Indicator Reporting Information System (IRIS)

What is IRIS?
The Indicator Reporting Information System (IRIS) is a web-based information system. The key value propositions of IRIS are to reduce the burden of routine reporting suffered by many organizations. IRIS reduces burden by automating all data processing, thus freeing limited human resources to focus on the critical activities of data acquisition and interpretation.

What are Indicators?
Indicators are objective, repeatable measures of the status of a system. Often systems are complex and their status influenced by many factors. Indicators are measures of the status of the system. A familiar example is our body temperature – which is a general indicator of bodily health; the human body is a complex system so the indicator of health can be affected by many factors.

What is the Shared Knowledgebase (SKB)?
IRIS includes a Shared Knowledgebase which allows organizations involved in reporting to share methods, tools, templates and experiences with others. The SKB is thus a Capacity Building tool - by which organizations with more scientific experts can sharing their work in a directly reusable manner with less well-resourced organizations – and thus improve the well-being of their people and their environments. The SKB will be a global resource available for use and contribution by organizations across the globe.

How does IRIS support Reporting?
IRIS will automatically calculate values for indicators according to a reporting schedule. The indicator value and data on factors that influence the indicator value will be automatically presented to the assigned subject matter expert for their expert interpretation. The result will form a section of a report document. Several such sections will be automatically “bound” together according to the report specification. Optionally the data used to calculate an indicator value will be shared with the report. The reports generated by an IRIS can be used as a data source by another IRIS. Thus organizations can report to organizations higher in the reporting hierarchy – who in turn can aggregate data from lower tiers to generate over indicators. For example a Federal Ministry can prepare national reports from reports submitted by State level entities.

Data Sharing
A concern in many organizations is the misinterpretation of data by people not familiar with the context it comes from. Such concerns have inhibited the sharing of data between organizations. IRIS will overcome this by keeping the indicator value, the underlying data and the local subject matter experts bound together. Thus data can be shared but only in the context of expert narrative from the provider.
Which type of organization is IRIS intended for?
By design IRIS can be used for any indicator that can be expressed as a suite of data sets and a set of data processing steps. Therefore IRIS can be used at all levels of Government, from sub-national to global. For the same reason IRIS can be used in any geography. IRIS will be available in a large number of languages.

Which Indicators does IRIS Support
By design IRIS will support any indicator that can be derived from one or more data elements. The science behind indicators is in a state of constant improvement. Together the core IRIS engine and the shared knowledgebase will allow organizations to benefit from new indicators and methods as they evolve. It will also allow organizations to monitor new issues as they arise.

By design IRIS is not limited to any specific topic area – this allows data streams from different sectors to be brought together. This is essential for sustainable development which demands the interactions between Social, Environmental and Economics to be understood.

What Reports does IRIS support
IRIS is a generic tool. The Shared knowledgebase will store community provided report specifications and report templates – which any user can download. Consequently any report that is based on indicators and associated subject matter interpretations can be generated by IRIS.

How will IRIS help decision makers
Indicators are important tools for both tactical management and strategic planning.

IRIS includes a dashboard on which many indicators can be displayed. This will allow decision makers to understand the status of the many components of the sector they are responsible for.

IRIS will facilitate a cause-effect analysis, and the presentation on the dashboard of indicators of upstream causes and downstream consequences. This will allow decision makers to understand how decisions in one part of society (e.g. jobs) effect other elements (e.g. air quality) – and to thus make informed decisions.

What IT Resources will I need?
For organizations that prefer to keep their data internal during the processing stage IRIS will be available as intranet solution run on local servers. For organizations with more open data policies or for organization with limited resources IRIS will be available as a web system, requiring little more than a browser and a medium speed internet connection.

Who is involved
IRIS being developed jointly by Environment Agency Abu Dhabi and United Nations Environment Programme (UNEP) within the framework of their Abu Dhabi Global Environmental Data Initiative partnership.