



Environmental and other sustainability performance indicators – Some key features of recent UN, GRI and UK proposals and the assurance implications

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Abstract: The paper identifies some key features of thinking by the United Nations Conference on Trade and Development, “A Manual for Preparers and Users of Eco-efficiency Indicators” (2004). The UN approach is compared with that of the Global Reporting Initiative (GRI) in an exposure draft of the third generation of its Sustainability Reporting Guidelines (G3) issued in January 2006 and that set out in “Environmental Key Performance Indicators – Reporting Guidelines for UK Business” (2006). The paper also refers to some of the performance indicators given as examples in the international standard on environmental performance evaluation issued by the International Organization for Standardization (ISO 14031).

After summarising the advantages of using indicators to manage sustainability performance and the attendant limitations, the paper examines the extent to which these proposals are based on a conceptual framework, the range of impacts addressed and the detailed guidance provided as regards definition and compilation of the performance indicators. Reference is made to the need for credibility and the implications for providing independent assurance on the information.

I BENEFITS AND LIMITATIONS OF SUSTAINABILITY PERFORMANCE INDICATORS

The use of performance indicators helps organisations to measure, manage and communicate their impacts on the environment and other aspects of sustainability. Key performance indicators (KPIs) assist business and other organisations in meeting defined targets and can be used to provide a link between environmental performance and financial performance.

The principal benefits likely to be available from the use and publication of performance indicators are that:

- It is difficult to measure sustainable development directly so there is a need to look at environmental and other impacts via a range of performance indicators
- Stakeholders are often interested in particular issues, for which performance indicators can provide readily assimilated information
- Comparisons of the environmental impacts of an organisation over time and between different organisations in the same sector are assisted
- Preparation and internal use of performance indicators encourages and facilitates management of the key issues.

Some of the main limitations of performance indicators are that:

- In many cases, environmental indicators are not yet well defined, with the result that data reported by different organisations operating in the same sector may not be comparable
- The methodology for calculating some of the performance indicators is complex and there is limited reference material available to provide guidance
- Underlying systems for recording and processing data are not normally integrated with mainstream information flows, posing a threat to completeness and reliability
- Credibility may be in doubt without some form of independent verification or assurance.



II CONCEPTUAL UNDERPINNING

The UN Manual [1] sets out a range of eco-efficiency indicators, defined as the ratio between an environmental and a financial variable, i.e. indicators are ratios composed of an environmental item divided by a financial item. Eco-efficiency is therefore increased by reducing the environmental impact while increasing the value of an enterprise (Schaltegger/Sturm 1989). Accounting principles in the UN Manual are based on the IASB Framework for the Preparation and Presentation of Financial Statements, particularly the characteristics: understandability, relevance, reliability and comparability. For each of the eco-efficiency indicators, the accounting policy adopted is disclosed. The Manual notes the importance of aligning conceptual frameworks for ecological and financial accounting if the resulting figures are to be combined to produce eco-efficiency indicators and the need to ensure that, in defining the reporting entity for environmental items, the same criteria are used as in financial reporting, i.e. if upstream and downstream environmental impacts are included, related eco-efficiency indicators are distorted.

The GRI draft Guidelines [2] include principles regarding report content and quality of reported information about an organisation's environmental, social and economic performance. Report content is governed by the principles of inclusivity, relevance and materiality, sustainability context and completeness. Associated guidance is provided on setting the report boundary, addressed in more detail in a technical protocol. GRI recognises that the boundary of a sustainability report should include entities over which the reporting organisation exercises control or significant influence, but the reporting requirement differs depending on the degree of influence. Quality of reported information is seen as being determined by such principles as balance, comparability, accuracy, timeliness, clarity and assurability. There is no specific reference to the IASB Framework or to any other conceptual framework, nor is there any attempt to link the environmental indicators with financial performance. Each category of indicators is expected to be accompanied by a "Disclosure on Management Approach", in which matters such as overall policy, responsibility and performance are described.

The UK Reporting Guidelines [3] are intended to apply to large businesses and state that: "where possible, the Government has sought to ensure that the Guidelines are consistent with other standards and reporting guidance". Reference is made to the GRI framework as well as the Guidelines on Environmental Management Accounting issued by the International Federation of Accountants and the Corporate Accounting and Reporting Standard issued by the World Business Council for Sustainable Development and the World Resources Institute. The UK Guidelines identify three general reporting principles: transparency (including the definition of boundaries and explanation of processes to manage risk), accountability (including stakeholder engagement and third party assurance) and credibility (including the use of an EMS and policy for supply chain management).

ISO 14031[4] is designed to provide management with information to assist in evaluating environmental performance. It is not essentially an external reporting standard (although it accepts that management may wish to make the resulting indicators available to interested parties). Nor does it establish minimum levels of performance or identify core indicators amongst the 146 examples listed in an "informative" annex supplementing the standard. The guidance provided in ISO 14031 is intended to support existing ISO standards on environmental management systems and makes no reference to other international frameworks such as those of the IASB or the GRI. Two types of performance indicators are identified: *management performance indicators*, which measure management efforts to influence environmental performance; and *operational performance indicators*, which measure the environmental performance of an organisation's operations. Both of these are distinguished from *environmental condition indicators*, which provide context by measuring the condition of the external environment and are not directly concerned with an organisation's impacts. ISO 14031 suggests a number of possible bases for selecting performance indicators. The standard provides high-level guidance without attempting to explain how any of the environmental performance indicators given as examples should be calculated. In addition to the groups of indicators discussed in Section III below, ISO 14031 includes a number of examples of management performance indicators dealing with conformance with requirements and the implementation of policies and programmes.



III KEY FEATURES OF ENVIRONMENTAL INDICATORS

There is substantial variation between the different proposals as regards the range of environmental indicators advocated and the impacts covered. In this paper, it is convenient to discuss the way in which indicators address:

- Emissions to air and contribution to global warming
- Water use and discharge
- Waste and emissions to land
- Materials, use of resources and recycling
- Energy use
- Biodiversity
- Environmental protection expenditure
- Impacts of products, services and transport

Emissions to air and contribution to global warming

The UN Manual is concerned with energy users rather than the global warming contribution of energy-producing companies, the agricultural sector or forestry. Global warming gases are defined as the six gases listed under the Kyoto Protocol. An enterprise's global warming contribution over a 100 year time frame is expressed in kilograms or tonnes of carbon dioxide equivalent per year. Renewable energy is assumed to have no global warming contribution and "for the time being" other global warming gases (e.g. methane) from the use of energy and transport services are not considered. The resulting eco-efficiency indicator "global warming contribution per unit of net value added" is disclosed, together with the contributions for each category of global warming gas and management policy on energy use, objectives and measures to achieve targets.

GRI has four indicators that concern emissions to air and contribution to global warming:

EN 17 Greenhouse gas emissions

EN 19 Other significant air emissions by weight

EN 23 Other relevant greenhouse gas emissions

EN 17 calls for the total greenhouse gas emissions from the six gases listed under the Kyoto Protocol, in tonnes of carbon dioxide equivalent. The supporting guidance refers to different conversion methodologies and compilation guidance. For example, the Corporate Accounting and Reporting Standard issued by the World Business Council for Sustainable Development (WBCSD) and the World Resources Institute provides guidance on emissions data that should be provided as standard as well as additional information that is optional. The standard disclosure requires separate emissions data for each of the six greenhouse gases as well as carbon dioxide emissions from biologically sequestered carbon, e.g. burning biofuels. This is rather more demanding than EN 17. No reference is made to the UN Manual. The indicator includes direct emissions and indirect emissions resulting from the generation of purchased electricity, heat or steam.

EN 19 deals with other significant regulated air emissions. Organisations are expected to disclose the weight of emissions in each case and to state the methods of calculation used. EN 23 concerns other relevant indirect greenhouse gas emissions, measured in carbon dioxide equivalent. These include those resulting from the activities of the organisation but which are generated at sources owned or controlled by another organisation, such as business travel. Emissions resulted from imported electricity, heat or steam are not included.

The UK Guidelines include five indicators that concern emissions to air and contribution to global warming:

KPI 1 Greenhouse gases

KPI 2 Acid rain and smog precursors

KPI 3 Dust and particles

KPI 5 Volatile organic compounds

KPI 6 Metal emissions to air

Three of these: KPI 1, KPI 2 and KPI 5, taken together, cover similar ground to the corresponding indicators in the UN Manual and the GRI draft Guidelines, although differences in scope and classification will hinder comparisons with data prepared on another basis. The Guidelines emphasise



that indirect greenhouse gas emissions should be reported separately from direct emissions. It is also noted that “companies may decide to report on impacts that occur outside their normal financial reporting boundaries and this is common practice in the case of greenhouse gas emissions.” Reference is made to the UK and European Trading Schemes, although there is no suggestion that key performance indicators should include information about the impacts of emissions trading. KPI 3 requires that dust and particles emitted should be reported in metric tonnes per year, by size of particle. KPI 6 calls for metal emissions to air to be reported in metric tonnes per year, with a discussion of the type of metal, the mass emitted, particle size and whether emitted from a point or dispersed source.

ISO 14031 suggests the use of indicators covering the quantity of specific emissions per year and per unit of output, the quantity of waste energy released to air and the quantity of air emissions having ozone-depletion potential or global climate change potential.

Water use and discharge

The UN Manual specifically excludes water suppliers and distinguishes between off-stream use (most commercial, industrial, agricultural and domestic applications) and in-stream water use, such as power generation. Water consumption is the difference between water received and off-stream return flow, e.g. release of cooling water. The eco-efficiency derived is “water consumption per net value added” and associated disclosures cover the amounts of water received from each source, return flow and wastewater treatment and management policy.

The GRI draft Guidelines include indicators:

EN 9 Total water withdrawal by source

EN 10 Water sources and related habitats significantly affected by withdrawal of water

EN 11 Percentage and total volume of water recycled and reused

EN 21 Total water discharge and quality

EN 25 Water sources and related habitats significantly affected by discharges of water and runoff

EN 9 specifies four categories of source for which the volume of water withdrawn should be stated. Water suppliers are not specifically excluded, nor is any adjustment proposed for cooling water returned to a water source. EN 10 is concerned with impacts on the ecosystem caused by lowering the water table. EN 11 calls for total volume of water recycled and reused per year, excluding rainwater and domestic wastewater, and the percentage of total water use. EN 21 deals with water discharge and quality, excluding rainwater and domestic wastewater. Quality is determined according to national regulators of standard effluent parameters. Unmetered discharges are estimated. There is no requirement to describe the way in which discharges are made, e.g. to sewers, surface dispersal or removal by truck. Under EN 25, information is provided about any water bodies that are significantly affected by the reporting organisation’s discharges, including the volume of the receiving water body, its biodiversity value and whether or not it is a protected area. (Waste and water discharges are quantified under EN 20 and EN 21).

The UK Guidelines deal separately with water abstractions and emissions to water:

KPI 14 Water abstraction

KPI 7 Nutrients and organic pollutants

KPI 8 Metal emissions to water

KPI 14 is concerned with water abstraction for public water supply and for direct use by industrial or agricultural processes, rather than supplied water, which is reported as a supply chain impact. Reuse or recycling is expected to be discussed but not quantified. KPI 7 addresses emissions to water that can cause pollution and disruption to habitats. Guidance is provided on measurement procedures, resulting in disclosure of the volume and content of effluent discharged and the number and volume of any spills that have contributed to water pollution. In the case of metal emissions to water, KPI 8 identifies a number of sectors and processes that may give rise to pollutants and requires disclosure of the emissions in kilograms per year, together with details of the sampling and monitoring technique used.

ISO 14031 proposes the use of indicators quantifying the water used per unit of product, the quantity of water reused, specific materials discharged to water per unit of product and the quantity of waste energy released to water.



Waste and emissions to land

The UN Manual identifies waste as a non-product output with a negative or zero market value, distinguishing between mineral and non-mineral waste. Disclosure comprises the weight or volume of waste generated per unit of net value added and includes waste treatment by incineration, landfill and temporary on-site storage. The management policy is disclosed, together with information about any schemes for energy recovery from the conversion of waste.

The GRI draft Guidelines include indicators:

- EN 20 Total amount of waste by type and destination
- EN 22 Total number and volume of significant spills
- EN 24 Weight of transported, imported, or exported waste deemed hazardous

EN 20 distinguishes between hazardous and non-hazardous waste and requires the total weight of waste to be classified by type and destination (as between recovery, reuse, recycling, incineration, landfill, on-site storage, composting or deep well injection), with a statement as to how the destination has been determined. EN 22 requires an organisation to state the total number and volume of recorded spills. For those spills that result in a liability included in the organisation's financial statements, information about the location, volume and material involved should be provided. Hazardous waste is addressed by EN 24, which requires the weight of transported, imported or exported hazardous waste to be identified and separately disclosed.

The UK Guidelines include:

- KPI 9 Pesticides and fertilisers
- KPI 10 Metal emissions to land
- KPI 11 Acids and organic pollutant emissions to land
- KPI 12 Waste (Recycling, recovery and landfill)
- KPI 13 Radioactive waste

KPI 12 deals with non-hazardous waste whereas the other KPIs concern hazardous waste. A distinction is made between landfill, recovery (including waste incineration as a source of renewable energy), recycling and reuse. Disclosures include the total amount in metric tonnes per year, the proportion disposed of in each way and whether an estimation method has been used. In the case of pesticides and fertilisers (KPI 9), in addition to the total weight applied, the total area treated should be reported. Metal emissions to land arising from industrial activities are reported in metric tonnes per year and whether an estimation method has been used. KPI 11 deals with spills and methods of estimation. The number of spills should be reported, with the volume of any significant spills and whether an estimation method has been used. Radioactive waste (KPI 13) is classified in three levels. Guidance is provided on measurement procedures and the reporting practice in each case.

ISO 14031 suggests the use of a number of possible indicators regarding waste and emissions to land. These include the total quantity of waste for disposal per year and per unit of product, the quantity of material sent to landfill per unit of product, the quantity of hazardous, recyclable or reusable waste produced per year and the amount or type of wastes generated by contracted service providers. Other indicators might be the quantities of waste stored on site, waste controlled by permits, waste converted to reusable material per year and the quantity of hazardous waste eliminated due to material substitution. Further examples deal with the quantity of effluent discharged per year and the quantity of effluent per service or customer.

Materials, use of resources and recycling

The UN Manual does not include any specific eco-efficiency indicators dealing with materials use and recycling.

The GRI draft Guidelines include:

- EN 1 Weight of materials used
- EN 2 Percentage of materials used that are recycled
- EN 27 Percentage of products sold that is reclaimed at the end of the product's useful life by product category



EN 1 is concerned with conservation of global resources and calls for disclosure of the total weight of materials used that are part of the final product (direct materials) and non-renewable materials, such as metals, minerals, oil, gas and coal. EN 2 requires disclosure of the percentage of recycled materials as a proportion of the total weight of materials used. EN 27 concerns the reuse or recycling of products at the end of a product's useful life, whether carried out by the manufacturer or by a contractor. The proportion of reclaimed products as a percentage of products sold is disclosed, together with the way in which the data has been collected. The basis to be used is not specified so presumably the percentage could be based on numbers, weight or selling price.

The UK Guidelines cover the use of resources:

- KPI 15 Natural gas
- KPI 16 Oil
- KPI 17 Metals
- KPI 18 Coal
- KPI 19 Minerals
- KPI 20 Aggregates
- KPI 21 Forestry
- KPI 22 Agricultural produce

KPI 15 and KPI 16 require the quantities of natural gas and oil extracted to be reported in cubic metres or barrels of oil equivalent per annum. KPI 17 requires metals extracted in metric tonnes extracted per annum, broken down by type of metal. Under KPI 18, coal extracted is stated in metric tonnes per year, by type of coal and method of extraction (deep mine or opencast). KPI 19 and KPI 20 require minerals and aggregates extracted to be reported in metric tonnes per annum by type of mineral or aggregate. Under KPI 21, organisations involved in forestry and logging are expected to report the volume of harvested timbers and other wood products in cubic metres per annum by type of wood (prior to any drying process), the area from which the wood was sourced and any evidence as to whether legal or sustainably managed forests were used. KPI 22 requires extracted or sold agricultural resources, including foodstuffs such as meat and fish, tobacco, rubber and other crops, to be reported in metric tonnes per annum by type of resource or species (prior to any drying process).

ISO 14031 includes a wide range of examples of performance indicators covering materials, the use of resources and recycling. Amongst the management performance indicators listed are the number of products designed for disassembly, recycling or reuse and financial savings through reductions in resource use, prevention of pollution or waste recycling. Operational performance indicators include the quantity of materials used per unit of product, the quantity of processed, recycled or reused material used, the quantity of packaging materials discarded or reused per unit of product, the quantity of auxiliary materials recycled or reused, the quantities of raw materials and hazardous materials used in the production process. Other indicators deal with the use of material by contracted service providers, such as the amount of hazardous materials and the amount of recyclable and reusable materials. ISO 14031 also suggests measuring the quantity of materials used during after sales servicing of products.

Energy use

The UN Manual is concerned with energy users rather than energy producers. The impacts of energy use are dealt with in the context of greenhouse gases and contribution to global warming. A number of different forms and sources of energy are considered and tables of calorific values for a wide range of fuels in different countries (based on OECD figures) are provided. For the purpose of eco-efficiency reporting, energy is valued by its capacity to perform work, and the resulting indicator, after application of a factor to convert to thermal energy, measures the "energy requirement per unit of net value added". This is disclosed, with the total energy requirement for the period and the amounts for each energy source, together with the related management policy.

The GRI draft Guidelines include:

- EN 3 Direct energy consumption broken down by primary energy source
- EN 4 Indirect energy consumption broken down by primary energy source
- EN 5 Percentage of total energy consumption met by renewable sources
- EN 6 Total energy saved due to conservation and efficiency improvements
- EN 7 Initiatives to provide energy-efficient products and services
- EN 8 Initiatives to reduce indirect energy consumption



Under EN 3, primary sources include non-renewable sources such as coal, natural gas, oil and nuclear energy, whereas renewable sources include biomass, solar, wind, geothermal and hydro energy. Energy consumed is derived from energy purchased, plus energy produced less energy sold. Total energy consumption is stated in joules, by primary source. EN 4 concerns indirect energy consumption, i.e. energy used indirectly through the purchase of electricity, heat (or cooling), distilled fuel (e.g. diesel, LPG), steam or other forms of imported energy. Using data from providers, an organisation is required to estimate and disclose the amount of primary fuels used to produce these forms of imported energy. EN 5 requires disclosure of the percentage of total energy consumption met from renewable sources. EN 6 identifies the total energy saved due to conservation and efficiency improvements. A single figure is disclosed for the total amount of energy saved, measured in joules. EN 7 deals with initiatives to provide energy efficient products and services. As well as describing the initiatives, an organisation is expected to quantify reductions in the energy requirements achieved during the period. Where normalised data is provided, assumptions are stated or industry standards used. EN 8 calls for a description of initiatives to reduce indirect energy consumption, with an estimate of the extent to which indirect energy use has been reduced in four different areas and a statement of assumptions and methodologies used.

The UK Guidelines deal with resource use, including extraction from energy sources such as natural gas, oil and coal, but do not propose any specific disclosures from the viewpoint of energy consumption or conservation.

ISO 14031 suggests the use of indicators covering the total quantity of energy used per year or per unit of output, the quantity of each type of energy used, the quantity of energy used per service or customer, and the quantity of energy units saved due to energy conservation programmes. For producers, the key indicators would be the quantity of energy generated with, by products or process streams, and the land area used to produce a unit of energy. For organisations with a vehicle fleet, examples also include the average fuel consumption.

Biodiversity

The UN Manual makes no reference to biodiversity.

The GRI draft Guidelines include:

- EN 12 Location and size of land owned, leased or managed in, or adjacent to, protected areas
- EN 13 Description of significant impacts of activities on protected areas
- EN 14 Areas of habitats protected or restored
- EN 15 Programmes for managing impacts on biodiversity
- EN 16 Number of IUCN Red List species with habitats in areas affected by operations, broken down by level of extinction risk

EN 12 calls for geographical information about land owned, leased or managed in, or adjacent to, protected areas, the type of operation and position in relation to the protected area, the size of the operational site and biodiversity value affected. EN 13 requires a description of significant impacts of activities on protected areas, particularly the nature of the impact, the area and species affected, duration of the impact and extent to which it may be reversible. EN 14 deals with size and location of areas of habitats protected or restored and measured the extent to which negative impacts are prevented or redressed and whether restoration has been independently verified. EN 15 seeks a statement of the organisation's strategy for managing impacts on biodiversity, together with any actions or plans to manage diversity risks. EN 16 calls for information about the IUCN Red List species with habitats in areas affected by operations, by level of extinction risk.

The UK Guidelines do not include a specific KPI for biodiversity on the grounds that "there is no single, universally accepted method for measuring the impacts of company activity on biodiversity", although brief reference is made to the GRI indicators and to industries with significant impacts on biodiversity, such as extractive industries, natural resource use and agriculture, as well as the relevance of indicators dealing with emissions to water.

ISO 14031 lists only one example of a management or operational performance indicator that addresses biodiversity: the number of sites with wildlife programmes. However, the standard includes a wide range of environmental condition indicators that relate to biodiversity as regards the condition of the



external environment rather than the direct results of an organisation's impacts. Such examples are grouped under the headings air (6), water (6), land (7), flora (8) and fauna (4).

Environmental protection expenditure

Neither the UN Manual nor the UK Guidelines include any performance indicators concerning environmental protection expenditure.

The GRI draft Guidelines incorporate a single indicator EN 30 requiring total environmental protection expenditure by type, within the categories:

- (a) Waste disposal, emission treatment and remediation costs
- (b) Prevention and environmental management costs.

The costs to be included are widely defined and include certain personnel costs, external services, research and development. (Expenditure on fines for non-compliance with environmental regulations is addressed under EN 28).

ISO 14031 includes several management performance indicators that relate to environmental protection. Such indicators might cover the number of management levels with specific environmental responsibility, the number of employees who have environmental requirements in their job descriptions or who are participating in environmental programmes, the number of or costs attributable to fines and penalties, the costs (operational and capital) associated with environmental aspects of a product or process, the return on investment for environmental improvement projects, progress on local remediation activities and the number of local clean-up or recycling initiatives, sponsored or self-implemented.

Impacts of products, services and transport

The GRI draft Guidelines include:

EN 26 Initiatives to manage the environmental impacts of products and services and extent of impact reduction

EN 29 Significant environmental impacts of transportation used for logistical purposes
EN 26 seeks to address the problem that environmental impacts of some goods and services from their use and disposal is significantly greater than during their production. Initiatives to reduce negative impacts are required to be described in relation to use of materials and water, emissions, effluents and waste. The extent of reduction is quantified and any assumptions regarding use of the products are disclosed. Under EN 29, the environmental impacts of transportation, excluding passenger transport, are identified and described. The impacts are either quantified, with an explanation of the criteria and methodology used, or the reason for not including such data is stated. Other impacts of products and services are addressed in GRI indicators dealing with water use, reuse or recycling of products and initiatives to provide energy-efficient products and services.

None of the other documents reviewed put forward indicators that would capture the downstream environmental impacts of an organisation's products or services. The remainder of this section is therefore limited to indicators dealing with ozone-depleting substances. As a result of the Montreal Protocol 1987, the use of such substances is being phased out internationally.

The UN Manual has a section concerned with ozone-depleting substances that may exist either as part of a "use system", i.e. goods and equipment (such as refrigerators and fire extinguishers) or as a substance sold in pure or blended form. Ozone-depleting substances "added by the reporting entity" through its operations should be reported by weight and ozone depletion potential, with disclosure of the "dependency per net value added", the total amount of ozone-depleting substances recognised during the period, together with the management policy.

The GRI draft Guidelines include an indicator EN 18 Emission of ozone-depleting substances, which calls for disclosure of the emissions of ozone-depleting substances in tonnes, excluding emissions from products during their use or disposal.



The UK Guidelines include KPI 4 requiring ozone-depleting substances to be reported by type in metric tonnes per annum. Any estimation method used should be stated. The indicator is expected to be disclosed mainly by businesses that use air conditioning, refrigerators and certain types of fire extinguishers.

ISO 14031 suggests the use of indicators dealing with the number of products with explicit “product stewardship” plans or with instructions regarding environmentally safe use and disposal, the number of products introduced in the market with reduced hazardous properties, the percentage of a product’s content that can be reused or recycled, the duration of product use and the number of units of energy consumed during use of the product. The standard also highlights the number of vehicles in the fleet with pollution-abatement technology.

IV CREDIBILITY AND ASSURANCE

Much of the information used in preparing environmental and other sustainability indicators is expressed in non-financial units and may not be subject to the same degree of control as financial information. It may therefore result in performance indicators that are unreliable. It is also the case that organisations are often concerned with the possibility that performance indicators may present an unfavourable picture and may see an apparent benefit in omitting or “adjusting” certain data. In addition to installing a process of internal check, the credibility of performance indicators is therefore enhanced by external verification or assurance.

There are some key criteria to be borne in mind if the information is to be regarded as credible. Indicators need to be defined with sufficient precision to ensure that preparers and users have a uniform understanding as to the information included, its limitations and context. This should embrace completeness and reliability, neutrality, and clarity. There should be relatively little scope for individual judgement in deciding what information to report or omit. Definitions and measurement methods need to be sufficiently precise to avoid uncertainty and to ensure that different organisations in similar circumstances do not present significantly different data. The degree of flexibility should be minimal so as to reduce the scope for bias or manipulation of a performance indicator. An explicit statement defining each indicator and the basis of compilation is important in meeting these criteria, whether the indicator is used internally or published externally.

REFERENCES

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