

THE SIGMA GUIDELINES

PUTTING SUSTAINABLE DEVELOPMENT INTO PRACTICE – A GUIDE FOR ORGANISATIONS



The SIGMA Guiding Principles

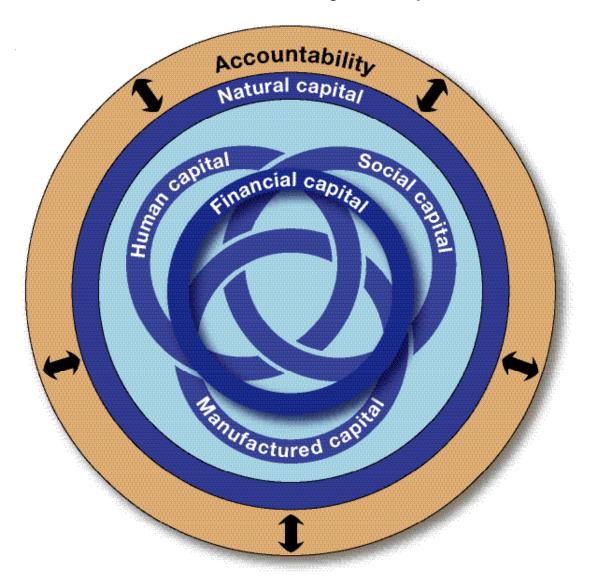


Figure 1. The SIGMA Guiding Principles.

The SIGMA Guiding Principles consist of two core elements:

- 1. The holistic management of five different types of capital that reflect an organisation's overall impact and wealth (in the broadest sense)
- 2. The exercise of accountability, by being transparent and responsive to stakeholders and complying with relevant rules and standards.

The principles, including the five forms of capitals are explained in Chapter 4.



Pccountability Accountability Monitor, Review Leadership and Vision and Report Check that performance Define the vision for is improving and sustainability and ensure leadership communicate results support **Enhancement and** maintenance of the five capitals Accountability Accountability Delivery Planning Decide what needs to Improve performance be done to improve performance

SIGMA Management Framework

Figure 2. The SIGMA Management Framework

The SIGMA Management Framework describes a four-phase cycle to manage and embed sustainability issues within core organisational processes. The Management Framework is described in Chapter 5.



About the SIGMA Project

The SIGMA Project – **S**ustainability **I**ntegrated **G**uidelines for **M**anagement was launched in 1999 by the British Standards Institution – the leading standards organisation, Forum for the Future – a leading sustainability charity and think-tank, and AccountAbility – the international professional body for accountability, with the support of the UK Department of Trade and Industry (DTI). For more information about the history and development of the SIGMA Project visit www.projectsigma.com

Project partners

AccountAbility

AccountAbility's mission is to promote accountability for sustainable development. As a leading international professional institute, AccountAbility provides effective assurance and accountability management tools and standards through its AA1000 Series, offers professional development and certification, and undertakes leading-edge research and related public policy advocacy. AccountAbility has an innovative, multistakeholder governance model.

See <u>www.accountability.org.uk</u> for more information.

BSI

The British Standards Institution (BSI) works to support business improvement and trade worldwide. BSI believes in the universal adoption of best management practices, reduction of risk throughout the trading process, and the harmonisation and acceptance of international standards by consent as a means of delivering economic prosperity and releasing the potential in all businesses to deliver excellence. See www.bsi-global.com for more information.

Forum for the Future

Forum for the Future is a UK-based sustainable development charity working to accelerate the transition to a sustainable way of life through a solutions-oriented approach. Forum works in partnership with business, local authorities, regional bodies and universities, to deliver a shared commitment to sustainability, providing advice on issues as diverse as climate change, procurement strategies, sustainability accounting and the digital divide. Forum also runs a number of cutting-edge research projects engaging with a much wider audience of NGOs, business, higher education and government on key sustainable development challenges.

See <u>www.forumforthefuture.org.uk</u> for more information.

The guidelines and the accompanying SIGMA Toolkit are available on the SIGMA Project website: www.projectsigma.com

FOREWORD

The successful organisations of the future will be those committed to sustainable development, delivering better social, environmental and economic value simultaneously. However, in this fast developing area, it is not always easy for companies to know what action they should take. The DTI has been pleased to sponsor the SIGMA Project as we believe it is important that organisations have access to clear, practical advice on sustainable development.

I welcome the SIGMA Guidelines which set out a clear and systematic programme of action for improvement. They benefit from having been developed through research, consultation with stakeholders and most importantly, practical application with companies and other organisations.

This kind of approach is crucial to enabling sustainable development to become an integral part of the mainstream business model of the future. In the long term, sustainable development will have benefits for both the organisations themselves and the UK economy as a whole, as the competitive advantage of reputational benefits, operational efficiency, innovation and lasting value take effect.

I strongly endorse the SIGMA Guidelines as a practical and innovative contribution to this debate and look forward to seeing them being widely used.

Patricia Hewitt

Secretary of State for Trade and Industry





"Sigma has been particularly helpful for us in exposing us to the very best thinking on business and sustainability. Its focus on bringing practitioners together to share experiences on the reality of managing sustainability has been commendable. By producing a framework it has pointed business in a common direction but allowed each company to interpret the detail itself, reflecting the diversity of business model, product/service offer and customer base in the UK's economy in the 21st Century."

Mike Barry

Sustainable Development Manager

Marks & Spencer



"WWF-UK's Business Education Unit welcomed the opportunity to be involved in the SIGMA project. The guidelines provide an invaluable, systematic approach to engaging meaningfully in sustainable development. We believe that SIGMA will represent a cornerstone of corporate sustainability management, equipping companies to meet the challenges of the future."

Joss Tantram

Business Education Manager WWF-UK



"Turning sustainable development thinking into management practice is a key challenge for business – SIGMA offers companies a practical approach to do this. Within the Principles, Guidance and the toolkit is a reservoir of knowledge that will help companies unlock Sustainable Development for themselves."

Patrick Mallon

Director Benchmarking and Reporting

Business in the Community





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Whilst the list grows ever longer, we would specifically like to thank the following for their valued contributions to the Project:

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- 2. The UK Department of Environment, Food and Rural Affairs (DEFRA) for providing practical and policy support to the Project. Our particular thanks to Bernie Walsh.
- 3. The organisations that worked with us to test and develop the SIGMA Guidelines and help fund our work. These included:
 BAA, Boots, Bovince, British Airways, Co-operative Bank, DEFRA, Durham County Council, Horizons
 Courth Most Innerse, January Legal Payer Legal

South West, Innogy, Jaguar, Land Rover, London Borough of Southwark, London Borough of Waltham Forest, Marks and Spencer, Northumbrian Water, Powergen, RMC, TNT, Txu, Vauxhall Motors, Wessex Water.

- 4. The members of our Project Steering Group for their enthusiasm, knowledge, wisdom, and guidance. We have been fortunate to have representatives from:

 The Association of Chartered Certified Accountants (ACCA), Business in the Community, CELE Centre for Ethics Law and Economics, Centre for Sustainable Design, Centre for Tomorrow's Company, The Citizen Brand Company, Confederation of British Industry, Department for International Development, Department of the Environment, Food and Rural Affairs, Department of Trade and Industry, Federation of Small Businesses, New Economics Foundation, The Natural Step, S/- British Standards Institution, SustainAbility Ltd, Trades Union Congress, Traidcraft, The Work Foundation, WWF-UK.
- 5. Our Research and Development Consortia for their expertise and for opening the door to a wealth of knowledge, information and best practice. We are also grateful for the opportunity to collaborate with ACCA, the Chartered Institute of Marketing and the Centre for Sustainable Design.
- 6. The sustainable development consultants who worked to support our piloting organisations and contributed their considerable expertise, enthusiasm and commitment: Dave Knight, and Jason Perks of Sd3 and before them Julia Kukard, Michael Smith and Christopher Sheldon.
- 7. We would like to thank current and former staff of the Project and of the three founding partner organisations: BSI, Forum for the Future and AccountAbility. In particular we thank David Bent, Christopher Cutter, Fiona Gibbons, Virginia Gould, Annette van der Kolk, George Martin, Ruth Martin, Philip Monaghan, Sandy Muirhead, Sara Murphy, Sara Parkin, Mike Pierce, Jonathon Porritt, Mark Watson, James Wilsdon and Simon Zadek.
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The final responsibility for the content of this document lies with the SIGMA Project Management Team: Mark Barthel of BSI, Jonathan Cohen of AccountAbility, Stephanie Draper of Forum for the Future and Rosalind Oakley, SIGMA Project Director.



1. EXECUTIVE SUMMARY

1.1 Towards a sustainable world

Creating a sustainable future, economically, socially and environmentally requires governments, society, organisations and individuals to rethink how we use our resources, how we interact, and what we want to achieve. There is increasing recognition that we are all part of a complex and interdependent system. Some of our behaviours are causing irreparable damage that threatens the continued survival of our species and planet. Sustainable development¹ offers the opportunity of a new course, towards a better future.

Sustainability:² the capacity for continuance into the long term

Sustainable development: development that meets the needs of the present without compromising the ability of future generations to meet their own needs

UK Government's sustainable development strategy identifies four objectives to be met at the same time:

- 1. social progress which recognises the needs of everyone;
- 2. effective protection of the environment;
- 3. prudent use of natural resources;
- 4. maintenance of high and stable levels of economic growth and employment.

1.2 The organisational contribution to a sustainable world

Organisations are part of our increasingly complex and global system, drawing on and impacting on that system. Sustainable development poses a challenge to the traditional mindset of organisations. Increasingly their performance is judged not just by the services, products and profits they make but also by the impacts they have on human and social well-being and on the natural environment on which we all depend for life. Expectations are changing, bringing both risks and opportunities.

1.2.1 Opportunities

Growing evidence of a business case

There is an increasing body of evidence that companies that take a more sustainable approach enjoy positive benefits.⁴ The nature of these rewards varies for different organisations and is dependent on their particular sector, strategy and stage of development.



¹ Corporate Social Responsibility, corporate citizenship and triple bottom line are some of the terms variously used by companies to describe their non-financial performance. We prefer to use the term 'sustainable development' as explained above, to encompass an organisation's economic, social and environmental performance.

² 'Our Common Future' Tomlinson C. Report of the World Commission on Environment and Development chaired by Norwegian Prime-Minister Gro Harlem Brundtland1987. Oxford Paperbacks. Widely known as 'The Brundtland Report'.

³ A better quality of life: a strategy for sustainable development for the UK May 1999 (Cm 4345, The Stationery Office, London, ISBN 0-10-143452-9).

⁴ See for example: Sustainability Pays, Brian Pearce, Patrick Roche, Nick Chater (2002) Co-operative Insurance Society, which draws on almost 400 separate research papers dedicated to developing or measuring the business case.

Business benefits⁵		
Improved operational efficiency	Preservation of licence to operate	
Enhanced brand value and reputation	Promoting and increasing innovation	
Customer attraction and retention	Improved access to capital	
Enhanced human and intellectual capital	Building and sustaining shareholder value	
Improved management of risk Generating increased revenues		
Attracting and retaining talented staff	Identification of new opportunities	

A values case. More responsible business practices often deliver traditional business benefits. A more fundamental driver for action is the prospect of being architects of a better future for ourselves, for others and for generations to come.

1.2.2 Risks and threats

There are growing pressures on organisations to take greater responsibility for their social, environmental and economic performance:

- new communication technologies that allow the fast spread of information about what is happening around the world, including the performance of individual organisations
- a growing sense that corporate social and environmental behaviour is a source of business risk, particularly to brand, reputation and shareholder value – but also to operational efficiency, access to capital, licence to operate, attractiveness to customers and employees
- increasing governmental interest and action at national and international level.
 Interventions range from legislation on specific issues, to tax incentives and promotion of voluntary codes.
- increasing power of multinational companies with greater power comes greater responsibility
- raised awareness that corporate responsibility includes consideration of behaviour and performance both up and down the supply chain
- increasing influence of NGOs (non-governmental organisations).⁶



⁵ This is based on: *Uncovering the business case for corporate sustainability* produced by Sustainability with the support of the United Nations Environment Programme, 2001. Although described as business benefits they are relevant for other sectors.

⁶ NGOs should of course not be thought of only as a threat. Many NGOs take a constructive solutions-oriented or partnership approach. Engagement with NGOs and others can add valuable insight and aid innovative thinking by organisations.

1.3 SIGMA – helping organisations to take action

A key issue for organisations that want to respond to the challenge posed by sustainable development is how to take effective action.

SIGMA provides a clear, practical, integrated framework for organisations. It allows an organisation to build on what it has, to take a flexible approach according to its circumstances and to reduce duplication and waste by seeing how different elements can fit together. The SIGMA Guidelines point the practitioner towards the important questions to ask and the actions to resolve them.

SIGMA content	How it helps an organisation	
SIGMA Guiding Principles	Help an organisation understand how it can contribute to sustainable development and offer a framework to help an organisation develop its own robust principles.	
SIGMA Management Framework integrates sustainable development issues into core processes and mainstream decision-making.	Four systematic phases, broken down into detailed sub-phases to allow an organisation to develop, plan, deliver, monitor and report on its sustainable development strategy and performance. The Framework explains clearly and concisely necessary activities, the anticipated outcomes, and lists further resources. It also helps an organisation understand how to build on what it already has in place.	
SIGMA Toolkit Available at www.projectsigma.com	Advice and guidance on specific management challenges, e.g. reviewing performance, assessing opportunities and risks, and stakeholder engagement.	

1.4 SIGMA Guiding Principles for a sustainable organisation

The SIGMA Guiding Principles consist of two core elements:

- 1. The holistic management of five different types of capital that reflect an organisation's overall impact and wealth (in the broadest sense).
- 2. The exercise of accountability, by being transparent and responsive to stakeholders⁷ and complying with relevant rules and standards.

The Guiding Principles are shown in Figure 1. They are also reproduced on the outer cover for ease of reference.

The SIGMA Project

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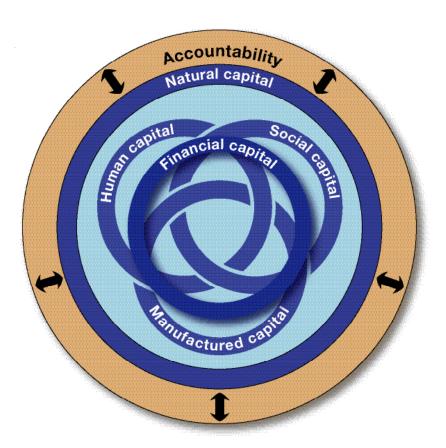


Figure 1. The SIGMA Guiding Principles

The five capitals are:

Natural capital – the environment

Social capital - social relationships and structures

Human capital - people

Manufactured capital – fixed assets

Financial capital - profit and loss, sales, shares, cash etc

Natural capital encompasses the other capitals as natural resources and ecological systems form the basis of life, on which all organisations (and wider society) depend. Social, human and manufactured capitals are critical components of an organisation and its activities. High levels of these capitals deliver value to both organisations and society, not to mention improving the quality of life of stakeholders. Financial capital is crucial to the ongoing survival of an organisation, and is simply derived from the value that the other four capitals provide. All of the capitals are heavily interlinked and there is some overlap between them.

This whole system is then encircled by the principle of accountability, representing the relationship that an organisation has with the outside world – with its stakeholders and for its stewardship of the five capitals.



The capitals need to be managed for the long term, not just for immediate return, building up stocks of capital and living off the interest that this creates. They also need to be recognised as interdependent, where changes in one are likely to cause an impact on another. Likewise, one form of capital cannot simply be traded against another.

The SIGMA Guiding Principles are compatible with other approaches that organisations may wish to pursue, most notably the concept of the triple bottom line, which has widespread popularity.⁸

1.5 SIGMA Management Framework

The SIGMA Management Framework describes a four-phase cycle to manage and embed sustainability issues within core organisational processes.

Organisations may enter the cycle at different points and work through the phases at different speeds according to their particular circumstances and existing systems.

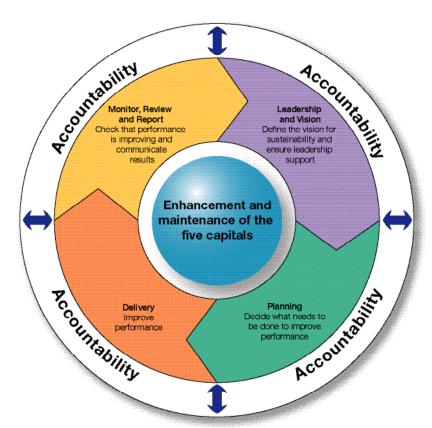


Figure 2. The SIGMA Management Framework



The idea of the triple bottom line was developed by John Elkington (1997) Cannibals with Forks - The triple bottom line of 21st Century business, Capstone Publishing Limited. See section 4.3 for further explanation of the triple bottom line and how the SIGMA Guiding Principles build on this concept.

These four phases are divided into detailed sub-phases:

SIGMA Four-phase Management Framework and sub phases		
Management Phase	Purpose	
Leadership and Vision LV1 Business case and top-level commitment LV2 Vision, mission and operating principles	 To develop a business case to address sustainability issues and secure top-level commitment to integrate sustainable development into core processes and decision-making. To identify stakeholders and open dialogue with them on key impacts and suggested approaches. To formulate the organisation's long-term sustainable 	
LV3 Communication and training LV4 Culture change	 development mission, vision and operating principles and a high-level strategy that supports them, and to revisit them periodically. To raise awareness of sustainability issues and how they may affect the organisation's licence to operate and its future direction and its training and development requirements. To ensure that the organisational culture is supportive of a move towards sustainability. 	
Planning P1 Performance review P2 Legal and regulatory analysis and management P3 Actions, impacts and outcomes P4 Strategic planning P5 Tactical planning	 To ascertain the organisation's current sustainability performance, legal requirements and voluntary commitments. To identify and prioritise the organisation's key sustainability issues. To develop strategic plans to deliver the organisation's vision and address its key sustainability issues. Consult with stakeholders on plans. To formulate tactical short-term action plans to support the agreed sustainability strategies with defined objectives, targets and responsibilities. 	
P1 Change management P2 Management programmes P3 Internal controls and external influence	 To align and prioritise management programmes in line with strategic and tactical planning and the organisation's sustainability vision. To ensure that identified actions, impacts and outcomes and legal and self-regulatory requirements are managed and appropriate internal controls are in place. To improve performance by delivering sustainability strategies and associated action plans. To exercise appropriate external influence on suppliers, peers and others to progress sustainable development. 	
Monitor, Review and Report MMR1 Monitoring, measurement, auditing and feedback MRR2 Tactical and strategic review MRR3 Reporting progress MRR4 Assurance of reporting	 To monitor progress against stated values, strategies, performance objectives and targets. To engage with internal and external stakeholders via reporting and assurance, and by incorporating feedback into effective strategic and tactical reviews culminating in appropriate and timely change. 	



1.6 SIGMA Toolkit

The toolkit provides a range of practical tools and guides that organisations can use to help them improve their management of sustainability issues and their overall performance, e.g. a business case tool, a performance review tool, a process for stakeholder engagement, and a sustainability scorecard. The full SIGMA toolkit, and a selection of case studies are available on our website www.projectsigma.com

1.7 Improving performance

Improved performance is the key aim of the SIGMA Guidelines. This is achieved not by prescribing levels of performance in the Guidelines themselves, but by setting out how organisations should set performance targets that are consistent with the operating principles they have adopted; measure their performance against these targets over time and report against them – taking action to remedy any situations where the level or speed of performance improvement is insufficient to achieve the targets that have been set.

"The Boots Group has a long standing commitment to incorporate sustainable development principles into its business operations. Collaboration with the Sigma project is a natural progression of this philosophy. Using the latest thinking, Sigma has provided the stimulus to develop new processes, enabling us to remain a leading edge sustainable business and reinforce the trust our customers place in the Boots name."



Ken Piggott

Group Corporate Social Responsibility Director

Boots Group PLC



2. INTRODUCING THE SIGMA GUIDELINES

In recent years, increasing numbers of organisations have recognised that there is a powerful case for managing the social, environmental and wider economic impacts of their activities. Many organisations however, are unsure of how best to act.

2.1 The purpose of the SIGMA Guidelines

The SIGMA project has developed the SIGMA Guidelines to provide clear, practical advice to organisations to enable them to make a meaningful contribution to sustainable development.

The Guidelines help organisations to:

- effectively meet challenges posed by social, environmental and economic dilemmas, threats and opportunities.
- become architects of a more sustainable future.

2.2 The development of the guidelines

The SIGMA Project has involved a unique range of leading practitioners, thinkers and opinion formers to ensure the Guidelines are as effective and credible as possible. They were developed through:

- research into best practice and by commissioning new work
- practical piloting of different drafts of the Guidelines by leading companies and public sector organisations
- input from stakeholders, particularly from the wide range of organisations represented on our Project Steering Group.

The Guidelines consist of:

- a set of Guiding Principles that help organisations to understand sustainability and their contribution to it.
- a Management Framework that integrates sustainability issues into core processes and mainstream decision-making. It is structured into phases and sub-phases.⁹

On our website you can also find the SIGMA **Toolkit**, consisting of targeted tools and approaches to help with specific management challenges, and case studies explaining how organisations have used the SIGMA Guidelines and Toolkit to tackle real issues.



THE SIGMA GUIDELINES

SIGMA is the first of its kind, but it links into existing management systems and frameworks such as ISO 14001, Investors in People, the ISO 9000 series, OHSAS 18001 and AA1000 Framework, thus enabling compatibility with existing systems and helping organisations to build on what they already have in place.

The SIGMA Guidelines provide flexible and workable solutions that can be implemented across a wide range of sectors, types of organisation and functions. This document is a guide for practitioners. Its intended audiences are:

- organisations from the private, public and voluntary sectors, regardless of size, industry or stage of development in understanding the sustainability challenge
- managers responsible for directing, planning or implementing sustainable approaches in their organisations, including functional specialists such as product designers, human resources and business process professionals
- anyone interested in the contribution organisations can make to sustainable development.

2.3 About the SIGMA Project

The SIGMA Project – **S**ustainability – **I**ntegrated **G**uidelines for **M**anagement – was launched in 1999 by the British Standards Institution, the leading standards body; Forum for the Future, a leading sustainability charity and think-tank; and AccountAbility, the international professional body for accountability, with the support of the UK Department of Trade and Industry (DTI).

For more information about the history and development of the SIGMA Project visit www.projectsigma.com



3. HOW TO USE THE SIGMA GUIDELINES

3.1 Audience

The SIGMA Guidelines, in particular the Executive Summary are aimed at anyone interested in the contribution organisations can make to sustainable development. The SIGMA Management Framework and SIGMA Toolkit, focused on practical details, are of particular value to those managers and personnel who are responsible for directing, planning or implementing sustainable approaches in their organisations.

3.2 A flexible approach

The SIGMA Guidelines are designed to allow flexibility in the way they are used by organisations according to their individual circumstances. For example:

- The SIGMA Guiding Principles set out a framework to help organisations understand how they can contribute to sustainable development. Organisations may adopt these, use them to develop or benchmark their own principles, or work with other compatible principles for sustainable development.
- The SIGMA Management Framework can be used to build on existing management systems and approaches or as a stand-alone framework for managing sustainability issues in an organisation.
- Organisations may move through the Management Framework at different speeds and give different phases different emphasis depending on their individual circumstances and the level of maturity of their sustainable development policies, strategies and programmes.
- The phases can be used to institute a formal management system or as guidance to deepen and broaden existing management practice without the formal structure and documentation of a management system.
- The SIGMA Toolkit offers a range of tools for organisations to use when appropriate.

3.3 Certification and assurance

It is important that organisations ensure their activities and reports are credible.

Certification is a process that uses a specified set of criteria, principles and standards, and is carried out by a third party to attest that prescribed requirements have been fulfilled.



Assurance is an evaluation method that uses a specified set of principles and standards to assess the quality of a reporting organisation's subject matter, to establish confidence and credibility. This should include the systems, processes and competencies that underpin its performance.¹⁰

It is important to distinguish between the two approaches. Certification is predicated on the need to follow prescribed approaches or specific requirements. Assurance is more focused on the overall outcome than the following of prescribed steps.

The SIGMA Guidelines are not intended for certification purposes. SIGMA believes assurance is an important component of credibility. We also believe that the unique nature of sustainable development requires an innovative and flexible approach – unlikely to be delivered through a conventional 'requirements-based' certification scheme. Sub-phase MRR4 of the SIGMA Management Framework outlines how organisations can assure their processes and reporting, in particular by engagement with stakeholders.

3.4 An evolving topic

Sustainable development is a dynamic topic and our knowledge and understanding is ever developing. Wherever possible we have provided signposts to additional sources of information.

The SIGMA Project website also contains additional information, including the SIGMA research and development reports and archive material.

3.5 Improving performance

Improved performance is the key aim of the SIGMA Guidelines. This is achieved not by prescribing levels of performance in the Guidelines themselves, but by setting out how organisations should set performance targets, which are consistent with the operating principles they have adopted; measure their performance against these targets over time and report against them – taking action to remedy any situations where the level or speed of performance improvement is insufficient to achieve the targets that have been set. The SIGMA Guidelines can be used with standards and guidelines that prescribe levels of performance, or to assist benchmarking of performance.



¹⁰ This definition is based on the AA1000 Assurance Standard.

4. THE SIGMA GUIDING PRINCIPLES

4.1 The purpose of the SIGMA Guiding Principles

The purpose of the SIGMA Guiding Principles is:

- to help organisations understand how they can contribute to sustainable development
- to provide a framework that helps organisations to develop a robust set of guiding principles that they can then follow.

Developing robust principles for your organisation

It is up to individual organisations to select the guiding principles that best fit their values, vision, mission, strategies and operations. These guiding principles should then be communicated to the organisation's stakeholders and will act as a compass for its journey towards a more sustainable future. This goal should be achieved through well-informed and participative decision-making, improved awareness of acceptable operating parameters and transparency of purpose and direction.

There are a wide range of existing codes of conduct and best practice, business principles and guidelines, from which the SIGMA Guiding Principles have been developed. The SIGMA Guiding Principles seek to build upon a range of existing approaches, whilst remaining compatible with them. For a review of 20 standards and guidelines relevant to sustainable development see 'SIGMA Guide to Guidelines and Standards relevant to sustainable development' in the SIGMA Toolkit. This can be found at www.projectsigma.com

Where an organisation has already adopted or signed up to external codes or has valid principles in place, it can choose to use the SIGMA Guiding Principles to benchmark the coverage, depth and breadth of its existing approaches.

An organisation that achieves alignment with the SIGMA Guiding Principles will be helping to maximise its contribution to sustainable development. How the SIGMA Guiding Principles relate to other approaches, such as the triple bottom line, is discussed in section 4.3.

4.2 The SIGMA Guiding Principles

The SIGMA Guiding Principles consist of two core elements:

- 1. The holistic management of five different types of capital that reflect an organisation's overall impact and wealth (in the broadest sense)
- 2. The exercise of accountability, by being transparent and responsive to stakeholders and complying with relevant rules and standards.

The SIGMA Guiding Principles seek to illustrate and reflect what an organisation working towards sustainability would look like and some of the characteristics that such an organisation might exhibit. Figure 1 on the inside front cover shows how the two core elements of the SIGMA Guiding Principles can work in combination within organisations.

The five types of capital are:

Natural capital - the environment

Social capital – social relationships and structures

Human capital - people

Manufactured capital - fixed assets

Financial capital - profit and loss, sales, shares, cash etc

Natural capital encompasses the other capitals as natural resources and ecological systems form the basis of life, on which all organisations (and wider society) depend. Social, human and manufactured capitals are critical components of an organisation and its activities. High levels of these capitals deliver value to both organisations and society, not to mention improving the quality of life of stakeholders. Financial capital is crucial to the ongoing survival of an organisation, and is simply derived from the value that the other four capitals provide. All of the capitals are heavily interlinked and there is some overlap between them.

This whole system is then encircled by the principle of accountability, representing the relationship that an organisation has with the outside world – with its stakeholders and for its stewardship of the five capitals.



4.2.1 Accountability

What does it mean?

'Accountability' consists of three elements:

- 1. **Transparency** means the duty of an organisation to account to its stakeholders.
- 2. **Responsiveness** means the need to respond to stakeholders.
- Compliance means the duty to comply with standards to which an organisation is voluntarily committed, and rules and regulations that it must comply with for statutory reasons.

An organisation's accountability is fulfilled by being transparent, being responsive and by its compliance with appropriate rules; and by engaging with and accounting to stakeholders for its performance in these respects.

Organisational accountability is based on effective engagement with stakeholders. An organisation's stakeholders are those groups who affect and/or are affected by the organisation and its activities. Stakeholders may include, but are not limited to owners, trustees, employees and trade unions, customers, members, business partners, suppliers, competitors, government and regulators, the electorate, non-governmental organisations (NGOs), not-for-profit organisations, pressure groups, and local and international communities. Engagement builds relationships with stakeholders to determine what is important, or material, ¹¹ to all involved in order to improve overall performance.

Why it is important to organisations

The principle of accountability acknowledges that an organisation is part of a wider environmental, social and economic system. Stakeholder engagement helps to secure an ongoing licence to operate. It also provides a powerful stimulus to innovation and helps an organisation gain new understanding and insight. In addition, accountability better enables an organisation to identify, evaluate and manage risks and opportunities arising from its impacts on and relationships with its stakeholders, such as customer and employee liability lawsuits and other issues affecting reputation and brand. Accountability supports improvements in the overall performance of organisations, enhancing financial performance and the long-term value of the organisation to shareholders and other owners.



¹¹ Material means information needed by stakeholders for them to be able to make informed judgements, decisions and actions about an organisation's sustainability performance.

Ways organisations can enhance accountability

- Identify those who affect and are affected by the organisation.
- Practise stakeholder engagement.
- Identify priorities and key performance indicators by engaging with stakeholders.
- Measure, communicate, report and obtain feedback on sustainability performance.
- Utilise governance systems that inspire confidence and trust.
- Practise accountability throughout the organisational supply chain.
- Develop and observe an ethical code of conduct.
- Be consistent in words and actions, including public policy positions, advertising and marketing activities.
- Be transparent about performance through accessible reporting mechanisms.

4.2.2 Maintenance and enhancement of the five capitals

The five capitals component of the SIGMA Guiding Principles provides a basis for understanding sustainable development in terms of the economic concept of wealth creation or 'capital'. Any organisation will utilise these five types of capital to deliver its products or services. A sustainable organisation will maintain and, where possible, enhance these stocks of capital assets, rather than deplete or degrade them.

The five capitals apply at every stage of the product or service lifecycle, including through the supply chain, during production or service creation, when products and services are delivered, used, and at the end of their life. Hence a product or service will be based on a combination of all the capitals – built with human skills and knowledge, natural materials and social structures, using machinery and infrastructure and financial investment.

The following sections explain how each capital is relevant in an organisational context and provide guidance on how they can be managed and enhanced. ¹² Examples are given of how organisations can maintain and enhance the different capitals. Organisations should focus on the areas where they have the greatest impact, which will differ according to their circumstances.

¹² These lists of activities are not wholly inclusive, nor will every aspect be relevant to all organisations.

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Natural capital

What does it mean?

'Natural capital' means the natural resources (energy and matter) and processes needed by organisations to produce their products and deliver their services. They include *sinks* that absorb, neutralise or recycle wastes; *resources*, some of which are renewable (e.g. timber, grain, fish and water), whilst others are not (e.g. fossil fuels); and *processes*, such as climate regulation and the carbon cycle, which enable life to continue in a balanced and healthy way.

Why it is important to organisations

All organisations rely on natural capital to some degree and have an environmental impact. All organisations for example, currently consume energy and create waste (although some organisations have adopted zero waste or zero emissions strategies). Organisations need to be aware of the limits to our use of the natural environment and the impact that they can have on it now and in the future, and operate within them.¹³

Ways organisations can maintain and enhance natural capital¹⁴

- Limit and reduce over time the use of substances extracted from the Earth's crust.
- Substitute abundant minerals for those that are scarce in nature.
- Ensure that all mined materials are used efficiently within cyclic systems.
 Systematically reduce dependence on fossil fuels and use renewable resources instead.
- Eliminate the accumulation of human-made substances and products in nature

 substitute all persistent and unnatural compounds with substances that can
 be easily assimilated by natural systems. Eliminate waste, re-use, recycle or
 re-manufacture where possible.
- Prevent the physical degradation of nature and protect and enhance biodiversity and eco-system functions.
- Draw renewable resources only from well-managed and restorative eco-systems.
- Systematically pursue the most productive and efficient use of resources and land.
- Adopt the precautionary principle in any situation that may result in the modification of nature.



Eco-footprinting studies have shown that if everyone on the planet were to adopt a UK lifestyle then we would require three planet Earths to sustain humanity. Source: WWF-UK Living Planet Report 2002.
See: www.panda.org/news_facts/publications/general/livingplanet/lpr02.cfm.

¹⁴ This list draws heavily on the first three systems conditions of *The Natural Step* – a scientifically based, systematic approach for organisations to sustainably manage their resources and is designed to minimise risk and optimise opportunities.

Human capital

What does it mean?

'Human capital' incorporates the health, knowledge, skills, intellectual outputs, motivation and capacity for relationships of the individual. In an organisational context it includes the elements needed for people to engage in productive work and the creation of wealth, thereby achieving a better quality of life. Human capital is also about dignity, joy, passion, empathy and spirituality.

Why it is important to organisations

Organisations depend on individuals to function – for instance, they need a healthy, motivated and skilled workforce. Intellectual capital and knowledge management are increasingly recognised as key intangible assets that an organisation can use to create wealth. Health epidemics, such as HIV and AIDS, can damage organisational viability. Damaging human capital by abuse of human or labour rights or compromising health and safety has direct as well as reputational costs. Poverty prevents many people from achieving their full potential. ¹⁵

Ways organisations can enhance human capital

- Ensure that it is contributing positively towards meeting human needs such as subsistence, freedom and security, but also identity, empathy, creativity and leisure
- Give employees (and where possible other stakeholders) access to training, development and lifelong learning.
- Create an enabling environment for learning, innovation and sharing of knowledge.
- Respect human rights throughout its operations and geographical regions.
- Understand and respect human values and their different cultural contexts.
- Implement diversity policies that enable an organisation to access the variety of human talent and eliminate discrimination.
- Ensure health and safety, incorporating physical and mental well-being.
- Support health promotion and education.
- Provide a reasonable living wage and fair remuneration for employees and business partners.
- Create opportunities for varied and satisfying work.
- Adopt fair labour standards, including avoidance of slave, forced or child labour.



This is particularly true in areas with high HIV prevalence rate. More than 28 million Africans are living with HIV and in some countries over 30% of the adult population is infected. In the most severely affected African countries, it is estimated that more than one-quarter of the workforce may be lost to the immune deficiency disease by 2020. Source: UNAIDS Report on the Global HIV/AIDS Epidemic July 2002.

Social capital

What does it mean?

'Social capital' is any value added to the activities and economic outputs of an organisation by human relationships, partnerships and co-operation. Social capital includes, for example, networks, communication channels, families, communities, businesses, trade unions, schools and voluntary organisations as well as cultural and social norms, values and trust.

Why it is important to an organisation

Organisations rely on social relationships and interactions to help them to achieve their objectives.

Internally: social capital takes the form of shared values, trust, communications and shared cultural norms that help people to work cohesively and so enable organisations to operate effectively.

Externally: social structures help create a climate of consent and understanding, or a licence to operate, in which trade and the wider functions of society are possible. Organisations also rely on wider socio-political structures to create a stable society in which to operate, e.g. government and public services, effective legal systems and security arrangements, trade unions, schools and other organisations.

Ways organisations can enhance social capital

- Support the development of the community in which the organisation operates, including economic opportunities (e.g. the use of local service providers, suppliers and produce).
- Provide safe, supportive living and working conditions, including family-friendly policies.
- Ensure ethical sourcing of materials and fair treatment of suppliers, customers and citizens
- Respect and comply with local, national and international law.
- Pay taxes and be supportive of the social infrastructure.
- Implement effective communication systems throughout the organisation, reflecting shared values and objectives.
- Offer reasonable pricing, accessibility of products and services, and fair and accurate claims in promotional material.
- Minimise the negative social impacts of products and services and maximise the positive.
- Promote a culture where corruption and the payment of bribes are unacceptable, including provision for the anonymity and support of 'whistleblowers'.
- Contribute to open, transparent and fair governance systems.

Manufactured capital

What does it mean?

'Manufactured capital' refers to material goods and infrastructure owned, leased or controlled by an organisation that contribute to production or service provision, but do not become embodied in its output. Examples include: tools, technology, machines, buildings and all forms of infrastructure.

Why it is important to organisations

Manufactured capital is important for the sustainable development of an organisation in two ways. Firstly, the efficient use of manufactured capital enables an organisation to be flexible, responsive to market or societal needs, innovative and faster in getting its products and services to market. Secondly, manufactured capital and technology can reduce resource use and focus more on human creativity, thus enhancing both efficiency and sustainable development.

Ways organisations can enhance manufactured capital

- Use infrastructure, technologies and processes in a way that uses resources most efficiently.
- Develop flexible or customised production techniques that reduce resource use.
- Implement modular or closed loop manufacturing systems that reflect the whole lifecycle of products and services.
- Utilise system innovations leasing products on a continual service contract rather than a 'fire and forget' sales approach.
- Utilise reverse logistics to get 'used' products back from the market and develop re-use and re-manufacturing systems.
- Work towards zero-waste and zero-emissions production systems.
- Use industrial ecology looking at synergistic production systems where one organisation's waste streams are another's raw materials.
- Form partnerships within the supply chain and customer base to make more efficient use of resources and develop or improve products and services.
- Apply bio-mimicry mimicking nature and natural processes in industrial processes and systems design.
- Improve product systems through eco-efficiency and eco-innovation.
- Apply sustainable construction techniques when looking at new infrastructure or offices.
- Ensure adequate levels of investment, research and maintenance of infrastructure.



Financial capital

What does it mean?

'Financial capital' reflects the productive power and value of the other four types of capital and covers those assets of an organisation that exist in a form of currency that can be owned or traded, including (but not limited to) shares, bonds and banknotes.

Why it is important to organisations

Financial capital is the traditional primary measure of business performance and success (the 'single bottom line') in terms of reporting performance to shareholders, investors, regulators and government. Sustainable organisations need a clear understanding of how financial value is created, in particular the dependence on other forms of capital. For measures of financial capital to truly reflect the value of other forms of capital, organisations must understand the importance of a number of other factors and how to ascribe financial importance to them (see below).

Ways organisations can enhance financial capital

- Ensure that the organisation's financial measures reflect the value of the other four capitals.
- Value intangible assets such as brand and reputation to better understand their contribution to shareholder value.
- Internalise environmental and social costs and benefits and assign an economic value to them (i.e. understanding that they are either assets or liabilities on the organisation's balance sheet).
- Manage opportunities, risks and corporate governance issues.
- Demonstrate a positive stance on, and management of, sustainability issues to improve access to financial capital or reduce financial costs, for example by demonstrating that the organisation meets socially responsible investment (SRI) criteria or through achieving a reduction in insurance premiums as sustainability opportunities and risks are managed.
- Ensure equitable use of the wealth created.
- Honour relationships with suppliers and customers/citizens.
- Assess the wider economic impacts of the organisation's activities, products and services on society, e.g. creating wealth in the communities in which the organisation operates.

4.3 How the SIGMA Guiding Principles relate to other approaches

The concept of a 'triple bottom line' is widely used to describe sustainable development in an organisational context, setting out organisational performance in terms of three bottom lines – social, economic and environmental. It is a popular and powerful concept. The SIGMA Guiding Principles build on and develop this idea by offering the concept of protecting and enhancing five types of capital under an umbrella of organisational accountability. This approach is intended to illustrate the dynamic nature of sustainable development. By utilising the five capitals model it is possible to overcome some of the weaknesses of the triple bottom line concept, for example, the temptation to trade off social, economic and environmental factors as if they were equal (when environmental integrity is actually a prerequisite for society and the economy) and can be treated in isolation from one another (when, in fact, they are very often interrelated).

The SIGMA Guiding Principles seek to make it clearer that these five types of capital are interrelated and, therefore, need to be managed, protected and enhanced in an integrated fashion. The five capitals emphasise the underpinning nature of natural capital, as well as the fact that financial capital is simply an expression of the value of the other capitals.

SIGMA believes these distinctions are helpful to organisations, particularly when they are creating a vision and principles for sustainable development.

The two approaches – the triple bottom line and the five capitals model – are complementary, with manufactured and financial capital being reflected in the economic bottom line, human and social capital representing the social bottom line, and natural capital paralleling the environmental aspect of the triple bottom line. Indeed the triple bottom line approach has been used in other parts of the SIGMA Guidelines and in many of the SIGMA tools.

There are also a number of other codes and principles that organisations may choose to adopt or align with, for example the UN Global Compact, The Global Sullivan Principles, The OECD Guidelines for Multinational Enterprises, or Amnesty International's Human Rights Guidance for companies. The 'SIGMA Guide to Guidelines and Standards relevant to sustainable development' surveys 20 such codes that may be of interest to organisations.



5. THE SIGMA MANAGEMENT FRAMEWORK - GETTING INTO THE DETAIL

5.1 Introduction to the SIGMA Management Framework

The SIGMA Management Framework is a cycle of four flexible implementation phases: leadership and vision; planning; delivery; and review, feedback and reporting. Organisations may enter and move through the phases at different speeds and give different phases different emphasis depending on their individual circumstances, the availability of resources and the level of maturity of their sustainable development policies, strategies and programmes.

The SIGMA Management Framework may be used in whole or in part:

- to integrate existing management systems, building on existing approaches
- to establish a stand-alone management system
- as guidance to deepen and broaden existing management practice without the formal structure of a management system.

In order to ensure compatibility with existing practice, the SIGMA Management Framework is modelled on approaches widespread in formal and informal management systems. The 'Plan, Do, Check, Act' model that underpins the SIGMA Management Framework is familiar to many organisations and has the benefit of being both practical and effective in delivering improved organisational performance. Organisations can improve their performance by using the Management Framework:

- to set ambitious yet achievable targets
- to build on existing management systems and approaches or as a standalone framework for managing sustainability issues in an organisation.

Many of the activities and outcomes called for in the phases of the SIGMA Management Framework may already be in-hand as a result of existing business management practices and systems.

5.1.2 Getting started

Some organisations may have well-established business management systems or practices, but may need to clarify or revisit their strategic vision. For these organisations the leadership and vision phase would be a good place to start.



For other organisations the priority may be to embed sustainability into their core processes and decision-making. The planning and delivery phases of the SIGMA Management Framework would be a good place to start in these circumstances.

Other organisations like to start by reporting what they are doing and then build systems to improve their performance. Organisations that have already used the Global Reporting Initiative's (GRI) Sustainability Reporting Guidelines¹⁶ to produce sustainability reports will find that working through the SIGMA Management Framework will help them to improve their performance.

5.1.3 Introduction to the Management Framework tables

Figure 2 and Table 1 on the fold out covers outline the four key phases of the SIGMA Management Framework. Each phase is divided into sub-phases (for example, the Leadership and Vision (LV) phase is divided into sub-phases LV1 to LV4). In sections 5.2 to 5.5 each phase and its sub-phases are described in detailed tables. The tables contain:

- key questions to focus on
- a cross-check of how intended activities link to the organisation's chosen principles
- who needs to be involved
- what the key activities are
- when they need to be implemented
- a list of helpful resources
- expected outcomes and outputs
- key implementation issues that the organisation may need to be aware of.

Organisations may choose to establish a dedicated team to implement SIGMA. The tables refer to such a team as the SIGMA Implementation Team. Similarly, an organisation may appoint key individuals to support the implementation process; these are referred to as Project Champions.

The outcomes and outputs column lists the likely output and outcomes of the recommended activities. Open book symbols denote where written output is likely to be appropriate. It is not necessary to produce all the documents listed in the tables. Some organisations will favour producing all or most of the written output, to aid monitoring and auditing; others will prefer a less formal approach, or will be able to modify existing documents rather than create new ones. An overview of core documents is listed in Appendix C.

All the SIGMA resources listed in the tables can be found on the SIGMA Project website: www.projectsigma.com



5.1.4 How the SIGMA Guiding Principles relate to the Management Framework

The SIGMA Guiding Principles provide a model reflecting what an organisation working toward sustainability might look like. These, along with other codes and principles will help organisations develop their own robust operating principles. This is a key activity in the Leadership and Vision phase. The Management Framework is all about helping organisations turn their vision and principles into reality. It is important to keep these principles in mind. The processes of building accountability and of enhancing capital are embedded within each phase. (Where it is particularly appropriate to engage stakeholders this is highlighted in the detailed descriptions of the phases and sub-phases.)

5.1.5 Improving performance

The phases are based on a management process, and do not include expected levels of performance. However, improved performance is the main aim of the SIGMA Guidelines and organisations should set ambitious and achievable goals that can be delivered using the SIGMA Management Framework.

"Participation in the SIGMA Project enabled us to change our approach for integrating the full range of sustainability factors within our management systems. We used the SIGMA framework to guide us in developing a Sustainable Development Management System and give us a strategy for moving forward."

Eryl Smith

BAA Heathrow

Business Strategy, Planning and Development Director





The four key phases of the SIGMA Management Framework

Management Phase	Purpose
Leadership and Vision Define the vision for sustainability and ensure leadership support for it	 To develop a business case to address sustainability issues and secure top-level commitment to integrate sustainable development into core processes and decision-making. To identify stakeholders and open dialogue with them on key impacts and suggested approaches. To formulate the organisation's long-term sustainable development mission, vision and operating principles and a high-level strategy that supports them, and to revisit them periodically. To raise awareness of sustainability issues and how they may affect the organisation's licence to operate and its future direction and its training and development requirements. To ensure that the organisational culture is supportive of a move towards sustainability.
Planning Decide what needs to be done to improve performance	 To ascertain the organisation's current sustainability performance, legal requirements and voluntary commitments. To identify and prioritise the organisation's key sustainability issues. To develop strategic plans to deliver the organisation's vision and address its key sustainability issues. Consult with stakeholders on plans. To formulate tactical short-term action plans to support the agreed sustainability strategies with defined objectives, targets and responsibilities.
Delivery Improve performance	 To align and prioritise management programmes in line with strategic and tactical planning and the organisation's sustainability vision. To ensure that identified actions, impacts and outcomes and legal and self-regulatory requirements are managed and appropriate internal controls are in place. To improve performance by delivering sustainability strategies and associated action plans. To exercise appropriate external influence on suppliers, peers and others to progress sustainable development.
Monitor, Review and Report Check that performance is improving and communicate the results	 To monitor progress against stated values, strategies, performance objectives and targets. To engage with internal and external stakeholders via reporting and assurance, and by incorporating feedback into effective strategic and tactical reviews culminating in appropriate and timely change.

Table 1. SIGMA Four-phase Management Framework and sub phases



"For Jaguar and Land Rover the "Sigma Project" experience has been of great value, giving the opportunity to explore in depth the concepts of sustainable development management. The output from the project is practical guidance, flexible tools and will help support us in developing sustainable business solutions."



Fran Leedham

Group Environment Manager

Jaguar & Land Rover



"Within Powergen, we have already developed policies and management systems for the various components of 'sustainable development'. We believe that the key benefit of the SIGMA Guidelines is that they bring together the principles of sustainable development and how these might be delivered within one unified policy and management system."

Sara Vaughan

Director Regulatory and Sustainable Development

Powergen



"The Co-operative Bank and CIS welcome the SIGMA guidelines, particularly the core emphasis on social accountability, independent assurance and the Natural Step principles of ecological sustainability. Going forward, Co-operative Financial Services will seek to further embed these elements and to deliver value in a sustainable manner."

The COPERATIVE BANK Customer led, ethically guided

Paul Monaghan

Head of Sustainable Development Co-operative Financial Services





5.2 Leadership and Vision Phase

Define the vision for sustainability and ensure leadership support for it.

Phase		Activity	
LV1	Business case and top-level commitment	 Developing a business case to address sustainability issues. Securing sufficient top-level management understanding and commitment to integrate sustainability and stakeholder engagement into core processes and decision-making. Identifying stakeholders and opening dialogue with them on key impacts and suggested approaches. 	
LV2	Vision, mission and operating principles	 Formulating the organisation's long-term sustainable development mission, vision and operating principles and a high-level strategy that supports them and revisiting them periodically. 	
LV3	Communication and training	 Establishing the organisation's training and development requirements; launching training programmes as appropriate. Raising awareness on sustainability issues and how they may affect the organisation's licence to operate and its future direction. 	
LV4	Culture change	Ensuring that the organisational culture is supportive of a move towards sustainability.	

Table 2. Leadership and Vision Phase.

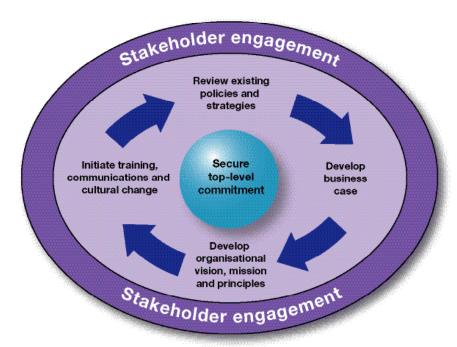


Figure 3. Leadership and Vision phase



PHASE:	LEADERSHIP AND VISION Sub-phase: Business case and top-level commitment LV1			
Key Questions	'What is our business case for sustainable development?' 'How sustainable are we?' 'What are we talking about here?' 'What do our stakeholders think?'			
Alignment with principles	Organisations should ensure that: Top-level management are aware of the strategic and tactical implications of adopting a more sustainable business model and alignment with the SIGMA Guiding Principles.			
When	Prior to establishing the implementation programme and throughout the implementation process.			
Who	Project Champions, Board Members and Senior Management Team.			
	What - Key Activities	How - Suggested Resources	Results – Outcomes and Outputs	
Business case development	Formulating a business case for sustainability, which includes considering the organisation's capacity and capability to contribute and defining the boundaries of the organisation's responsibility	 'To whose profit? Building a Business Case for Sustainability' (2002) WWF-UK www.wwf.org.uk/towhoseprofit SIGMA Business Case tool 'Buried Treasure – Uncovering the business case for corporate sustainability' (2001) SustainAbility www.sustainability.co.uk SIGMA case study: Vauxhall Motors Business Case 'Sustainability Pays' Brian Pearce, Patrick Roche, Nick Chater (2002) Co-operative Insurance Society 'The business case for sustainable development' WBCSD (2002) www.wbcsd.org 'Developing Value – The business case for sustainability in emerging markets' SustainAbility, International Finance Corporation & Ethos Institute (2002) www.sustainability.com/developing- value / 	Internal business case for sustainability	
Initial stakeholder dialogue	 Identifying stakeholders who are key to sustainable business success. Opening an initial dialogue with stakeholders to understand their perspectives and priorities on sustainability and how their views and level of influence are likely to affect the organisation's future direction. 	SIGMA Guide to Stakeholder Engagement AA1000 Series standards www.accountability.org.uk Environment Council www.the-environment-council.org.uk	 Initial stakeholder dialogue plan Initial stakeholder dialogue exercise, including records and key issues raised 	

PHASE:	LEADERSHIP AND VISION Sub-phase: Business case and top-level commitment LV1		
	What - Key Activities	How - Suggested Resources	Results – Outcomes and Outputs
Awareness- raising and senior management commitment	 Awareness-raising workshops, meetings, and events with senior management and key personnel on sustainability issues and how they may affect the organisation's license to operate and future direction Note: this requires a reasonable understanding of the organisation's sustainability impacts and outcomes. Therefore, it may be prudent to conduct this exercise in parallel with the Performance Review in Phase 2 Planning of the Management Framework. 	'Value, Growth, Success – how sustainable is your business?' Advisory Committee on Business and the Environment (ACBE) (2000)	 Objective evidence that awareness of sustainability issues has been raised within the organisation (e.g. workshop attendance records, reference to sustainability issues in company documents, staff interviews, etc.) Board level/senior management champion secured. Leadership is demonstrated internally and externally. Adequate resources secured to proceed with the implementation process
Key Issues			

PHASE:	LEADERSHIP AND VISI Sub-phase: Vision, mission and		
Key Questions	'What is our vision in relation to sustainable development?' 'What is our mission in relation to sustainable development?' 'What operating principles are we already committed to and which do we amend or adopt in support of our vision and mission?' 'What are our values?'		
Alignment with principles	Organisations should ensure that: Their vision and mission for sustainable development are compatible with the SIGMA Guiding Principles and any other operating principles or codes of conduct they choose to adopt. The operating principles they adopt are complementary to the organisation's vision and mission for sustainable development. Subsequent to communicating their vision and mission for sustainable development, that they are suitably transparent about their performance against them over time, and that they are responsive to the views of relevant stakeholders.		
When	Following the awareness-raising phase		
Who	Project Champions, Board Members, S What - Key Activities	Senior Management Team, SIGMA Implen How – Suggested Resources	nentation Team. Results – Outcomes and Outputs
Vision and mission statement	 Developing an organisational vision and mission for sustainable development and/or setting company direction on sustainability. Note: Stakeholder dialogue, scenario planning, back casting exercises and a consideration of extended time horizons for business planning can assist in the development of a vision. 	The Natural Step www.naturalstep.org.uk 'Exploring Sustainable Development – WBCSD Global Scenarios 2000 – 2050' WBCSD (1997) www.wbcsd.org SIGMA Guiding Principles SIGMA case study: Northumbrian Water vision development	Vision and mission statement on sustainable development Gaining a good understanding of what the organisation would look like if it were sustainable and what the implications are Understanding stakeholder perspectives
Operating principles	Identifying and adopting relevant and appropriate operating principles to support and facilitate organisational vision	 SIGMA Guiding Principles SIGMA Guide to Guidelines and standards relevant to sustainable development UN Global Compact www.unglobalcompact.org OECD Guidelines for Multinational Enterprises www.oecd.org/daf/investment/guidelines Caux Roundtable Principles for Business http://training.itcilo.it/actrav_cdrom1/english/global/code/caux.htm Amnesty International's Human Rights Guidance for Companies www.amnesty.org.uk/business/pubs/hrgc.shtml 	Agreed set of operating principles Monitoring plan for alignment with vision, mission and operating principles

PHASE: LEADERSHIP AND VISION Sub-phase: Vision, mission and operating principles LV2			
	What - Key Activities	How - Suggested Resources	Results - Outcomes and Outputs
Consultation and Communication	 Consulting with stakeholders to strengthen the vision, mission and principles and to gain buy in. Communicating organisational vision, mission statement and operating principles to internal and external stakeholders and the provision of feedback mechanisms. 	 SIGMA Guide to Stakeholder Engagement AA1000 Framework 	Consultation process and communications plan, including process for responding to feedback Stakeholder engagement
Key Issues	Useful documents: Business case Existing policy and strategy documents Initial stakeholder engagement plan at Real-world tips: If an organisation chooses to develop be clearly linked to its overall vision at the boundaries of its responsibility, the perceptions. Recognise the issue of trade offs. The	and documented findings o a separate vision and mission for sustand mission, and ultimately they will nee ugh what it is, and is not, willing to accepte organisation needs to bear in mind he e organisation will need to deal with dile Sustainable development requires main	ot responsibility for. When considering ow this accords with stakeholder

PHASE:	LEADERSHIP AND VISI Sub-phase: Communication ar		
Key Questions	'Does everybody know what they need to know?' 'Has our training programme been effective?' 'Are our communications effective?' 'How can we take what we've learnt and use it to improve our performance and ability to innovate?'		
Alignment with principles	Organisations should ensure that: Their staff, subcontractors and suppliers understand their vision, mission and operating principles in sufficient detail to avoid situations that might lead to conflict with them; and that awareness amongst personnel is sufficiently high for them to recognise opportunities for continual improvements in performance and for capital enhancement. Their staff, subcontractors and suppliers are competent to undertake the roles assigned to them and have the level of authority to perform their roles effectively.		
When	From the outset of the implementation	process and thereafter as necessary.	
Who	Project Champions, Board Members ar Marketing Communications, PR and Po	nd Senior Management Team, Implementa ublic Affairs.	ation Team, Human Resources,
	What – Key Activities	How - Suggested Resources	Results – Outcomes and Outputs
Communication	 Identifying communications issues and implementing or refining communications strategy(ies) and plan(s): Identifying or confirming internal and external audiences Evaluating the relevance of communication and the use of appropriate language and vocabulary Determining appropriate communication techniques and forms of communication for different audiences Developing and testing of response mechanisms 	 SIGMA Guide to Stakeholder Engagement 'Sustainability Reporting Guidelines' Global Reporting Initiative (August 2002) www.globalreporting.org 	 List/database of relevant stake-holders and their communications/engagement needs, including the issues and impacts that affect each identified group Agreed language/vocabulary/messages for use within and outside the organisation Overall organisational communications strategy and plan (building on initial stakeholder engagement plan from LV1)
Training	 Establishing or refining learning, training and awareness programmes: Establishing learning models and cycles appropriate to the organisation's culture and strategies Undertaking skills audit and training/learning needs analysis Evaluating and agreeing delivery mechanisms Developing learning, training and awareness-raising materials Use learning, training and awareness-raising activities to drive cultural and behavioural change Evaluating training/learning and improve based on feedback continued 	 SIGMA Business Case Tool Investors in People The Natural Step (training materials) www.naturalstep.org.uk SIGMA R&D Report on Learning, Innovation and Culture Change 	Skills audit findings and gap analysis and learning/training needs analysis • Analysis of the learning models/ communities within the organisation and how they can be energised to achieve the organisation's vision for sustainable development • Development of awareness-raising materials and delivery mechanisms (e.g. intranet and internet resources, staff induction packs, etc.) • Development and testing of learning/training materials continued

	LEADERSHIP AND VISION Sub-phase: Communication and training LV3		
	What - Key Activities	How - Suggested Resources	Results - Outcomes and Outputs
Training continued	Capture organisational learning and feedback within knowledge management systems and review opportunities for innovation and performance improvements		Schedule and roll-out of awareness-raising and training events Performance indicators and measures to assess the effectiveness of awareness-raising/learning/training programmes (e.g. indicators of culture change and innovation) Analysis of impact of awareness-raising, learning and training on culture change and innovation Training analysis and plan
Key Issues	 Existing training materials and training. Existing communication strategies at the Real-world tips: Implementing organisations need to some organisations this will be later. Once the implementation plan has be in order to ensure that personnel at development. Ongoing training need. Wherever staff are considered to be rationale to support this decision. Internal communication issues will in Rather than relying on broadcast mecommunication prior to sending it of Tight targeting of messages will help. 	and plans be judge the most appropriate timing of control of the communications need to compete the communication of the competent on the basis of work experimental contact, sometiment the communication of the commun	ommunication and training activities. In be ongoing. It training needs will need to be undertaken their functions in relation to sustainable soperational staff. In the ence, the analysis should supply a mes in new ways and at new levels. In the ence of all the ence of the ence o

PHASE:	LEADERSHIP AND VISION Sub-phase: Cultural change LV4		
Key Questions	'Does the existing business culture support the organisation's vision of sustainable development?'		
Alignment with principles	Organisations should ensure that: The prevailing culture is supportive of their vision, mission and operating principles and will allow for sufficient allocation of resources to ensure the effective implementation of the strategic and tactical plans that underpin them.		
When	Ongoing – an assessment is required in the early stages of the SIGMA implementation process to ensure that the business culture is supportive of a move towards sustainability.		
Who	Project Champions, Board Members, Senior Management Team and SIGMA Implementation Team.		
	What - Key Activities How - Suggested Resources Results - Outcomes and Outputs		
Cultural change	 Analysis of the current business culture and any change required to achieve organisational vision and strategies, e.g. Ability to innovate and respond to changing markets and stakeholder expectations and priorities Capacity and ability to manage change successfully Organisational learning ability The prevailing and required leadership and empowerment culture (if different!) Changes in organisational or departmental structures and functions The development of strategies and programmes for crossfunctional collaborative working SIGMA Guide to Stakeholder Engagement SIGMA R&D Report on Learning, Innovation and Culture Change Report and recommendations on requirements for cultural change, including changes in organisational structure, policies and management and operational practices. 		
Key Issues	Useful documents: Staff attitude surveys and questionnaires. Real-world tips: The SIGMA research into the role of learning, innovation and culture change in sustainable development found that the key characteristics that reflect a 'learning company' are: A learning approach to informing organisational strategy – a concerted effort is needed to develop a strong company policy and strategy geared towards the development of a learning environment. Participative approach – although it is vital to have strong leadership to drive change, it is also equally important to engage stakeholders in a proactive partnership, especially employees. The spread of information – this involves empowering employees by making information widely available, disseminating information in order to promote understanding about the organisation's systems and processes. Formative accounting and control – ensuring that the systems of accounting, budgeting and reporting are structured to assist learning and innovation. Internal exchange – fostering working environments where individuals, groups, departments and divisions can engage in a regular dialogue with the aim of exchanging information on expectations and negotiating and providing feedback on issues.		

PHASE: **LEADERSHIP AND VISION** Sub-phase: Cultural change LV4 **Key Issues** Real-world tips: • Enabling structures - specific context-bound remits reduce scope for sharing ideas and innovation. Therefore roles need to be fluid and loosely structured, in order to allow for growth and development, thus creating a pool of resources and of creativity and innovation. • Inter-company learning - joint training, sharing in investment, research and development, and job exchanges can be excellent ways of pooling resources and learning from each other. • A learning climate, where individuals are encouraged to take advantage of a range of learning opportunities with the full support of the organisation. • Personal self-development opportunities – all stakeholders need to be encouraged to take responsibility for their own learning and development. However, it is the responsibility of management to provide guidance as well as the opportunity for self-development.

"The best thing about Sigma is the way it has brought together a wide range of organisations facing the same tough questions as us – how best to become more sustainable. The guidelines offer practical help distilled from the experience of working together over the past 3 years."

Katherine Bennett

Manager, Government Affairs and Policy issues Vauxhall Motors



"I believe that the SIGMA Guidelines represent a significant advance in sustainability thinking at a very practical level. The Guidelines offer organisations the opportunity to integrate and embed sustainability issues into their core processes and decision-making, whilst at the same time taking account of stakeholder needs and expectations."

Mark Barthel

Head of Environment, Sustainability and CSR BSI Group



"The SIGMA Guidelines provide a clear set of sustainability principles and a wide range of tried and tested tools.

Together, these provide a good introduction to the structure and scope of sustainability management."

Dan Green

Sustainability co-ordinator

Wessex Water





5.3 Planning Phase

Decide what needs to be done to improve performance.

Pha	se	Activity
P1	Performance review	 Ascertaining the organisation's current sustainability performance Identifying and prioritising the organisation's key sustainability issues Involve stakeholders in performance review
P2	Legal and regulatory analysis and management	 Identifying and understanding the organisation's legal and regulatory requirements and voluntary (or self-regulatory) commitments Developing strategies and processes to ensure future compliance and compliance improvements
Р3	Actions, impacts and outcomes	 Identifying, evaluating, categorising and managing the organisation's significant sustainability actions, impacts and outcomes
P4	Strategic planning	Developing strategic plans to deliver the organisation's vision and address its key sustainability issues
P5	Tactical planning	Developing tactical short-term action plans to support the agreed sustainable development strategies with defined objectives, targets and responsibilities

Table 3. Planning phase and sub-phases

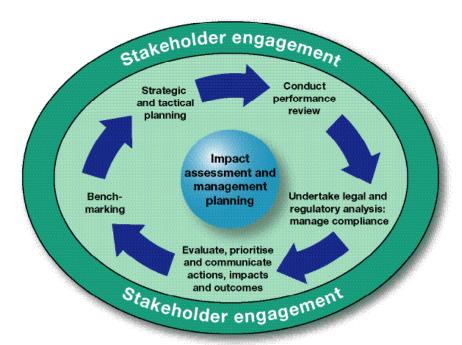


Figure 4. Planning Phase



PHASE:	PLANNING Sub-phase: Initial performance review P1		
Key Questions	'Where are we now?'		
Alignment with principles	Organisations should ensure that: They have reviewed their current levels of performance against the organisation's vision, mission and operating principles, and have prioritised the actions they need to take to correct any shortfalls in performance and implement urgent action where performance falls far short of the required levels.		
When	To inform strategic and tactical planning	g and the organisation's vision for sustain	nable development.
Who	Project Champions, Senior Managemen	nt Team, SIGMA Implementation Team.	
	What - Key Activities	How - Suggested Resources	Results - Outcomes and Outputs
Scoping, preparation and training for the performance review	 Preparing and scoping the performance review, including any training of review team deemed necessary to ensure an effective review process 	SIGMA Business Case Tool SIGMA Performance Review Tool	Training of performance review team Process mapping exercise
Conducting the performance review	 Conducting the performance review, including: Mapping of key processes and management practices Analysing existing decision-making processes Analysing market and supply chain data and conditions Assessing risk and opportunity Reviewing governance structures and processes Benchmarking performance against leading organisations or peer group Analysing performance review data Generating and communicating the performance review report 	 SIGMA Performance Review Tool SIGMA Risk and Opportunity Guide SIGMA Guide to Stakeholder Engagement SIGMA Supply Chain Management R&D report PD 6668 Managing risk through corporate governance www.bsi-global.com Business in the Community Index of Corporate Engagement www.bitc.org.uk 'Sustainability Reporting Guidelines' Global Reporting Initiative (August 2002) www.globalreporting.org 	Performance review report Initial implementation project management plan
Involve stakeholders in performance review	Conducting stakeholder engagement (including planning of engagement and staff interviews)	SIGMA Guide to Stakeholder Engagement AA1000 Framework	Stakeholder dialogue
Key Issues	Useful documents: The information required to conduct an effective initial performance review will have to be sourced from representative business unit(s) according to the scope of the review process. It may be necessary for the organisation's implementation team to support their requests for documents and information with a rationale. Potentially useful information for the performance review process would normally be expected to include (but is not limited to): Published policies/mission/values/principles/codes of conduct statements Output of any 'corporate values identification' exercise Output of ethical analysis/current public relations campaigns/opinion poll feedback		ry for the organisation's implementation Potentially useful information for the imited to):

PHASE: **PLANNING Sub-phase:** Initial performance review **Key Issues** Useful documents: • Brand management reports and plans and existing business planning processes and parameters (i.e. time horizons, scope, who was involved etc.) • An understanding of who champions sustainability at what level within the organisation • Any existing procedure or initiative to incorporate sustainability into decision-making • Relevant tools, management systems, practices and procedures already in use (green accounting, The Natural Step, scenario planning techniques, back-casting techniques, etc.) • Results attained from the use of the SIGMA Performance Review Tool • The rationale for selection of scope of the organisation's suggested implementation of the SIGMA Guidelines (biggest risk, most exposure, highest profile, most representative operational unit for implementation programme, etc.) • Assessments of the environmental, social and economic aspects of activities, products and services within the implementation project scope • Assessment of current (known) environmental, social and economic impact profile • Resource consumption records and resource management practices • Relevant policies (i.e. transport, equal opportunities, socially responsible investment policies, etc.) • Existing risk assessment exercises and records (exposure to liability/ethical or value shortfall) • Current supply chain strategy/management/evaluation/profile • Assessment of team and resources required to rollout implementation • Existing management systems, certification and assurance • SWOT/PEST analysis for organisational sustainability • Stakeholder identification and analysis (priorities/views/influence) Opportunities for performance improvement • Any legal and regulatory compliance records and established management practices (including self-regulatory issues and relevant corporate standards) • An initial evaluation of the organisation's alignment with the SIGMA Guiding Principles and/or other principles adopted by the organisation • Expected changes in regulations/stakeholder views and priorities Appropriate performance records • Reporting and communications (including accountability policy and procedures) • Emergency planning and response/crisis management/business continuity procedures • Proposed and current boundaries of responsibility (including any areas of significant influence, beyond strict definitions of management control) and a defensible rationale for them.

PHASE:	PLANNING Sub-phase: Legal and regulatory analysis and management P2		
Key Questions	'What are we committed to?' 'What must we do to be a responsible organisation?'		
Alignment with principles	Organisations should ensure that: They comply with relevant legislation	n, their vision, mission and any operating	principles they have adopted.
When		nce review process (depending on the leve understand its actions, impacts and outco	
Who	Project Champions, Senior Manageme	nt Team, SIGMA Implementation Team, L	egal Department and advisers.
	What - Key Activities	How - Suggested Resources	Results – Outcomes and Outputs
Legal and regulatory assessment	 Establishing the organisation's level of conformity with/performance against relevant current (and anticipated future) legal, contractual, regulatory and voluntary requirements, including: Local, national, regional and international law and regulation Internal corporate standards and initiatives Contractual requirements laid down by customers, where they contain environmental, social or economic criteria Best practice codes of conduct or practice and other voluntary instruments (e.g. the UN Global Compact) Customer's contractual requirements 	 SIGMA Guiding Principles Actions, impacts and outcomes report (developed in P3) Performance review report Reference texts and software tools/databases for social, ethical, governance, environmental and economic (including financial and accounting) law and regulation The UK Environment Agency's 'NetReg's' web-resources covering environmental law www.environment-agency.gov.uk/netregs 	Map of relevant legislation, self-regulatory and contractual requirements and associated regulatory bodies (including regulatory contacts list), showing current state of alignment/compliance/performance with same
Legal and regulatory management	 Assigning roles and responsibilities to manage the above and achieve improvement targets 	Reference texts and software tools/databases for social, ethical, governance, environmental and economic (including financial and accounting) law and regulation	Process for managing and updating legal, regulatory and other relevant knowledge, including organogram showing roles and responsibilities for legal and regulatory management
Compliance reporting	 Drafting, maintaining and communicating organisational compliance reports and plans (to ensure future compliance) Note: This activity should ultimately be linked to the establishment and testing of internal and external controls, mechanisms and technologies – see Control and influence sub-phase D3. 	SIGMA Guide to the Global Reporting Initiative 'Sustainability Reporting Guidelines' Global Reporting Initiative (August 2002) www.globalreporting.org	Summary compliance/ improvements report Communication of compliance/ improvements report to relevant stakeholders

PHASE:	PLANNING Sub-phase: Legal and regulatory analysis and management P2		
	What - Key Activities	How - Suggested Resources	Results - Outcomes and Outputs
Preventive, corrective or innovative actions	 Undertaking and completing any urgent preventive/corrective or innovative actions identified as required to maintain compliance or avoid future non-compliance 		Preventive, corrective or innovative action plans, including timeframes for completion of actions and subsequent review of effectiveness.
Strategy and tactics for improvement	 Agreeing the strategy and tactics to ensure that (known or potential) future legislation and regulation and any changes to self-regulatory initiatives are managed to ensure compliance and performance improvement 		 Mechanisms in place to periodically review the implications of future legislation, self-regulatory and contractual requirements and regulatory frameworks and their implications for the organisation.
Key Issues	Useful documents: In order to provide robust information i appropriate related:	in support of this sub-phase, organisati	ons should ensure they have
	Site-level documentation		
	Records		
	Compliance plans		
	Monitoring data and analysis		
	In addition to the legal issues, implementing organisations will need to capture information concerning: The number, nature and scale of internal initiatives, including related self-regulatory actions		
	Areas of overlap, if any		
	Internal or commercially available databases		
	How information relates directly to their sphere of operations and impacts		
	Compliance auditing procedures		
	How continual improvement initiatives relate to identified legal and regulatory requirements		
	This level of information could be included in the performance review and any subsequent report. Alternatively, implementing organisations may wish to submit the review to senior management at an earlier stage.		
	in relevant social, environmental and e	conomic law. They will also need to knoative and policy developments and how	v to communicate these issues internally



PHASE:	PLANNING Sub-phase: Actions, impacts and outcomes P3		
Key Questions	'What are we trying to manage?' 'How do we get there?'		
Alignment with principles	Organisations should ensure that: They have a sufficient understanding of their actions, impacts and outcomes to be able to implement performance improvements that reflect an ongoing alignment with their operating principles, vision and mission.		
When	Before any key decisions are made wit	hin the current strategic and tactical plan	ning process.
Who	Project Champions, Senior Managemen	nt Team, SIGMA Implementation Team.	
	What - Key Activities	How - Suggested Resources	Results – Outcomes and Outputs
Training and preparation	 Training the SIGMA implementation team in impact assessment and management techniques Agreeing a process/plan for identifying, categorising (e.g. social, economic and environmental or similar approach), evaluating, prioritising and communicating the organisation's actions, impacts and outcomes 	 Performance review report Legal and regulatory compliance/improvement report Feedback from stakeholder engagement 	Impact assessment and management training
Managing actions, impacts and outcomes	 Developing significance criteria, weighting and ranking methodologies to evaluate and prioritise the management of actions, impacts and outcomes (actual and potential) Identifying, evaluating and categorising actual or potential actions, impacts and outcomes that are likely to lead to significant deviations from the organisation's vision, mission and operating principles Investigating, understanding and optimising the options for managing identified significant actions, impacts and outcomes. Assigning roles and responsibilities to manage, reduce, reconcile, mitigate, compensate or optimise actions, impacts and outcomes and achieve performance improvement targets Note 1: this activity should also consider the linkages between different actions, impacts and outcomes, including any cumulative impacts and outcomes. 	SIGMA Risk and Opportunity Guide SIGMA Sustainability Accounting tool Note: the SIGMA Sustainability Accounting Guide could be used to assess the economic value to be assigned to specific actions, impacts and outcomes, as a way of prioritising investments to avoid, mitigate, compensate or optimise them.	Prioritised actions, impacts and outcomes, including significance, weighting and ranking criteria Documented process for the management of actions, impacts and outcomes, including organogram, flow chart or table showing roles and responsibilities Management (reduction, mitigation, compensation or optimisation) plans for significant actions, impacts and outcomes

PHASE:	PLANNING Sub-phase: Actions, impacts and outcomes P3		
	What - Key Activities	How - Suggested Resources	Results - Outcomes and Outputs
Managing actions, impacts and outcomes continued	Note 2: the organisation should identify and consider the effect of its past, present and potential future actions, impacts and outcomes on its current and future performance – including its ability to achieve its mission and vision and align itself with the operating principles its has adopted.		
Reporting and communicating	Drafting, maintaining and communicating organisational actions, impacts and outcomes report to relevant internal and external stakeholders. Note 1: the actions, impacts and outcomes report should include information on the level of direct management control or influence for each action, impact and outcome. It should also highlight different options for managing impacts and the likely effect on the outcomes.	SIGMA Stakeholder Engagement tool	Summary report of significant actions, impacts and outcomes Communicating actions, impacts and outcomes report/plan to relevant internal and external stakeholders and mechanisms for feedback
Key Issues	 Site-based information, including his Real-world tips: Though a broad consideration of the eleperformance review, organisations implefore revisiting their strategic options. In order to do this, organisations may represent the scope of their impacts an amanagement control, influence or from the elegaback, social impacts, financial perfeedback, social impacts, financial perfects financial perfects	lifecycle studies lergy usage, waste arising, waste disposal atorical data on site use, occupancy, etc. Invironmental, social and economic impact lementing the SIGMA Guidelines will protect the level of responsibility they are preport the perspective of a broader corporate enhanced Life Cycle Assessment' (Enviror lanning and economic forecasting) or social tivities within the scope of their implement all/emergency) for each element. Frum of environmental, social and economic ed, as well as how big or permanent they sential) and relate them to their activities, p separent weighting, risk analysis, significant the SIGMA Guiding Principles	ets may have been included in the pably need to go into greater depth ared to take on in terms of direct e social responsibility approach. In mental LCA that includes stakeholder enario planning exercises. In that including the station programme (including the lic impacts – i.e. where they are, what ware). Troducts and services. The control of the
		ed in the initial performance review and any consummer to senior man	•

PHASE:	PLANNING Sub-phase: Strategic planning	P4	
Key Questions	'Where do we want to go and what do we want to enhance?'		
Alignment with principles	Organisations should ensure that: Their strategic plans are aligned with other operating principles they have	the organisation's vision and mission for adopted.	sustainable development and any
When	_	leaned from the initial performance review gal and regulatory requirements are unde	
Who	Project Champions, Board Members ar	nd Senior Management Team.	
	What - Key Activities	How - Suggested Resources	Results - Outcomes and Outputs
Information gathering and development of strategic options	Incorporating findings from previous or parallel activities into mainstream strategic planning and definition of organisational response/goals in the short (1-5 years), medium (6-20 years) and long (21 years and beyond) term	SIGMA Business Case tool SIGMA case study: Vauxhall Motors Business Case 'Value, Growth, Success – how sustainable is your business?' Advisory Committee on Business and the Environment (ACBE) (2000) www.defra.gov.uk 'Beyond the Twilight Zone – defining and managing key survival issues for corporate environmental sustainability' The Environment Council (1998) 'Tomorrow's Markets – Global trends and their implications for business' WBCSD, WRI and UNEP (2002) www.wri.org/www.wbcsd.org/www.uneptie.org	Identification of strategic options (short, medium and long-term)
Parameters and business objectives	 Agreeing the boundaries of responsibility for performance, and identifying business objectives relevant to capital enhancement 	 SIGMA Sustainability Scorecard Sustainability Reporting Guidelines' Global Reporting Initiative (August 2002) www.globalreporting.org 	Agreement and prioritisation of strategies that minimise the negative and maximise the positive
Review of strategic options	 Reviewing strategic options against the organisation's: Vision Initial Performance Review Significant actions, impacts and outcomes Legal and regulatory management and analysis Mission statement and adopted operating principles Stakeholder engagement process Existing and required future business culture 	 The Natural Step SIGMA Stakeholder Engagement tool 	Strategic plans, including pointers for tactical planning and management • Agreed capital enhancement strategy – including rationale for a balanced enhancement approach and justification of any boundaries to corporate responsibility, capability and capacity Clearly defined roles, responsibilities and authority for implementing strategic plans

PHASE:	PLANNING Sub-phase: Strategic planning	P4	
	What - Key Activities	How - Suggested Resources	Results - Outcomes and Outputs
Agreement, sign-off and communication of strategy	 Agreeing final strategies, including prioritisation and roles, responsibilities and authority for their delivery Communicating strategic plans and providing feedback mechanisms Refining strategies following communication and feedback (if required) Board-level sign-off on the strategies 	 SIGMA Stakeholder Engagement tool SIGMA Marketing and Sustainability tool 	 □ Updated communications plan □ Documented processes for handling and responding to stakeholder feedback on the strategies □ Board-level buy-in and sign-off
Key Issues	 innovation possibilities Findings from stakeholder engageme Sector analysis and benchmarking re Initial performance review report/con Real-world tips: The implementation team will require they are incorporated at the approprany further operational changes coul conflicting internal (and external) merperformance review. To prompt the strategic planning prolike to consider the use of the follow Scenario planning and back casting introductions to The Natural Step Introductions to The Natural Step Involvement of financial directors are a consideration of extended time of the Assessing existing and future grown arrangements, suppliers and subcevision, operating principles and pe Revisiting policy statements for acceptable and pedentical suppliers. 	information and analysis, including market ent exercises exports/studies inpliance report/actions, impacts and outcome a clear understanding of the issues and iate planning level. Failure to achieve intered be in conflict with the thrust of business sages and denying the organisation according: ing exercises (if not already done) or alternative models and economic advisers in weighting economications for business planning with assumptions, mergers and acquisition contractors (including products and service formance requirements alaptation and reissue in corporate values and corporate actions all sounding board when developing strates.	what needs to be done to ensure gration at this level will mean that s planning, slowing progress, sending ess to the benefits identified by the omission, implementation teams may omic impacts and opportunities as, joint ventures, outsourcing es) against the organisation's mission, (if any)



PHASE:	PLANNING Sub-phase: Tactical planning P5		
Key Questions	'What do we need to do to achieve our vision and deliver our strategies?' 'How do we get to where we want to go?'		
Alignment with principles	Organisations should ensure that: Their tactical plans are aligned with the organisation's vision and mission for sustainable development and any other operating principles they have adopted.		
When	Prior to executing the implementation p	programme and throughout the implemen	ntation process.
Who	Project Champions, Board Members ar	nd Senior Management Team.	
	What – Key Activities	How - Suggested Resources	Results – Outcomes and Outputs
Implementation project plan	Developing or consolidating the implementation project plan	BS 6079 – Guide to project management www.bsi-global.com	Revised implementation project plan, (originally produced in P1) with agreed milestones and resources
Tactical plans	Developing tactical plans that underpin strategic planning, significant actions, impacts and outcomes and the short-term delivery of the organisation's vision, mission and operating principles		Tactical plans
Supply chain management approach	Agreeing the supply chain management approach, including partnership, training, performance targets and indicators, knowledge management and prioritisation approach (e.g. spend profile analysis, criticality or risk-based approach or focus on tier 1 suppliers, etc.)	SIGMA Sustainable Supply Network Management R&D report Project Acorn resources (environmental supply chain management) www.theacorntrust.org.uk BS 8555 www.bsi-global.com	 Agreed supply chain management approach, including consideration of supplier/service provider performance evaluation, knowledge management approach, use of contractual requirements to address sustainability impacts embedded in the supply chain, etc.
Business management systems	 Agreeing organisational business management systems (including those for knowledge management) Integrating business management systems to facilitate informed decision-making and a balanced approach to capital enhancement (as appropriate and required). 	SIGMA Compatibility tool	Agreement on business management systems to be used and systems integration strategy and plans (as required)
Performance indicators and scorecard	 Agreeing organisational objectives, targets and performance indicators and measures. Incorporating performance indicators into SIGMA Sustainability Scorecard or similar balanced scorecard approach. 	ISO 14031 – Environment management – Environmental performance evaluation – Guidelines www.bsi-global.com ISO TR 14032 – Environment management – Environmental performance evaluation – Case Studies www.bsi-global.com 'Sustainability Reporting Guidelines' Global Reporting Initiative (August 2002) www.globalreporting.org	Agreed organisational objectives, targets (short, medium and longterm) and performance indicators and measures (management, operational and external condition indicators), along with an identified list of personnel responsible for monitoring and recording progress against them

PHASE:	PLANNING Sub-phase: Tactical planning P5			
	What - Key Activities	How - Suggested Resources	Results – Outcomes and Output	
Monitoring and eview process	 Developing initial monitoring and review process to measure progress against vision, strategies, etc. 	SIGMA Sustainability Scorecard	Initial monitoring and review process.	
(ey Issues	Useful documents: • Agreed strategic plans and supporting documentation			
	Existing and historical tactical plans	and supporting documentation		
	● Initial performance review report/compliance report/actions, impacts and outcomes report			
	 Information on existing management 	programmes		
		 At this stage implementing organisations will need to review the skills, knowledge and competencies of the implementation team and compare them to the requirements raised by the Performance Review and subsequent 		
	 Objectives and targets (including a Performance indicators and quant GRI Sustainability Reporting Guide Areas of plan requiring cost-benef Prioritisation of management prog Roll out process to departments, I Ongoing stakeholder engagement Appropriate policy statements 	uding project resources, milestones and dareas of further research) itative and qualitative measures (see suggestines) it analysis rammes ousiness units, countries, etc. process ess, including assignment of roles and res	gested reporting measures within the	



"SIGMA has helped us to innovate, to look 20 years ahead and understand how our business can develop and become increasingly sustainable and accountable. In the future we hope to be viewed not only as a sustainable building materials producer but also as a resource management business. This approach will present us with new commercial opportunities and we are already developing new activities based on this long-term view."

Tim Pinder

Environment Manager, and lead on sustainable development issues



"We strongly recommend that organisations, whether large or small, use the SIGMA Guidelines either in their entirety or in part. Whatever you choose – SIGMA can guide you and your organisation towards a more sustainable business future."

Derek Hall

Quality and Environmental Manager

Bovince



"The SIGMA project has been an exciting development in enabling organisations to embed sustainable development into their organisational make-up. These guidelines will significantly support the strides that organisations need to take to build a more sustainable future."

Dr Sally Uren

Director, Business Programme
Forum for the Future



Forum for the Future



5.4 Delivery Phase

Improve performance.

Pha	se	Activity
D1	Change management	 Agreeing and implementing change management approach/methodology (e.g. evolutionary change/ revolutionary change/paradigm shift)
D2	Management programmes	 Evaluating existing process management and opportunities for process improvement Agreeing, prioritising and establishing management programmes to achieve short, medium and long-term goals Agreeing roles and responsibilities for specific management programmes
D3	Internal controls and external influence	 Establishing/refining internal controls and reviewing their effectiveness over time Reviewing and refining corporate governance arrangements and performance Identifying opportunities where the organisation can influence external bodies and create a more positive enabling environment for business sustainability Developing supply chain management, evaluation and partnership approaches.

Table 4. Delivery phase and sub-phases

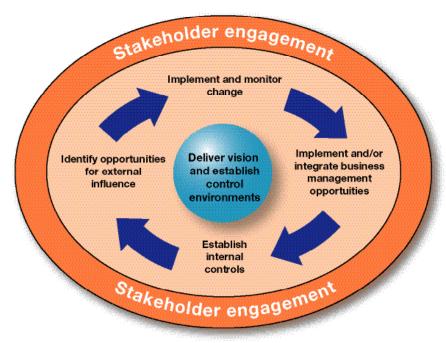


Figure 5. Delivery Phase



"The SIGMA framework provides both focus and flexibility. Within Innogy we have used it to develop our own thinking on corporate responsibility in specific areas. The key benefit is that it is practical and enables organisations to draw on existing activities rather than re-invent the wheel."

Anita Longley

Head of Corporate Responsibility

Innogy



"We know only too well how hard it is to focus on key sustainability issues, integrating these into core business strategy and day-to-day management. With SIGMA, organisations can benefit from the experience of many leading companies and sustainability advocates – distilled into clear and accessible guidance.

David Knight

Director Sd3

No other initiative has come so far in delivering practical, flexible and comprehensive guidance applicable to such a wide range of organisations that want to address full-blooded sustainability. SIGMA's advantage is that it has kept a focus on the core principles, while synthesising the views of a whole host of stakeholders and the experience of over 20 piloting organisations

Jason Perks
Director
Sd3





PHASE:	DELIVERY Sub-phase: Change management D1		
Key Questions	'What organisational change is necessary and desirable to achieve the organisation's vision for sustainable development?'		
Alignment with principles	Organisations should ensure that: • Any change management processes support the organisation' the organisation, to enable the organisation to deliver against		
When	Ongoing – an assessment is required in the early stages of the S appropriate and desirable organisational change is supportive of		
Who	Project Champions, Board Members, Senior Management Team	and SIGMA Imp	olementation Team
	What – Key Activities How – Suggested Re	sources	Results – Outcomes and Outputs
Change management		Scorecard seholder on Learning,	Change management process and plans
Key Issues	significant changes as early as SIGMA R&D Report on Learning,		

PHASE:	DELIVERY Sub-phase: Management prog	rammes D2	
Key Questions	'What management programmes do we need to deliver to ensure that our strategic and tactical objectives are met?'		
Alignment with principles	Organisations should ensure that: The implementation of their management programmes is in line with their vision and mission for sustainable development and any other operating principles they have chosen to adopt.		
When	Throughout the implementation proces	s and beyond.	
Who	Project Champions, Board Members ar	nd Senior Management Team, Implement	ation Team.
	What - Key Activities	How - Suggested Resources	Results – Outcomes and Outputs
Process management and improvement	 Establishing, reviewing and/or refining process management to ensure alignment with organisational vision Identifying and implementing process improvements in line with the organisation's vision for sustainable development 	Process flow and process mapping software	Process management/process improvement report
Prioritisation of management programmes and key performance indicators (KPIs)	Agreeing, prioritising and establishing management programmes to achieve short, medium and long-term goals Note: For many organisations with existing management programmes and practices much of the work at this stage may have already been undertaken through existing initiatives and management systems. However, it is important to ensure that, such work is integrated under SIGMA, there are no gaps in management programmes that may lead to problems in achieving the organisation's vision	SIGMA Compatibility tool SIGMA Sustainability Scorecard 'Sustainability Reporting Guidelines' Global Reporting Initiative (August 2002) www.globalreporting.org ISO 14031 – Environmental performance evaluation – Guidelines ISO TR 14032 – Environment management – Environmental performance evaluation – Case Studies www.bsi-global.com	Prioritised, established and documented management programmes and their alignment to organisational vision, mission, adopted operating principles, strategies, objectives and targets
Roles and responsibilities	Agreeing roles and responsibilities for specific management programmes – in line with skills and competence requirements – and undertake training and awareness programmes as required	Investors in PeopleOrganisation's training needs analysis	Organisational charts clearly illustrating the roles, responsibilities, reporting and communication lines and authority to deliver and manage the organisation's management programmes
Management programme delivery	Delivering management programmes		Record of activities undertaken and their impact on performance

PHASE:	DELIVERY Sub-phase: Management programmes D2
Key Issues	Useful documents: ■ Existing process and information flow diagrams
	 Documentation and records on existing process mapping, management and improvement programmes or initiatives, including any information on their effectiveness
	Information on existing business management systems and programmes
	Organograms illustrating the roles and responsibilities of personnel
	● Initial performance review report/compliance report/actions, impacts and outcomes report/governance reviews
	Strategic and tactical plans and supporting information
	 Real-world tips: Organisations should ensure that their management programmes are prioritised to address: The significant sustainability impacts and outcomes identified earlier in the implementation process Situations where legal and regulatory compliance are at risk Situations where a high level of organisational risk or opportunity has been identified.

PHASE:	DELIVERY Sub-phase: Internal controls ar	nd external influence D3	
Key Questions	'Are the links between word and action strong enough?'		
Alignment with principles	Organisations should ensure that: They develop a method of aligning and comparing their existing management practice, systems and procedures, against the organisation's vision and mission for sustainable development and any operating principles they have adopted, in order to identify gaps in internal controls. They develop internal controls where their absence may lead to a deviation from their operating principles or any planned outcomes. They review the opportunities to integrate and embed existing management practice, systems and procedures to improve internal efficiency and assure closer alignment with their operating principles. They exercise their influence on suppliers, subcontractors, peers and end-users of their products and services to further their vision for sustainable development and their alignment with their operating principles. Such influence needs to be exercised sensitively and supportively, especially for small suppliers in emerging markets.		
When		nd how to manage them – during plannir d maximising opportunities for positive ir	• •
Who	Project Champions, Board Members ar	nd Senior Management Team, Implement	ation Team.
	What - Key Activities	How - Suggested Resources	Results - Outcomes and Outputs
Internal controls	 Establishing/refining internal controls that facilitate the organisation's vision, adopted operating principles, strategy, objectives and targets and management programmes and measuring and reviewing their effectiveness over time Reviewing and refining corporate governance arrangements and performance 	 SIGMA Risk and Opportunity tool PD 6668 Managing risk through corporate governance www.bsi-global.com OECD Principles of corporate governance www.oecd.org 	Establishment/refinement of robust internal controls – including documented procedures and monitoring approach and schedule Corporate governance review Strategy for maximising the benefits of third party influence on internal control (or minimising the risk of unforeseen third party intervention that may adversely affect the organisation's ability to deliver its vision for sustainable development)
External influence	Identifying opportunities where the organisation can influence external bodies and create a more positive enabling environment for business sustainability. This may include lobbying of, and/or collaborations with, trade associations, industry peers, government departments and agencies, academia, think tanks and NGOs	SIGMA Stakeholder Engagement tool	 Constructive dialogue and engagement with key external stakeholders and enablers. New partnerships and collaborative programmes – e.g. new sectoral codes of conduct, joint ventures and R&D programmes.

PHASE:	SE: DELIVERY Sub-phase: Internal controls and external influence D3		
	What – Key Activities	How - Suggested Resources	Results – Outcomes and Outputs
Supply chain management	 Developing supply chain management, evaluation and partnership approaches that minimise negative embedded sustainability impacts and maximise opportunities for performance improvement and enhanced internal control Work in partnership with relevant stakeholders to develop workable approaches 	SIGMA Stakeholder Engagement tool 'Sustainability Reporting Guidelines' Global Reporting Initiative (August 2002) www.globalreporting.org SIGMA Sustainable Supply Chain Management R&D report BS 8555 (an incremental approach to implementing an environmental management system) www.bsi-global.com	Supply chain report, including coverage of supply chain risk, critical issues, opportunities for supply chain driven performance improvement, any additional training and awareness requirements, spend profile analysis to identify opportunities for influencing supplier behaviours and performance, partnership opportunities with suppliers – e.g. involving suppliers in product design issues, etc.
Key Issues		nce report/actions, impacts and outcomes	
	technologies	ing internal controls and operational conti	or processes, systems and
	 Data and information from existing in 	nternal and external audit/assurance activ	rities
		near misses relating to health and safety management/evaluation/partnership progs.	

5.5 Monitor, review and report Phase

Check that performance is improving and communicate the results.

Phas	е	Activity
MRR1	Monitoring, measurement, auditing and feedback	 Training for, planning and executing the organisation's internal audit/assurance programmes Communicating audit/assurance findings and recommendations to relevant internal and external stakeholders, including those responsible for conducting the strategic and tactical review process Taking preventive, corrective and innovative actions as appropriate Consulting with stakeholders on performance and future challenges
MRR2	Tactical and strategic review	 Reviewing strategies and tactical plans to assess their effectiveness and ability to deliver against the organisation's vision and targets for sustainable development Reviewing audit/assurance findings and recommendations Assessing any changes in stakeholder priorities and their implications for the organisation's vision, activities, targets, processes, products and services Making recommendations to the next round of the organisation's Strategic and Tactical Planning processes Making immediate amendments to Strategic and Tactical Plans to take account of changing circumstances and priorities (as appropriate) Communicating the findings and recommendations from reviews to all relevant personnel
MRR3	Reporting progress	 Collecting information and data, agreeing the scope, media, audiences and levels of disclosure for reporting, distributing the reports through a range of communications channels Establishing or reinforcing mechanisms for handling and responding to stakeholder feedback on reports
MRR4	Assurance of reporting	 Putting in place internal assurance processes for reporting and undertaking an internal assurance programme. Agreeing the need for, scope and objectives of, and service providers to deliver, assurance of reporting. Working with external assurance providers to achieve production of a favourable assurance statement.

Table 5. Monitoring review and report phase and sub-phases.

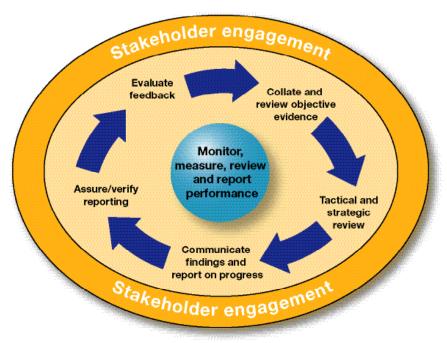


Figure 6. Monitor, Review and Report phase



"It's a refreshing change to be involved in a project where the relevance to local authorities has been considered from the outset. Sustainable development is a key challenge for local government. The SIGMA Guidelines offer a clear yet flexible approach that allows us to make progress."

Laura Kirman

Environmental Policy Officer
Waltham Forest



PHASE:	MONITOR, REVIEW AND REPORT Sub-phase: Monitoring, measurement, auditing and feedback MRR1		
Key Questions	'Are our strategic and tactical plans and management programmes delivering our vision for sustainable development?' 'Are we doing what we say we do?'		
Alignment with principles	The state of the s	cant sustainability actions, impacts and ce organisation progress towards its stated v	
When	Throughout the implementation programs severity of the sustainability impact or	mme and then at agreed timeframes acco	ording to the nature and potential
Who	Project Champions, Board Members ar	nd Senior Management Team, Implementa	ation Team, Independent Audit Team.
	What - Key Activities	How - Suggested Resources	Results - Outcomes and Outputs
Collecting and evaluating objective evidence	 Collecting and evaluating objective evidence: Opening meeting(s) with relevant personnel and key stakeholders Reviewing documentation and records Reviewing observable practice Monitoring of key performance indicators Undertaking root cause analysis to determine reasons for unsatisfactory performance or deviations from organisational vision, adopted operating principles, strategies, tactical plans and objectives and targets Assessing new opportunities for performance improvements Communicating and reporting non-conformities/compliances and agreeing a timeframe for appropriate actions to be undertaken 	 AA1000 Assurance Standard ISO 19011 - Guidelines for quality and/or environmental management systems auditing FEE Discussion Paper: Providing Assurance on Sustainability Reports (April 2002) www.fee.be 	Review papers, including: Evaluation of effectiveness of document control Tangible evidence that processes are being followed and are delivering performance improvement Root cause analysis stakeholder perception audits – including findings and prompts for stakeholder engagement process Completed surveys and questionnaires Monitoring records of key performance indicators Records and learning from previous incidents, accidents, events, failures of internal control and complaints or compliments
Consulting with stakeholders on performance and future challenges	 Undertaking interviews and surveys Capturing stakeholder perception 	SIGMA Stakeholder Engagement tool	Stakeholder views
Audit/ assurance team	 Selecting and training internal audit/assurance team, including team leader, ensuring competency and impartiality of team members 	AA1000 Assurance Standard ISO 19011 – Guidelines for quality and/or environmental management systems auditing	Audit/assurance team competence and selection criteria, including consideration of composite team competence and individual specialist knowledge required (e.g. legal, language, technical, organisational vision, policies, etc.)
Audit/ assurance preparation and planning	 Agreeing scope and objectives of audit/assurance, including timing, location and schedule of activities continued	 AA1000 Assurance Standard ISO 19011 – Guidelines for quality and/or environmental management systems auditing 	Agreed and documented audit/ assurance scope and objectives, including physical locations to be included within the scope of the audit/assurance.

PHASE:	MONITOR, REVIEW AND REPORT Sub-phase: Monitoring, measurement, auditing and feedback MMR1		
	What - Key Activities	How - Suggested Resources	Results – Outcomes and Outputs
Audit/ assurance preparation and planning continued	 Preparing audit/assurance plan and working papers 	'Sustainability Reporting Guidelines' Global Reporting Initiative (August 2002) www.globalreporting.org	Written audit/assurance plan, including team members, timing and duration of the audit/assurance, physical locations to be visited, data to be verified, report content, format and audience, etc.
Audit/ assurance close out	 Taking preventive, corrective and innovative actions as appropriate. Audit/assurance close out Producing and communicating an audit/assurance report – including key recommendations and observations for consideration during Strategic and Tactical Review 	 AA1000 Assurance Standard ISO 19011 – Guidelines for quality and/or environmental management systems auditing FEE Discussion Paper: Providing Assurance on Sustainability Reports (April 2002) www.fee.be 	 Audit/assurance report(s), including: Agreed audit/assurance criteria and objectives Assessment of current state of alignment with operating principles and relevant legislation and regulation Progress against organisational vision, stated policies, strategies, tactical plans, objectives and targets Observations, preventive, corrective and innovative actions Recommendations for improvement Other objective evidence (including actions completed/progressing to plan) Communication of audit report to all relevant personnel Evidence of preventive, corrective and innovative actions being undertaken according to audit report
Key Issues	Useful documents: Statement of organisational values in	nission statement and adopted operating	principles

- Statement of organisational values, mission statement and adopted operating principles
- Performance Review Report
- Corporate Governance Review
- Action, Impacts and Outcomes Report
- Compliance Report
- Strategies, tactical plans and management programmes
- Agreed objectives, targets and key performance indicators

Previous audit findings and recommendations from previous Strategic and Tactical Reviews, etc.

- Those organisations that have already produced sustainability reports following the guidelines available from the Global Reporting Initiative (GRI) will have already taken a big step towards managing their organisational sustainability. Even those who have not yet approached such a level of reporting will gain from viewing the guidelines and ensuring that their management systems, monitoring regimes and report structures can be aligned with GRI Guidelines where appropriate.
- Those organisations favouring performance measures and indicators may wish to give further consideration to a combination of the GRI Guidelines and a development of the approach stated in ISO 14031: Environmental Performance Evaluation - Guidelines. The creation of three different types of indicator for each relevant impact (Management Performance Indicators, Operational Performance Indicators, and Sustainability Condition Indicators) will allow organisations to build data sets that:
- are appropriate to the scope of their own implementation programme
- are matched to their own objectives and targets
- are appropriate for use in their ongoing stakeholder dialogue
- act as an adjunct to their existing management systems, and
 allow accurate diagnostic feedback of progress.

Some organisations may additionally wish to produce objective evidence of progress for their own internal use, and may also wish to develop auditing regimes in order to capture such evidence. Internal audit or assurance teams should be competent to perform the duties expected of them and independent of the activity to be audited or verified.

PHASE:	MONITOR, REVIEW AND REPORT Sub-phase: Tactical and strategic review MMR2		
Key Questions	'Are we achieving our vision for sustainable development?' 'Are our tactical and strategic approaches improving our performance and enhancing capital?'		
Alignment with principles	Organisations should ensure that: The frequency and depth of strategic and tactical review processes allow for the identification of any situations or issues that are likely to lead to deviations from the stated vision, mission, operating principles and policies.		
When	Typically an annual review based on the operating year of the organisation but may be more frequent at the beginning of the organisation's sustainability journey.		
Who	Project Champions, Board Members and Senior Management Team, Implementation Team, Independent Audit Team.		
	What - Key Activities	How - Suggested Resources	Results - Outcomes and Outputs
Frequency of reviews	 Agreeing the frequency of reviews required and who needs to participate in them 		Review schedule and list of participants, including contact details
Review process	 Reviewing strategies and tactical plans to assess their effectiveness and ability to deliver against the organisation's vision for sustainable development 	SIGMA Sustainability Scorecard	Documented review process Strategic and tactical review report and communications strategy
	 Reviewing audit/assurance findings and recommendations Assessing any changes in stakeholder priorities and their implications for the organisation's vision, activities, processes, products and services 		
Recommend- ations, change process and communication	 Making recommendations to the next round of the organisation's Strategic and Tactical Planning processes Making immediate amendments to Strategic and Tactical Plans to take account of changing circumstances and priorities (as appropriate) Communicating the findings and recommendations from reviews to all relevant personnel 		Implementation of communications programme, including mechanisms for handling feedback

PHASE:	MONITOR, REVIEW AND REPORT Sub-phase: Tactical and strategic review MMR2		
Key Issues	Useful documents: Useful documents:		
	Findings and recommendations from internal and external audit/assurance activities		
	 Initial performance review report/compliance report/actions, impacts and outcomes report/governance reviews 		
	Strategic and tactical plans and related performance indicators and measures		
	Findings from stakeholder engagement activities		
	Real-world tips: The review process should result in clearly communicated findings, which should form the basis for the next round of Strategic and Tactical planning.		



PHASE:	MONITOR, REVIEW AN Sub-phase: Reporting progres		
Key Questions	'Who are we reporting to?' 'How are we accounting for feedback from the reporting process?' 'What are we reporting?'		
Alignment with principles	Organisations should ensure that: They have taken into account the information needs of stakeholders in preparing and communicating their current state of alignment with the organisation's principles, the actions they have taken or are planning to take to improve their alignment with their principles and any progress they have made since the previous reporting period.		
When	Following the Tactical and Strategic Review process – typically following an annual cycle.		
Who	Project Champions, Board Members and Senior Management Team, Implementation Team, Legal departments, Corporate Affairs and Communications departments.		
	What - Key Activities	How - Suggested Resources	Results - Outcomes and Outputs
Scoping and boundary- setting	 Defining the objectives and boundaries for reporting Setting and agreeing the level of total disclosure – including frequency of reported information 	'Sustainability Reporting Guidelines' Global Reporting Initiative (August 2002) www.globalreporting.org WBCSD 'Sustainable development reporting – Striking the balance' (January 2003) Available from: www.wbcsd.ch WBCSD/WRI 'The Greenhouse Gas Protocol: a common accounting and reporting standard' (October 2001) www.ghgprotocol.org/standard/ standard.htm	Agreed objectives and boundaries for reporting, including level of total disclosure, and a coherent rationale for the agreed level of disclosure
Report content and format	 Identifying the audiences for reporting and tailoring language and content accordingly Identifying relevant information to report – using data drawn from the organisation's business management systems, key performance indicators, etc. Agreeing the reporting formats and design (e.g. hard copy or web-based reporting) Identifying media/approach to reporting 	'Sustainability Reporting Guidelines' Global Reporting Initiative (August 2002) www.globalreporting.org WBCSD 'Sustainable development reporting – Striking the balance' (January 2003) (Available from: www.wbcsd.ch 'The State of Sustainability Assurance – 2003' AccountAbility (2003) www.accountability.org.uk ACCA guidance on reporting www.acca.org.uk/resources.html Corporate Register – a useful website listing companies producing environmental and sustainability reports with direct access to examples of reports. www.corporate-register.com	Key audiences/readership for reports and stakeholder needs identified Collation of data for reporting purposes (including performance measures and indicators for significant impacts) Specification for reporting, including media and delivery mechanisms (e.g. continual web-based reporting)

PHASE:	MONITOR, REVIEW AND REPORT Sub-phase: Reporting progress MMR3		
	What - Key Activities	How - Suggested Resources	Results - Outcomes and Outputs
Report content and format continued		DEFRA 'Environmental reporting – General guidelines' (November 2001) Available from: www.defra.gov.uk. Also from DEFRA: – Guidelines for Company Reporting on Greenhouse Gas Emissions' (2000) – Guidelines for Company Reporting on Waste' (June 2000) – Guidelines for Company Guidelines for Company Guidelines for Company	
		Reporting on Water' (December 2000)	
Report approval, distribution and	 Creating and approving reports prior to distribution 	SIGMA Stakeholder Engagement tool	Completed reports including evidence of approvals/sign-off
feedback	 Distributing/communicating reports Establishing or reinforcing mechanisms for handling 		 Distributed reports – posting to website, etc.
	stakeholder feedback on reports		
Key Issues			

PHASE:	MONITOR, REVIEW AN Sub-phase: Assurance of repo		
Key Questions	'How credible and transparent is our reporting?' 'Does impartial assurance add value to our reporting process?'		
Alignment with principles	Organisations should ensure that: Their reporting is in line with the principles for sustainable development that the organisation has adopted, in particular the principle of accountability to stakeholders. Their reporting is transparent and meets best practice requirements (e.g. relevance, materiality, completeness and reliability of reported data, timeliness and transparency and responsiveness to stakeholder inputs and feedback).		
When	Following the Tactical and Strategic Review process – typically following an annual cycle.		
Who	Project Champions, Board Members and Senior Management Team, Implementation Team, Legal departments, Corporate Affairs and Communications departments and Assurance Providers.		
	What - Key Activities	How - Suggested Resources	Results - Outcomes and Outputs
Reviewing the need for assurance	 Reviewing the findings from stakeholder engagement and previous reporting exercises to determine the need for impartial assurance of reporting Agreeing the level of assurance required for reporting purposes, and reflecting this in the assurance statement Understanding the level of added value that assurance brings – including the enhancement of transparency and credibility 	 FEE Discussion Paper: Providing Assurance on Sustainability Reports (April 2002) www.fee.be AA1000 Assurance Standard SIGMA Stakeholder Engagement tool 	 Agreement on the level of assurance required for reporting purposes. Agreement on the need for internal and external assurance.
Preparing for assurance	 Preparing for assurance includes the following: Preparing report data and indicators for assurance Providing any supporting evidence to the report data Agreeing the objectives and scope of the assurance Assigning and training impartial internal assurance teams Engaging and briefing a competent, independent and impartial external assurance provider Agreeing the logistics for the assurance 	'Sustainability Reporting Guidelines' Global Reporting Initiative (August 2002) www.globalreporting.org WBCSD 'Sustainable development reporting – Striking the balance' (January 2003) Available from: www.wbcsd.ch FEE Discussion Paper: Providing Assurance on Sustainability Reports (April 2002) www.fee.be AA1000 Assurance Standard ISO 19011 – Guidelines for quality and/or environmental management systems auditing	Complete set of reporting data and measures. Compiled set of supporting evidence to reporting data. Trained internal assurance team. Appointment of external assurance provider. Documented and communicated internal assurance process, including consideration of the level of assurance and depth of assurance required. Assurance plan.
Executing the assurance	 Gathering objective evidence – physical, documentary and testimonial evidence Reviewing materiality, completeness, responsiveness, transparency, relevance and quality of report data and supporting evidence 	FEE Discussion Paper: Providing Assurance on Sustainability Reports (April 2002) www.fee.be AA1000 Assurance Standard ISO 19011 – Guidelines for quality and/or environmental management systems auditing	Assurance working papers. Assurance report and statement.

PHASE:	MONITOR, REVIEW AND REPORT Sub-phase: Assurance of reporting MMR4		
	What - Key Activities	How - Suggested Resources	Results – Outcomes and Outputs
Executing the assurance continued	 Comparing report data with the known needs of stakeholders, the organisation's vision and mission for sustainable development and any other operating principles the organisation subscribes to Reporting on the assurance process and recommending any amendments to be made to the report data by the reporting 		
	organisation and any amendments or performance improvements required to improve the effectiveness and coverage of reporting Producing the assurance statement		
Key Issues	Useful documents: ● Reports from industry or sector peers or leaders (to illustrate a range of assurance approaches).		
	Real-world tips: An impartial review of the findings from stakeholder engagement will usually provide a good indication of the level of assurance required and the extent to which external assurance is required. Assurance levels usually depend on the extent and quality of the following: The level of information available in the report data The sufficiency of supporting evidence The maturity and robustness of systems and processes that underpin the reporting process The existence, quality and coverage of internal audit, assurance or assurance programmes Any existing assurance processes or approaches for specific aspects of performance reporting (e.g. greenhouse gas emissions reporting) The competencies of those providing the assurance Any legal or commercial constraints affecting the reporting process When assessing the report data those responsible for providing assurance of reported data should assess the organisation's performance against the following performance parameters: Compliance with legal, contractual and regulatory requirements Performance against agreed organisational policies Performance against stakeholder priorities and needs Industry sector benchmarks or best practice The objectives, level and scope of the assurance Details of the assurance activities undertaken A description of the standards or methodologies used as the basis for assurance A description of the systems and processes underpinning the reporting process Key findings, recommendations for improving the organisation's reporting and conclusions from the assurance Note that the report being assured can be used by the reporting organisation's stakeholders.		

6. SIGMA TOOLKIT SUMMARY

6.1 Introduction

The SIGMA toolkit consists of a range of supporting tools, guides and case studies to support the implementation of the SIGMA Guidelines and to address specific sustainability challenges. Some of the tools in the toolkit were developed specifically for SIGMA and others, such as GRI and environmental accounting, have been taken from external sources, as they present the best current approach. All the SIGMA-specific tools have been developed in conjunction with piloting organisations.

The case studies, featured on the website, outline the experiences of some of the companies that have piloted the SIGMA approach.

6.2 Description of the tools

The table below provides a brief summary of each of the tools and what they can achieve for an organisation. More details of the tools and case studies can be found on the SIGMA Project's website: www.projectsigma.com

SIGMA Tools and Resources

SIGMA Guide to the AA1000 Assurance Standard

The AA1000 Assurance Standard is a generally applicable standard for assessing, attesting to, and strengthening the credibility and quality of organisations' sustainability reporting, and their underlying processes, systems and competencies. It provides guidance on key elements of the assurance process. This tool provides a simple summary of the standard. It includes an explanation of the principles to be applied in an assurance process undertaken using the AA1000 Assurance Standard: materiality, completeness and responsiveness.

This tool is aimed at managers and practitioners with responsibilities for sustainability within organisations.

SIGMA Business Case Tool

The SIGMA Business Case Tool provides a simple process to develop an organisation-specific case for addressing sustainable development. By taking a pragmatic approach that recognises the language and core priorities of the organisation, users can build a strong business case that incorporates real-life examples. This will highlight what sustainable development means to the organisation and how improved sustainability performance can maximise the opportunities this may bring and minimise the potential risks.

This tool is aimed at managers and practitioners with responsibilities for sustainable development within organisations.

SIGMA Tools and Resources continued

SIGMA Compatibility Tool

The SIGMA Compatibility Tool provides organisations with an understanding of how their existing management systems and approaches map on to the SIGMA Management Framework. It helps organisations to achieve the desired outcomes and outputs envisaged in the Management Framework without duplicating effort. The tool maps SIGMA against EFQM, AA1000 Framework, Investors in People, EMAS, ISO14001, ISO14031, OHSAS 18001, ISO 9000, SA8000, AS/NZS 4581, The Natural Step (TNS), The UN Global Compact and the Charter Mark.

This tool is aimed at managers and practitioners with responsibilities for sustainable development within organisations, and also operational managers who are using any of the standards described.

SIGMA Environmental Accounting Tool

The Environmental Accounting Tool provides an introduction to accounting for 'internal' environmental related expenditure (expenditure already incurred and captured within a company's accounting system but perhaps lost in general overheads) and 'external cost accounting' (the internalisation of environmental externalities). A pro-forma set of external environmental cost accounts is presented together with a practical step-by-step guide to help individual organisations to begin the task of developing and drawing up their own external environmental cost accounts.

This tool is mainly aimed at users with a good level of environmental and financial knowledge.

SIGMA Guide to the Global Reporting Initiative Sustainability Reporting Tool

The GRI Sustainability Reporting Tool is designed to provide guidance for an organisation of any size on producing a sustainability report. Based on the Global Reporting Initiative Guidelines, it sets out reporting principles that organisations should follow. The guidelines also provide core indicators for economic, environmental and social performance that organisations should include in their report, and a list of additional indicators that organisations should include where relevant. Both the principles and the indicators have been developed over the past five years, involving input from a wide range of stake holders around the world.

This tool is aimed at managers and practitioners with responsibilities for sustainable development and communication within organisations.

SIGMA Marketing and Sustainability Tool

The Marketing and Sustainability Tool provides an introductory bridge between the two specialist fields of marketing and sustainability and suggests some initial steps in developing a sustainability marketing plan. By first providing the marketer and the sustainability practitioner with an understanding of each other's field and how the two can support each other, the tool lays the foundations for collaboration. It then provides a number of practical steps towards identifying key opportunities, through understanding customers and the market, assessing the sustainability attributes of the organisation's products and services and determining which sustainability issues have the greatest potential for use in a marketing campaign.

This tool is aimed at managers with responsibility for sustainable development and marketing department professionals.



SIGMA Tools and Resources continued

SIGMA Performance Review Tool

The Performance Review Tool is a review checklist that assesses organisational performance against the SIGMA Management Framework.

The Performance Review Questionnaire consists of 16 question areas, each broken down into subcategories. It is recommended that organisations complete this questionnaire when setting out on implementing the SIGMA Management Framework to lay down a benchmark of current performance. It can then be used throughout the process to review progress and track trends. Having completed the questionnaire, organisations are able to score their performance, which provides them with a picture of how well they are doing in terms of sustainable development performance. The questionnaire can also be used to benchmark performance between different parts of an organisation.

This tool is aimed at managers and practitioners with responsibilities for sustainable development and operations within organisations.

SIGMA Risk and Opportunity Guide

The Risk and Opportunity Guide provides basic information and simple tools to enable organisations to improve their understanding and management of sustainability risks and opportunities. By providing an explanation of social, environmental and economic risks from stakeholder perspectives, organisations can build an understanding of a fuller range of threats to organisational success, including not fully realising opportunities. A generic risk and opportunity process, supported by tools and assessment guidance, enables users to enhance their existing processes or develop new ones.

This tool is suitable for experienced risk professionals and those new to risk assessment.

SIGMA Guide to Guidelines and Standards relevant to sustainable development

This guide reviews 20 standards and guidelines relevant to sustainable development. It includes the UN Global Compact, EMAS, The Natural Step, Social Accountability 8000, Investors in People, Global Sullivan Principles, The Ethical Trading Initiative Base Code, Balanced Scorecard, the European Foundation Quality Model – Excellence Model, The Global Reporting Initiative, AA1000 framework, Combined Code of Corporate Governance, ISO family of standards, the London Benchmarking Group, OECD Guidelines for Multinational Enterprises, Caux Roundtable Principles for Business, Amnesty International's Human Rights Guidelines for Companies, the Principles for Global Corporate Responsibility, Business Impact Task Force, UK Government Sustainable Development Strategy.

The guide is aimed at general practitioners and those new to sustainable development.

SIGMA Tools and Resources continued

SIGMA Guide to Stakeholder Engagement

The Stakeholder Engagement Tool provides organisations with two ways to improve their stakeholder engagement practices. The first approach is based on the AA1000 Framework, which incorporates stakeholder engagement as a core element of the process of managing, measuring and communicating performance. This process helps an organisation capture different stakeholder aspirations and needs, and balance and manage the interlinked elements of social, environmental and economic performance.

The second approach is a set of tools that help organisations explain and evaluate their stakeholder engagement. The first tool looks at the drivers of engagement, and the second provides a set of key questions on the who, what, where, when and how of engagement and the best techniques to use.

This tool is aimed at managers within an organisation, especially those with responsibilities for stakeholders.

SIGMA Guide to Sustainability issues

The Guide to Sustainability issues lists and briefly explains a wide range of sustainability issues that organisations need to be aware of.

This guide is particularly helpful for those new to sustainability issues.

SIGMA Sustainability Accounting Guide

The Sustainability Accounting Guide summarises the current state of research and availability of tools and approaches that help organisations account for organisational sustainability performance. Recognising that this is at an embryonic stage, and that there are many inadequacies in current financial accounting, the guide explores the latest sustainability thinking around resource flows and assets and liabilities in the context of Generally Accepted Accounting Practice (GAAP). Users can understand the drivers for change and benefits of sustainability accounting and see real-life examples of organisations adopting these approaches. Different ways of bringing the information together are presented to help organisations understand options for new accounting frameworks. Data sources for environmental coefficients and values are also provided.

This guide is mainly aimed at financial professionals and those with good sustainability knowledge.

SIGMA Sustainability scorecard

The Sustainability Scorecard builds on the concept of a Balanced Business Scorecard. The approach allows organisations to identify key drivers and how they are linked and use these to develop targets and measures.

This tool can be used by managers across an organisation to manage their sustainability impacts.

APPENDIX A - SIGMA COMPATIBILITY WITH EXISTING SYSTEMS AND STANDARDS

Introduction

SIGMA seeks where possible to help organisations work from where they are, helping them to build on, rather than replace their use of existing systems. The 'SIGMA Compatibility Tool' has been developed to identify links between the SIGMA Guidelines and existing management systems and frameworks. SIGMA seeks to help organisations integrate these different approaches so as to act in a coordinated, consistent and effective way to improve sustainability performance. The tool is available in full on the SIGMA Project's website: www.projectsigma.com. This appendix provides a brief summary.

The tool includes an analysis of 12 standards and guidelines that have been identified as being able to provide a sound basis for implementing the SIGMA Management Framework:

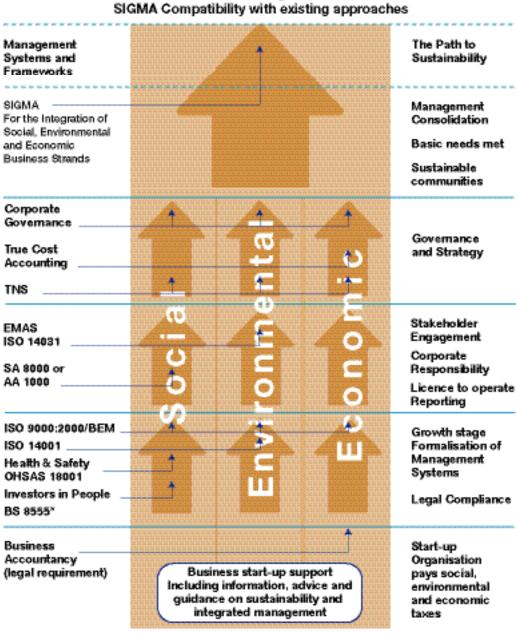
- 1. ISO 14001 Environmental management systems Specification with guidance for use
- 2. The European Eco-Management and Audit Scheme (EMAS) Regulation
- 3. ISO 14031 Environmental performance evaluation Guidelines
- 4. OHSAS 18001 OHS Management System Specification
- 5. ISO 9000: 2000 Quality Management
- 6. Investors in People (IIP)
- 7. Social Accountability (SA 8000)
- 8. AS/NZS 4581 Management System Integration Guidance to Business, Government and Community Organisations
- 9. The Natural Step (TNS)
- 10. The UN Global Compact
- 11. The European Quality Foundation (Business Excellence) Model (EFQM) (sometimes referred to as the Business Excellence Model (BEM)).
- 12. AccountAbility 1000 (AA1000) and the AA1000 Assurance Standard

The Deming cycle (Plan, Do, Check, Act), with continual improvement at its core, plays a major part in many standards and frameworks that can be linked to sustainable development. The SIGMA Management Framework uses this cycle as its basis to ensure compatibility with these standards without incurring excessive duplication of any of their core elements.

The path to integration

The figure below illustrates one possible path to integrating existing systems and standards. It shows how an organisation can progress from basic systems like accountancy at the start-up phase of the business, through specialist systems to the systematic management of sustainability issues.

Towards Integration



*BS 8555 is a phased approach to implement an EMS in line with ISO 14001.

Figure 7. Compatibility with existing systems and standards



Most organisations will start by managing aspects separately, but over time these can be integrated using the SIGMA Management Framework. Some organisations will develop in different ways and at different speeds from others and so the diagram should be considered as illustrative. The SIGMA Management Framework has been developed to be flexible enough for all organisations to use, including those with bespoke systems and those at various stages of sustainable development.

"Sigma offers a useful tool in the drive towards overall business sustainability."

John Holbrow

Chairman, Environment and Rural Affairs Federation of Small Businesses



"The Sigma project has provided Northumbrian Water with a framework within which to review our approach for integrating sustainability into the management of the business. External challenges, case studies and partner working were key components of the Sigma project. We look forward to continuing our work with partners to set new standards for the practical implementation of sustainable policies."

Dr Chris Spray MBE
Environment Director
Northumbrian Water





APPENDIX B

APPENDIX B - OVERVIEW OF CORE DOCUMENTS

This table summarises core written outputs from the Management Phases and subphases. These may be new for some organisations, but more likely they will be an adaptation of existing documents and resources.

Phase	Core documents
Leadership and Vision	
LV1 Business case, and top-level commitment	Business case Initial stakeholder engagement plan and documented findings
LV2 Vision, mission and operating principles	 Vision and mission statements on sustainable development Agreed set of operating principles
LV3 Communication and training	Communications strategy and plan Training and learning needs analysis and plan
LV4 Culture change	Report and recommendations on requirements for cultural change
Planning	
P1 Initial Performance review	Initial performance review report Initial implementation project plan
P2 Legal and regulatory analysis and management	Summary compliance/improvements report
P3 Actions, impacts and outcomes	 Summary report of significant actions, impacts and outcomes report and their management
P4 Strategic planning	Documented strategic plans
P5 Tactical planning	 Revised implementation project plan (see P1) Documented objectives, targets and performance indicators and measures
Delivery	
D1 Change management	Change management process and plans
D2 Delivery of management programmes	 Process management/process improvement report, including roles and responsibilities.
D3 Internal control and external influence	Internal controls documentation and records Corporate governance review
Manitan marian and manad	Supply chain evaluation and management report
Monitor, review and report	
MRR1 Monitoring, measurement, auditing	 Audit/assurance plan, including objectives, scope and criteria
MRR2 Tactical and strategic review	Strategic and tactical review report and communications strategy
MRR3 Reporting progress	 Report and strategy for communicating including process for handling and responding to stakeholder feedback
MRR4 Assurance of reporting	Assurance plan Assurance report/statement



APPENDIX C - GLOSSARY

For brief explanations of sustainability issues see the SIGMA Guide to Sustainability Issues, available at www.projectsigma.com

AA1000 Framework

The AA1000 Framework is an accountability standard designed to improve accountability and performance by learning through stakeholder engagement. The Framework helps users to establish a systematic stakeholder engagement process that generates the indicators, targets and reporting systems needed to ensure its effectiveness in overall organisational performance.

AA1000 Series

The AA1000 Series builds on the AA1000 Framework, adding a series of specialised modules for accountability practitioners, as well as supporting documents. The Series consists of the existing core AA1000 Framework plus an evolving programme of specialised modules.

The AA1000 Series builds on the core principle of inclusivity and is based on three propositions:

- Stakeholder engagement remains at the core of the accountability processes of accounting, embedding, assurance and reporting.
- Accountability is about 'organisational responsiveness', or the extent to which an organisation takes action on the basis of stakeholder engagement.
- This responsiveness requires the organisational capacities to learn and innovate effectively on the basis of stakeholder engagement.

AA1000 Assurance standard

The AA1000 Assurance standard is the first of the specialist modules in the AA1000 series. Its aim is to provide: 'generally accepted accounting principles' for auditing and assurance purposes. It is a non-proprietary, open-source Assurance standard that covers the full range of an organisation's disclosure and performance. It is designed to complement the GRI Reporting Guidelines and other standardised or company-specific approaches to disclosure.

Accountability

Is one of the Sigma Guiding Principles. See Section 4.2.1 for explanation



APPENDIX C

Assurance

Assurance is an evaluation method that uses a specified set of principles and standards to assess the quality of a reporting organisation's subject matter, such as Reports, and the organisation's underlying systems, processes and competencies that underpin its performance. Assurance includes the communication of the results of this evaluation to provide credibility to the subject matter for its users.

Audit

Systematic examination to determine whether activities and related results conform to planned arrangements and whether these arrangements are implemented effectively and are suitable for achieving the organisation's policy and objectives.

Business case for sustainable development

Body of evidence and arguments highlighting how improved sustainability performance can maximise opportunities and minimise potential risks for an organisation. The SIGMA Guidelines focus on making a business case within a specific organisation. (Some use the term 'business case' to refer to whether improved environmental and social performance is recognised externally, in particular by the City e.g. share price outperforming others in the sector.)

Compatibility

Compatibility is the capability to build on existing management systems and approaches.

Compliance

Meeting agreed standards, for example following organisational or externally defined policies and practices.

Corporate Governance

Corporate governance is the way in which corporations are directed and controlled.

Corporate Social Responsibility

Corporate Social Responsibility, corporate citizenship and triple bottom line are some of the terms variously used by companies to describe their non-financial performance. We prefer to use the term 'sustainable development', to encompass an organisation's economic, social and environmental performance.

Five capitals

Enhancement of five forms of capital is one of the SIGMA Guiding Principles. The capitals are explained in The Guiding Principles Section.



Global Reporting Initiative (GRI)

The Global Reporting Initiative (GRI) is a multi-stakeholder process and independent institution whose mission is to develop and disseminate globally applicable Sustainability Reporting Guidelines. See: www.globalreporting.org for more information.

Inclusivity

AA1000 defines inclusivity as an organisation's commitment to

- identify and understand its social, environmental and economic performance and impact and the associated views of its stakeholders;
- consider and coherently respond (whether negatively or positively) to the aspirations and needs of its stakeholders in its policies and practices; and
- provide an account to its stakeholders for its decisions, actions and impacts.

Innovation

Innovation is the generation and implementation of new more effective approaches. Change may be evolutionary (incremental) or revolutionary (a radical change).

Integration

Integration is about bringing things together in a coherent fashion. The concept is core to the SIGMA Guidelines and applies to several different elements of organisational sustainability:

- 1. Of social, environmental and economic issues
- 2. Within the organisation embedding values and aims within the organisation, including the alignment of activities with these aspirations
- 3. Within external environment positioning the sustainable development of an organisation within the sustainability (social, environmental and economic) of its operating sector and region
- 4. Of existing management systems where existing management systems exist it is important to find ways of integrating them in order to facilitate implementation of the three previous dimensions of integration. See backwards compatibility

ISO

ISO is the International Organisation for Standardisation. A federation of over 140 national standards bodies based in Geneva, Switzerland. For further information see: www.iso.ch

ISO 9001 The international specification (certifiable) standard for quality assurance and management systems.



APPENDIX C

ISO 14001 The international specification (certifiable) standard for environmental management systems.

Key performance indicators (KPIs)

Key performance indicators are (ideally quantifiable) measures of the performance of the organisation over time.

Management System

A means by which organisations can formalise, document and improve their management practices. A management system usually incorporates consideration or development of organisational policies, programmes, procedures, structure and resourcing; staff roles, responsibilities and training programmes; operational controls; planning (strategic and operational); internal audits, management reviews, etc. The management system is intended to facilitate the delivery of continual improvement in overall business performance.

Material or materiality

Material refers to information that is needed by stakeholders for them to be able to make informed judgements, decisions and actions about an organisation's sustainability performance. An organisation needs to understand what is material to its stakeholders in order to determine what it should report.

Responsiveness

The extent to which an organisation responds coherently and consistently to stakeholder concerns.

SIGMA

SIGMA stands for: Sustainability: Integrated Guidelines for Management.

Stakeholder

Those individuals and groups that affect and/or are affected by an organisation and its activities.

Sustainability

Sustainability may best be defined as the 'capacity for continuance into the long-term future'. Anything that can go on being done on an indefinite basis is sustainable. Anything that cannot is unsustainable.

Sustainable development

Sustainable development is the process by which we move towards sustainability.



The Natural Step (TNS)

See: www.naturalstep.org.uk

The Natural Step is a process that allows organisations to get to grips with the fundamental issues and principles that underpin sustainability. It is based on four system conditions, which provide a description of the conditions that must be met for society to live sustainably within planet Earth's supportive capacity:

Transparency

The duty to account to those with a legitimate interest – the stakeholders in the organisation: those groups who affect and/or are affected by an organisation and its activities.

"ACCA welcomes the publication of the new SIGMA sustainability management guidelines. The guidelines provide organisations from all sectors with a comprehensive and practical approach to integrating sustainable development into core business strategies and operations. The guidelines will help provide the sustainability management systems infrastructure required to complement and support other initiatives such as AA 1000 and the Global Reporting Initiative."

Roger Adams

Executive Director – Technical Association of Chartered Certified Accountants



"The SIGMA guidelines are based on comprehensive research with companies attempting to implement business sustainability. They are an important resource to help companies manage the trade-offs associated with the 'triple bottom line."



Professor Martin Charter

Director

The Centre for Sustainable Design

"Putting sustainability into practice will be that much easier for any organisation adopting the SIGMA Guidelines – they provide the most comprehensive set of practitioner tools and techniques available,including highly effective ways of engaging with different stakeholders."

Professor Stephen Martin

Visiting Professor
Centre for Complexity and Change,
The Open University and
The Institution of Environmental Sciences.

"The SIGMA Guidelines are most extraordinary because of how they combine learning, innovation and compliance, and their ability to align financial with non-financial objectives and performance."



Dr Simon Zadek
Chief Executive
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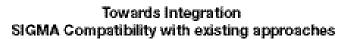
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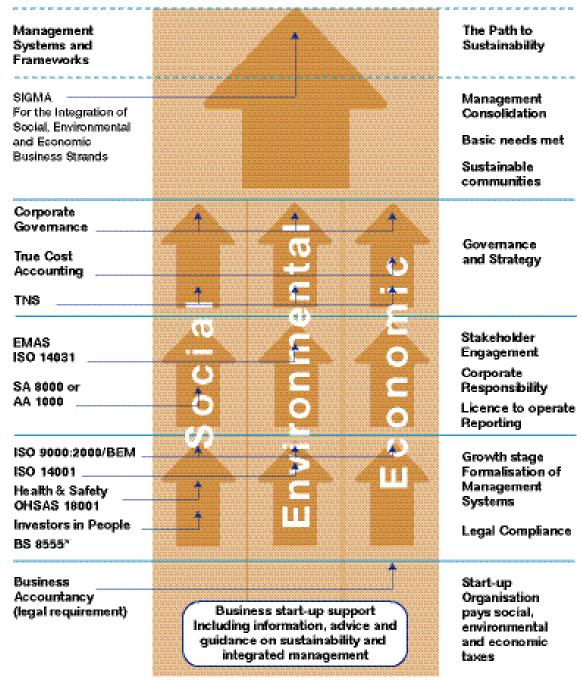
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Figure 7. Compatibility with existing systems and standards





*BS 8555 is a phased approach to implement an EMS in line with ISO 14001.



SIGMA Four-phase Management Framework

Management Phase	Purpose
Leadership and Vision	
LV1 Business case and top-level commitment LV2 Vision, mission and operating principles LV3 Communication and training LV4 Culture change	 To develop a business case to address sustainability issues and secure top-level commitment to integrate sustainable development into core processes and decision-making. To identify stakeholders and open dialogue with them on key impacts and suggested approaches. To formulate the organisation's long-term sustainable development mission, vision and operating principles and a high-level strategy that supports them, and to revisit them periodically. To raise awareness of sustainability issues and how they may affect the organisation's licence to operate and its future direction and its training and development requirements. To ensure that the organisational culture is supportive of a move towards sustainability.
Planning	
P1 Performance review P2 Legal and regulatory analysis and management P3 Actions, impacts and outcomes P4 Strategic planning P5 Tactical planning	 To ascertain the organisation's current sustainability performance, legal requirements and voluntary commitments. To identify and prioritise the organisation's key sustainability issues. To develop strategic plans to deliver the organisation's vision and address its key sustainability issues. Consult with stakeholders on plans. To formulate tactical short-term action plans to support the agreed sustainability strategies with defined objectives, targets and responsibilities.
Delivery	
P1 Change management P2 Management programmes P3 Internal controls and external influence	 To align and prioritise management programmes in line with strategic and tactical planning and the organisation's sustain ability vision. To ensure that identified actions, impacts and outcomes and legal and self-regulatory requirements are managed and appropriate internal controls are in place. To improve performance by delivering sustainability strategies and associated action plans. To exercise appropriate external influence on suppliers, peers and others to progress sustainable development.
Monitor, review and report	
MMR1 Monitoring, measurement, auditing and feedback MRR2 Tactical and strategic review MRR3 Reporting progress MRR4 Assurance of reporting	 To monitor progress against stated values, strategies, performance objectives and targets. To engage with internal and external stakeholders via reporting and assurance, and by incorporating feedback into effective strategic and tactical reviews culminating in appropriate and timely change.





Sustainable development is shaping up as the key challenge facing us all in the 21st century. Our current modes of behaviour and consumption cannot continue indefinitely. The well-being of our planet, society, communities and individuals is under threat. We need to better balance our human, social, environmental, material and economic needs.

Organisations have a key role to play – as part of the problem or as part of the solution. Expectations about the responsibilities of organisations, particularly companies, are changing. Increasingly their performance is judged not just by the services, products and profits they make but also by the impacts they have on human and social well-being and on the natural environment on which we all depend for life. Sustainable development is a major challenge for organisations and their traditional mindsets.

The SIGMA Guidelines provide a systematic, structured approach for organisations of different kinds to identify the contribution they can make to creating a more sustainable future, and how to make that a reality.

The SIGMA Guidelines:

- a set of Guiding Principles that help organisations to understand sustainability and their contribution to it.
- a Management Framework that integrates sustainability issues into core processes and mainstream decision-making.

The **SIGMA Toolkit,** consists of targeted tools and approaches to help with specific management challenges, and case studies explaining how organisations have used the SIGMA Guidelines and Toolkit to tackle real issues. The toolkit is available on the SIGMA Project website www.projectsigma.com.

The SIGMA Guidelines have been developed by the SIGMA Project – **S**ustainability Integrated **G**uidelines for **M**anagement. This unique, ground-breaking Project, backed by the Department of Trade and Industry, has involved a wide variety of organisations: companies, local authorities, and non-governmental organisations. A range of different organisations has actively tested the Guidelines. The Project has been spearheaded by AccountAbility – the international professional body for accountability, the British Standards Institution – the leading standards organisation and Forum for the Future – a leading sustainability charity and think-tank.





