The Indicator Reporting Information System (IRIS)
Formerly the National Reporting Toolkit (NRT)

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Typical Situation

1. Thematic silos
2. Ad hoc processes
3. Manual workflows
4. Manual collation of results

Decision maker overwhelmed with uncoordinated information
The Requirement/Briefing

1. An indicator-based reporting tool
2. To enable integrated (multi-indicator) environmental assessment – inclusive of social and economic dimensions
3. To provide a reporting capability for organisations with very limited resources
4. To be relevant at all scales of Government (Local to Global)
5. To enable formal inter-organizational reporting (Local > National > Regional/Global)
6. To support all data and information sharing policies – from fully Open to very-conservative
7. To support tactical reporting (dashboard)
8. To be relevant around the world (not tied to any specific indicators or regional specifics)
9. To be a durable solution (capable of accommodating new and evolving indicators)
10. To deliver business benefit – i.e. improving organisational capabilities and efficiency (automate routine reporting.)
11. To support Capacity Building by To enable establishment of a global Reporting Community of Practice with a community managed report and indicators resource/knowledgebase
Indicators

- The IRIS supports any indicator that can be expressed as a function

\[ \text{Indicator value} = f(A, J, Z) \]

- Indicators implemented in a IRIS install/profile determined by users reporting obligations or operational needs
- Function may be simple or complex
  - algebraic, scripts, spatial analyses etc.
- Function involves one or more data parameters
- Parameters have documented specifications
- Collection and recording standards
- Parameters may come from one or more sources
- Sources may be local or remote
- Sources may be diverse in form (file, d/b, web)
Conceptual Architecture

Executive has actionable data
Organisation has reduced burden

IRIS Instance Configuration
IRIS

Data Processing Services
Expert Interpretation

Knowledge Sharing

External Specifications
Report Specifications
Implementations
Indicator Specifications
Shared Knowledgebase

Internal Data Holdings
External Data Holdings

Data Access Component
Data Processing Orchestrator

Contextual Data Interpretation & Reporting Engine Indicator

Executive Dashboard

IRIS

DPSIR Knowledge Sharing

IRIS Instance Configuration

Reporting Calendar

Data Processing Holdings
External Data Holdings

IRIS

DPSIR Expert Interpretation

Internal Data Holdings
External Data Holdings

IRIS

DPSIR Knowledge Sharing
SKB will allow organizations with resources and technical leadership skills to develop indicator implementations and share them (with commentary) with others.

Applicability, Best practice, Experience
Conceptual Architecture

Executive has actionable data
Organisation has reduced burden

IRIS Instance
Configuration

Data Processing
Orchestrator

Data Access Component

Contextual Data
Interpretation & Reporting Engine

Indicator Specifications

Report Specifications

Knowledge Sharing

External Specifications

Shared Knowledgebase

Implementations

IRIS Instance
Configuration

Report
Specifications

Internal Data Holdings

External Data Holdings

Data Processing Services

Expert Interpretation

Knowledge Sharing

External Transmittal

Executive Dashboard

Reporting Calendar

DPSIR

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Data Access Component

Contextual Data
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Executive Dashboard

Abu Dhabi CO2 - 2010

Abu Dhabi SO2 - 2007

SO2 Emissions 2007 - 2012
IRIS Reports as Data Transfer Vehicle
Multi-Level Reporting

International Reporting

Multilateral Env Agreements

National Reporting

Nation 1 IRIS

Sub-National Reporting

Nation 2 IRIS

Sub National Entities

Sub National IRIS#1

Local Reporting

Sub National IRIS#2

Local Reporting

Sub National Gov.

Local Non Env. Authority

DATA
UN World boundaries

The designations employed and the presentation of material on this map do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries.
United Arab Emirates

Net Production Index - Agriculture

Index (2004–2006 = 100)

Original data source: FAO


The FAO indices of agricultural production show the relative level of the aggregate volume of agricultural production for each year in comparison with the base period 2004–2006. They are based on the sum of price-weighted quantities of different agricultural commodities produced after deductions of quantities used as seed and feed weighted in a similar manner. The resulting aggregate represents, therefore, disposable production for any use except as seed or feed.
To create a map using your data, first choose a base map from the options provided and then simply drag and drop data (in a CSV or Excel file) on to the map. Your file must include coordinates (latitudes and longitudes).
<table>
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<th>Obligation</th>
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<th>Reporting Format</th>
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IRIS as a Capacity Building tool

- Focuses
  - Organisational activities around reporting obligations/processes
  - Executive dashboard reveals the state of organisational monitoring and management

- Encourages
  - Systems approach to Environmental Management
    - e.g. DPSIR framework
  - Collection and Storing of field data
    - According to standard methods
    - In a timely manner

- Facilitates
  - Coordinated approach to environmental management and reporting across tiers of Government
Deployment of Model (e.g. UAE)

- Most effective as a top-down (Ministry) led initiative
  - Capacity Building Workshops / On-line training
  - Web version (UNEP-hosted)
  - Local versions locally-resourced (MOEW hosted or sub-nationally – per data policy)
- Repeated at Regional Scale (with UNEP)
- Potential to repeated at all scales across globe (with UNEP et al)
Capacity Building Workshop (Nov 16-19 2014)
Multiple Dashboards that provide a graphical snap-shot of indicators that together highlight, in a quick, easy way, the state and trends of the environment.
Data Sources can be uploaded so they are available for indicator development for multiple reporting needs.
Datasets are used in the calculation of indicators and for supporting elements...
Data – Supporting Maps and Charts

Emissions

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Data – Supporting Maps and Charts
• **Reports** can be generated using reporting templates, that bring in relevant indicators and an analysis of the data.

• With the data already in the system, it is a matter of a few clicks to produce a report with data, analysis, charts and maps.
User can easily share resources with a public access database called the Shared Knowledge Base. Such resources include reporting templates, report specifications, indicator specifications, charts and maps created in IRIS.
Thank You