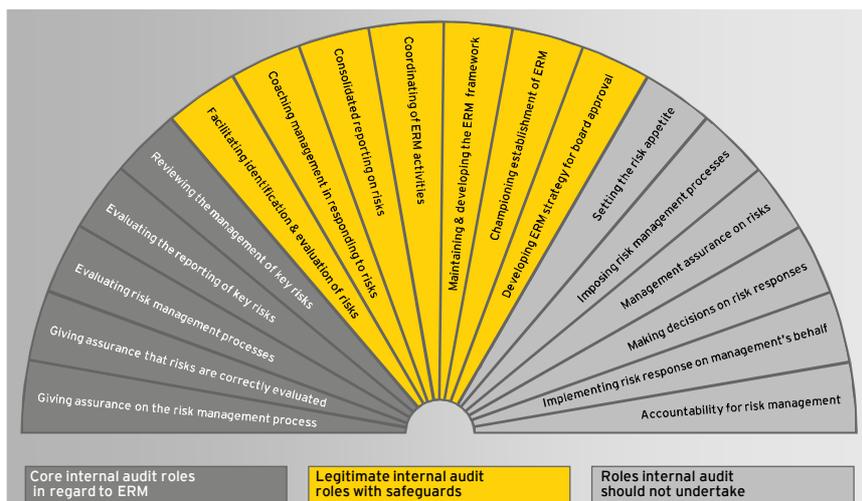
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## IIA standards related to Risk Management

- ▶ 1220: Due professional Care
  - ▶ Internal Audit must consider the adequacy and effectiveness of governance, risk management and controls processes
- ▶ 2120: Risk management
  - ▶ Internal auditors must evaluate the effectiveness and contribute to the improvement of risks management efforts
- ▶ 2050: Assurance maps
  - ▶ The chief audit executive should share information and coordinate activities with other internal and external providers of assurance and consulting services to ensure proper coverage and minimize duplication of efforts.

## The role of Internal Audit in ERM



Source: IIA position paper - The Role of Internal Auditing in Enterprise-wide Risk Management

## Traditional role of Internal Audit

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- ▶ Perform risk assessment for own purposes
- ▶ Facilitate risk workshops across company
- ▶ Evaluate risk identification by an entity at start of an audit
- ▶ Evaluate risk mitigation efforts from the entity (control effectiveness)
- ▶ Provide assurance on risk management process
- ▶ Evaluating risk management processes

## Future role of Internal Audit

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- ▶ Risk management maturity assessment
- ▶ Evaluate risk coverage
- ▶ Reviewing the risk management process' structure
- ▶ Ensuring communication of defined risk appetite by management
- ▶ Evaluating the processes used to assess risk (cascading)
- ▶ Assessing accountability for risk management and individual risks
- ▶ Ensuring risk management processes are embedded
- ▶ Appraising the effectiveness and alignment of compensation and incentive plans with the organization's risk appetite
- ▶ Clarify risk transparency, accountability, and focus
- ▶ Ensuring the risk assessment process is dynamic
- ▶ Assessing the impact of reputational risk

## Challenges

- ▶ Support from management to put ERM on the IA calendar
- ▶ Cooperation from other risk functions
- ▶ Maintain independence
- ▶ Skill set needed for effective risk management reviews
- ▶

## Risk diagnostic; the right balance between risk, cost and value

Focus area	Basic	Evolving	Established	Advanced	Leading		
<b>Risk governance</b>	Risk management efforts are autonomous and risk functions operate independently	•	•	•	•	•	
<b>Strategic risk management</b>	Inconsistent risk measures and incentives	•	•	•	•	•	
<b>Business level risk management</b>	Ad-hoc risk assessment and monitoring	•	•	•	•	•	<ul style="list-style-type: none"> <li>▶ Lower costs</li> <li>▶ Greater efficiency</li> <li>▶ Less complexity</li> </ul>
<b>Mandate and scope</b>	Risk function objectives are stand-alone and may not be aligned to business objectives	•	•	•	•	•	
<b>Infrastructure and people</b>	Capabilities of risk functions do not support key risk areas or focus on improvement activities	•	•	•	•	•	<ul style="list-style-type: none"> <li>▶ Broader risk coverage</li> <li>▶ Improved coordination</li> <li>▶ Proactive approach</li> </ul>
<b>Methods and practices</b>	Focus is primarily on financial and compliance risks – multiple methods to address risks	•	•	•	•	•	
<b>Information and technology</b>	Risk functions use basic technology with limited efficiency and leverage	•	•	•	•	•	

# Example assurance map

Risk Management Performance Assessment - Risk and Control Mapping

Significant Risks	Risk Level	Value Chain - Business Operations							Support Functions					Monitoring & Assurance				Oversight			
		New Product Development	Gain New Business	Procurement	Production	Product Delivery	After Sales Support	Finance and Accounting	IT	Tax	Transactions	HR	Legal	Internal Audit	Internal Control	Corporate Compliance	Other Risk Functions	Executive Management	Board	Audit Committee	Risk Committee
<b>TIER 1</b>																					
International Expansion	High																				
New Product Development	High																				
Raw Material Price Volatility	High																				
Foreign Exchange Rates	High																				
Interest Rate Volatility	High																				
Contract Terms/Conditions	High																				
Recruitment & Retention	High																				
Regulatory Compliance	High																				
Health/Pension Costs	High																				
Key Supplier Dependence	High																				
<b>TIER 2</b>																					
Joint Venture Partnerships	Medium																				
Business Continuity	Medium																				
Global Sourcing	Medium																				
Financial Reporting Integrity	Medium																				
Intellectual Property	Medium																				

Accountability / Risk Ownership   
  Monitoring & Control Assurance   
  Oversight  
 Potential Coverage Gap   
  Potential Inefficiencies

## Break

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## Content

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- ▶ Capital projects introduction
- ▶ Capital Project Assurance
- ▶ Case study Nuon Magnum
- ▶ Group discussion

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## Capital Projects introduction

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## Capital project characteristics

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- ▶ start and finish
- ▶ life-cycle (beginning and end, with distinctive phases)
- ▶ large budget with an associated cash-flow
- ▶ unique, non-repetitive activities
- ▶ use of resources and need for coordination
- ▶ single point of responsibility (manager)
- ▶ some time pressure
- ▶ team roles and responsibilities

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## Capital Projects are temporary

- ▶ Temporary means that every project has a definite beginning and a definite end
- ▶ The end is reached:
  - ▶ when the project's objectives have been achieved, or
  - ▶ when it becomes clear that the project objectives will not or cannot be met and the project is terminated
- ▶ Temporary does not necessarily mean short in duration:
  - ▶ many projects last for several years
- ▶ The duration of a project is finite:
  - ▶ projects are not ongoing efforts

## The product of a capital project is unique

- ▶ A product or service may be unique even if the category it belongs to is large:
  - ▶ for example, many thousands of office buildings have been developed, but each individual facility is unique - different owner, different design, different location, different contractors, and so on
  - ▶ because the product of each project is unique, the characteristics that distinguish the product or service must be progressively elaborated
  - ▶ progressively means "proceeding in steps; continuing steadily by increments"
  - ▶ elaborated means "worked out with care and detail; developed thoroughly"

## Major problems in capital projects

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- ▶ Morris en Hough analysed several thousand large projects:
  
- ▶ Many projects are
  - ▶ complex technology
  - ▶ many stakeholders
  - ▶ challenging budget
  - ▶ Time pressure
  - ▶ high risk
  - ▶ large uncertainty
  
- ▶ What are the most important contributing factors?

## Causes for problems in capital projects

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- ▶ **Inflation**  
(we could plan that!)
- ▶ **Technology**  
(what can we do about that?)
- ▶ **Changes in scope / aim of project**  
(very serious!)
- ▶ **Weak project definition**  
(we could do something about that!)
- ▶ **Interfering government**  
(what could we do about that?)
- ▶ **Weak contracts, management problems, bad training, mistakes, uncertainties during the project...**  
(you know all that in advance, so it can be taken into account...)

## Conflicting perspectives from different actors

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### Environment

- ▶ preferences and changes
- ▶ interests

### Technological professionals

- ▶ technological standards and changes

### Management

- ▶ control: how to handle changes in environment or with professionals

## When do you tackle problems like this?

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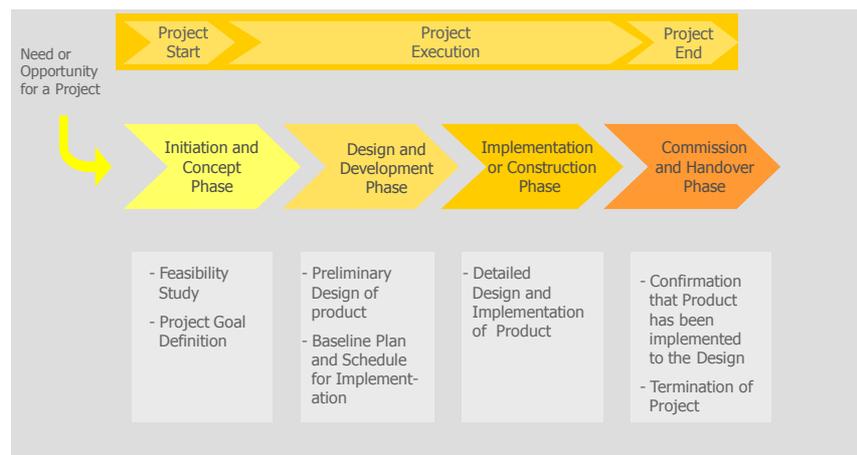
**BEFORE THE PROJECT  
HAS STARTED**

**AND NOT  
DURING THE PROJECT!**

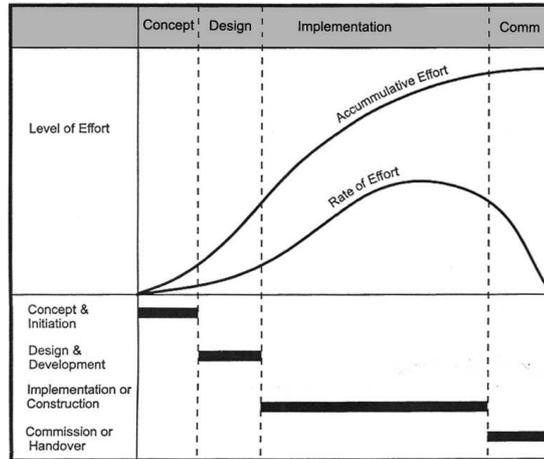
## What can be done about these problems?

- ▶ Reduce uncertainties
- ▶ Reduce complexity
- ▶ Before the start of the project and
- ▶ During the project
- ▶ By having good appointments and contracts
- ▶ By providing structure
- ▶ By a realistic plan at the start
- ▶ By collecting adequate information for control
- ▶ By evaluating at the right times and places
- ▶ By process management and control

## Project Life Cycle of an Engineering Project



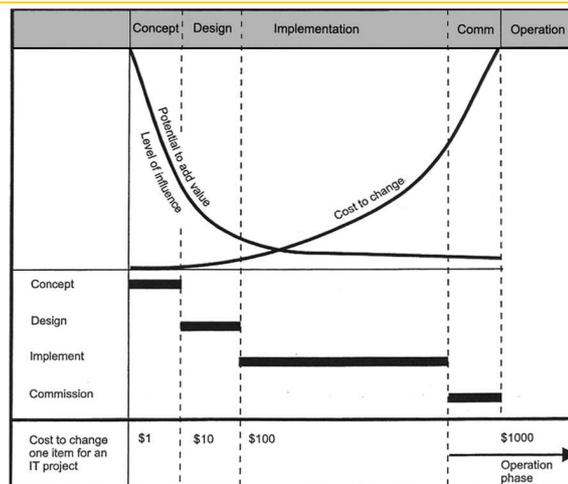
## PLC – Rate of Effort During Different Phases



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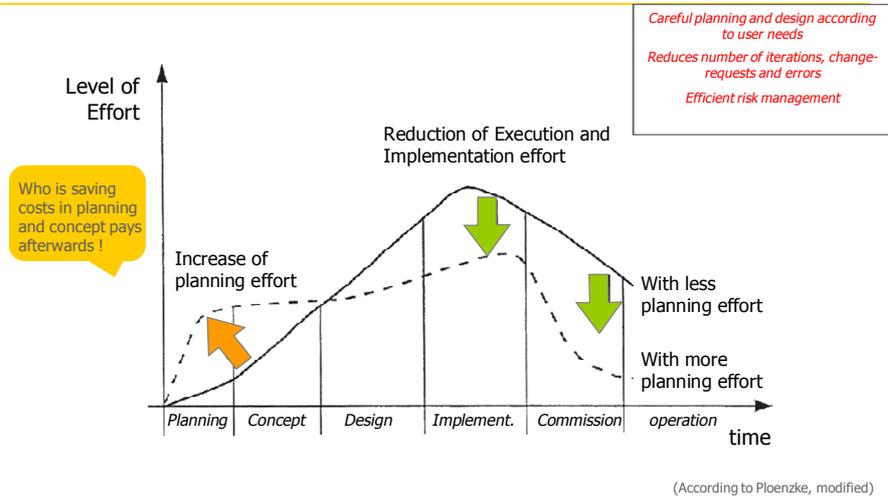
## PLC – Potential to Add Value / Cost of Changes



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## Importance of the Project Planning Phase



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## Five principles of good project management (1)

### 1. Manage through structured work or product breakdown

The objectives are:

- to delegate responsibility
- to define the scope
- to isolate risk
- to isolate changes

### 2. Focus on results

Determine what to achieve, not how to achieve it, with the objective:

- to control scope
- to give a flexible, but robust plan (using rolling-wave planning)

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## Five principles of good project management (2)

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### 3. Balance objectives through the breakdown structure

Provide a balance:

- between areas of technology
- between technology and culture (people, systems and organization)

### 4. Negotiate a contract between the parties involved

All project planning is a process of negotiation:

- between the owner and contractor
- between the project team members
- through bipartite discussion
- by trading benefits for contributions

## Five principles of good project management (3)

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### 5. Adopt clear and simple management reporting structures

Use single-page reporting, nested through the breakdown structure, to give:

- visibility
- clarity
- commitment

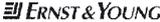
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## Capital Project Assurance

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### **CPA, identify areas where unacceptable risks are most likely to occur**

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- ▶ The areas to be tested are summarised below
  - ▶ Change control;
  - ▶ Schedule management;
  - ▶ Cost management;
  - ▶ Risk management;
  - ▶ Procurement / supplier contracts;
  - ▶ Management reporting;
  - ▶ Design; and
  - ▶ Construction management and
  - ▶ Commissioning and start-up management

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## Example of an audit approach (1)

	Area / Workstream	Risks	Approach
Business Environment	<ul style="list-style-type: none"> <li>Program planning process</li> <li>Project purpose funding and approval</li> <li>Executive oversight &amp; support</li> <li>Continuous improvement review</li> <li>Project scope / objectives</li> <li>External geopolitical and market risks</li> </ul>	<ul style="list-style-type: none"> <li>Poorly defined</li> </ul>	Review / Test <ul style="list-style-type: none"> <li>Business case evaluation process and criteria</li> <li>Executive oversight</li> <li>Continuous improvement reviews</li> <li>Test understanding of project scope and objectives with key project personnel</li> </ul>
Time / Programme Management	<ul style="list-style-type: none"> <li>Project schedule requirements</li> <li>Baseline project schedule</li> <li>Detailed schedule management</li> <li>Schedule completion checklist</li> <li>Disruption and reduced productivity</li> </ul>	<ul style="list-style-type: none"> <li>Uneconomic sequencing of works</li> <li>Reasonableness and quality of programme</li> <li>Progress of works</li> <li>Risks to completion</li> <li>Inadequate evidential records for delay and disruption</li> </ul>	Review / Test <ul style="list-style-type: none"> <li>Study the physical attributes of the project to determine the critical sequences that control the project completion date</li> <li>Schedule development and controls</li> <li>Analysis of the key components of the contract programme</li> <li>Progress of works (including visiting site) and compare progress with projections.</li> <li>Review claims procedures and records for delay and disruption</li> </ul>
Quality and Inspection	<ul style="list-style-type: none"> <li>Facilities design &amp; specification standards</li> <li>Design review and approval process</li> <li>Quality assurance process</li> <li>Remedial / defects rectification procedures</li> </ul>	<ul style="list-style-type: none"> <li>Inadequate design approval process</li> <li>Quality assurance procedures not in place / not followed</li> <li>No remedial / defects rectification procedures</li> <li>Latent / patent defects</li> </ul>	Review / Test <ul style="list-style-type: none"> <li>Design approval processes</li> <li>Quality assurance procedures and sample test compliance</li> <li>Cost and time provisions for remedial / defects rectification</li> </ul>

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## Example of an audit approach (2)

	Area / Workstream	Risks	Approach
Cost Management	<ul style="list-style-type: none"> <li>Program cost management guidelines</li> <li>Project funding &amp; capital budgeting</li> <li>Cost &amp; schedule forecasting</li> <li>Cost control</li> <li>Final payment / retention release</li> <li>Operating budget processes</li> <li>Project close out performance</li> <li>Financial information systems</li> </ul>	<ul style="list-style-type: none"> <li>Overstated / understated costs and value</li> <li>Poor CVR process / methodology</li> <li>Inappropriate recognition of profit assessments</li> <li>Inaccurate cost to complete</li> <li>Accrual of subcontractor liabilities</li> <li>Valuation of variations</li> <li>Claims procedures</li> <li>Materials on site</li> <li>Plant performance</li> <li>Unreliable financial information</li> <li>Inadequate assessment of costs to complete</li> <li>Lack of formal change control procedure</li> </ul>	Review / Test <ul style="list-style-type: none"> <li>Analyse financial information systems</li> <li>Work in progress (WIP) assessments</li> <li>Review CVR methodology</li> <li>CVR review and analysis</li> <li>Change control procedures</li> <li>Materials on site assessments</li> <li>Review contingency provisions and debtors vs. WIP</li> <li>Test financial information systems and recommend improvements</li> <li>Review interim payment procedures and payments to date</li> </ul>
Design	<ul style="list-style-type: none"> <li>Design liability</li> </ul>	<ul style="list-style-type: none"> <li>Fitness for purpose provisions</li> <li>Insurances including professional indemnity insurances</li> <li>Capabilities of appointed designers and sub consultants</li> <li>Novelty of construction and additional design liability</li> <li>Design fee</li> </ul>	Review <ul style="list-style-type: none"> <li>Contractors design liabilities</li> <li>Insurances</li> </ul>
HR Management	<ul style="list-style-type: none"> <li>Project management staffing</li> <li>Skills assessment / tools and techniques</li> <li>Knowledge management</li> </ul>	<ul style="list-style-type: none"> <li>Lack of clarity of roles and responsibilities</li> <li>Inappropriate skills set</li> <li>Continuity planning</li> <li>Availability of skilled labour resources and sub-contractors</li> </ul>	Review / Test <ul style="list-style-type: none"> <li>Project organogram</li> <li>Ascertain project specific skills sets required</li> <li>Identify resource risks</li> <li>Continuous improvement and training</li> </ul>

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## Example of an audit approach (3)

	Area / Workstream	Risks	Approach
Risk Management	<ul style="list-style-type: none"> <li>Risk management culture</li> <li>Risk strategies / plans through the project life cycle</li> <li>Risk registers</li> <li>Risk mitigation</li> </ul>	<ul style="list-style-type: none"> <li>Poorly defined risk strategy</li> <li>Non-compliance of established risk management procedures</li> <li>How is cost and time risk dealt with at site level</li> </ul>	Review / Test: <ul style="list-style-type: none"> <li>Compliance with risk management procedures</li> </ul>
Communications and reporting	<ul style="list-style-type: none"> <li>Project reporting requirements</li> <li>Project budget and cost reporting</li> <li>Internal organisation communications and reports</li> <li>Daily project management processes</li> <li>KPI monitoring</li> <li>Milestone monitoring</li> </ul>	<ul style="list-style-type: none"> <li>Inadequate reporting</li> <li>Poor communications between project level and board level</li> <li>Milestones not recognised at appropriate times</li> </ul>	Review / Test: <ul style="list-style-type: none"> <li>Reporting procedures</li> <li>Identify weaknesses in reporting procedures</li> <li>Success criteria for KPI monitoring</li> <li>Review milestones and payments against achievements</li> </ul>
Safety, Insurance and Risk	<ul style="list-style-type: none"> <li>Company health and safety policy</li> <li>Insurance and warranties</li> </ul>	<ul style="list-style-type: none"> <li>Inadequate training</li> <li>Non-compliance with health and safety procedures</li> </ul>	Review / Test: <ul style="list-style-type: none"> <li>Compliance with policies and procedures</li> <li>Safety program training / adherence to legislation</li> </ul>
Procurement & Contracts	<ul style="list-style-type: none"> <li>Contracting approach and controls</li> <li>Sub-con qualification process</li> <li>Sub-con selection / contracting</li> <li>Contract compliance review</li> <li>Punch list</li> <li>Vendor qualification / selection</li> <li>Onerous contract conditions and specifications</li> </ul>	<ul style="list-style-type: none"> <li>Insurance and warranties not in place</li> <li>Contract payment conditions</li> <li>Poorly defined sub-contractor selection process</li> </ul>	Review / Test: <ul style="list-style-type: none"> <li>Procurement procedures for goods and services</li> <li>Review contract conditions and identify risks</li> </ul>
Issue Management	<ul style="list-style-type: none"> <li>Claims management</li> <li>Disputes</li> <li>Insurance claims</li> </ul>	<ul style="list-style-type: none"> <li>Inadequate time and cost provisions made for resolution of disputes</li> <li>Non payment of insurance claims</li> </ul>	Review and advise on: <ul style="list-style-type: none"> <li>Sub-contractor and employer claims</li> <li>Review provisions to cover legal costs</li> <li>Review status of insurance claims</li> </ul>
Risks to profit	<ul style="list-style-type: none"> <li>Commercial reality</li> </ul>	<ul style="list-style-type: none"> <li>Risk that demonstrable entitlement cannot be converted into cash</li> </ul>	<ul style="list-style-type: none"> <li>Advise on converting claims into cash</li> </ul>

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## Example of an audit questionnaire...

Project Initiation and project plan development					
Checklist Questionnaire	Document Identification	Document Result [C/N/P/A/X]	Implementation/ Observation/ Comments	Document Result [C/N/P/A/X]	Findings Report Reference
Does an approved project and quality plan exist? If so is it kept up to date and by whom?					
Has the project plan been prepared to allow for traceability (measuring and assessing objectives/ deliverables? If not, is there an alternative means of traceability?					
Is the objective of the project to fulfil the requirements of a contract? If so are contract reviews performed?					
Are project organisations determined/ assigned projects based on similar projects that have been previously undertaken?					
Does the Project Plan consist of a Quality Plan/ Quality approach?					
Is the retention of project related records managed?					

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## Case study Nuon Magnum

Elles Staats

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### Company profile

- ▶ Nuon was created in 1999 by the merger of regional Dutch utility companies. Nuon Energy de-merged from n.v. Nuon (network company) on 30 June 2009.
- ▶ Vattenfall Group acquired 49% of the shares in Nuon Energy from provinces & municipalities on 1 July 2009. The remaining 51% of the shares will be transferred to Vattenfall in stages over the coming six years.
- ▶ Core activities of Nuon Energy: energy production & supply, trading and sales
- ▶ Nuon Energy has around 3 million customers in the Netherlands, Germany & Belgium
- ▶ Main figures Nuon Energy first half of 2009:  
Turnover € 3,0 billion, operating profit € 294 million,  
about 6,100 employees, total assets € 8,5 billion

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## Capital investment project

### Nuon Magnum (Eemshaven)



## Audit objective

- ✦ In 2008 the Council of State suspended several permits which were crucial for construction
- ✦ Construction was halted for one year and resumed in September 2009
- ✦ Audit focused on suspension period and resumption of construction
- ✦ The objective of this audit was to review the project governance and to assess the adequacy of project controls

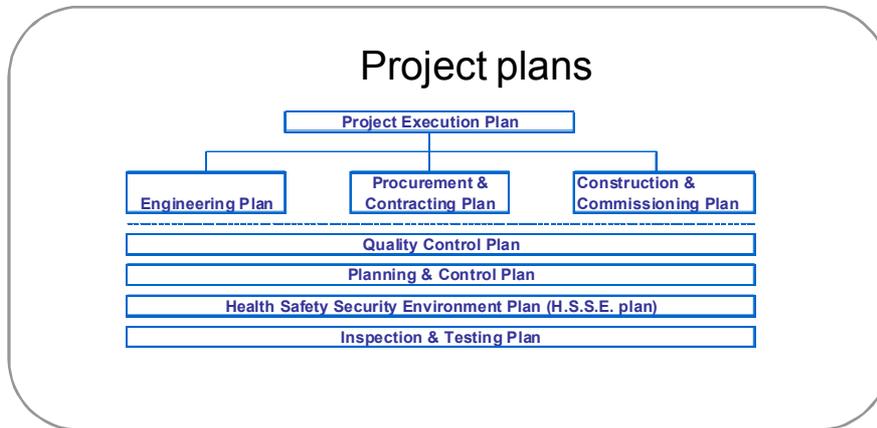
## Audit approach (part 1)

- ▣ Information received from auditees was offset against a normative framework, based on:
  - Audit templates used for similar project audits, provided by EY;
  - Principles of Prince II, a generally accepted project management method;
  - Nuon policies and procedures.
  
- ▣ The audit focussed on the following areas:
  - Time, Cost, HR, Risk and Issue management;
  - Procurement and contracts;
  - Financial reporting;
  - Permit procedures.

## Audit approach (part 2)

- ▣ We conducted the following activities:
  - Review of contract conditions;
  - Interviews with project team members and project management;
  - Review of materials and supporting documentation (guidelines, plans, reports, minutes of Board Meetings, etc)
  - Substantive testing
  
- ▣ Result:
  - Identification of key areas of risk
  - Assessment of design and implementation of mitigating controls;
  - Identification of areas of attention (and related recommendations);
  - Overall conclusion on project governance and project controls

## Audit approach (part 3)



## Lessons learned (part 1)

### ▣ Areas of attention:

- Stakeholder management
- Project definition
- Definition of risk appetite and mitigating controls
- Quality of contract
- Quality of main contractor and subcontractors

## Lessons learned (part 2)

### ▣ Areas of attention:

- Quality of project team
- Quality of plans, guidelines and procedures
- Interaction between project team and project owner
- Appointment of an Executive Oversight Board and Quality Assurance function
- Clear reporting on value of work done in relations to progress, critical path analysis, commentary on major risks in relation to contingency budget.

## Group discussion

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Questions?

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