

General comments on draft of United Nations Resource Management System: Principles and Requirements.

The comments here are a supplement to those made in the text.

- This is what I would call an “aspirational”, not to say idealistic, document. Nothing wrong with that, and I do not disagree with the general concepts, but have doubts about the practicality of many of them.
- Successful adoption of the Principles and Requirements would appear to depend on the central control of an organisation, such as a government. Although it has influence, the EGRM has no mandatory capacity. What are the drivers that would motivate a government or company to adopt these Principles?
- I was struck by the repeated use of the word “will” in the text, which implies inevitability to a complicated system with many components and dependencies. In many places throughout the text, the word “may” would be more appropriate.
- Much depends on the availability of good quality data and many governments and companies would be reluctant to provide what they regard as confidential information. Confidence in this information would require competent resource auditing (NOT the same as accounting auditing), which is not common.
- It seems to be implicit in the text that the Resource supply system (RSS) is deterministic, except for a brief mention in Annex II Item 3. It is not. It has the characteristics of a complex system, with uncertainty in many of its components, non-linearity, poorly predictable, and subject to the impact of extreme events. Resource management should consider this.
- “Sustainability framework to aid the financing of resource sectors” (p 6), needs explanation. Finance is the lifeblood of the resource supply system but its availability depends on confidence and it is fungible. A single resource project may be run at a loss but the larger system itself cannot. A comprehensive measurement process is needed, of which financial accounting is necessary, but not sufficient.
- In addition to financing, an essential requirement is the existence of a background setting (political, legal, regulatory, social, and environmental, etc.) that is conducive to carrying out successful resource supply projects.
- The importance of technology development in ensuring resource supply deserves more emphasis. Blockchain, machine learning, and artificial intelligence Annex II item 6 will probably play a useful role in the future, but are only examples of the continued, very much broader, role of technology
- II. Definitions A Glossary

A comprehensive Glossary is essential. Could take several pages.

p. 9 Definition of Resource and Source. Suggest:

Resource. A general term for the quantity of a useable commodity that includes both an original material or energy source and a produced and processed material product or energy that can be accessed for use. (See also Natural resource).

Source (D). The origin of a resource before it is produced into an RSS process and the feedstock for resource projects from which products can be developed.

Sources may be in their natural or secondary (anthropogenic sources, tailings, etc.) state.

Often referred to as “in situ” or “in place” for a material source and usually including a geographic location. It includes bioenergy, geothermal, hydro-marine, solar, wind, injection for storage, hydrocarbons, minerals, nuclear fuels, and water.

- **Unknown source (D)**. A source that may be thought to exist but not yet identified.
May also be described as “Unidentified” or “Undiscovered” and classified as a “Prospective resource.”
- **Known source (D)**. A source that has been identified and considered to have the potential to yield a resource.
- **Endowment source (D)** is the total number of individual sources in a region.
- **Project source (D)** is a source, or the sources attributed to a project.

System. A set of linked individual components

- The Resource Supply System

Part IV The Resource Supply System (RSS) of the “Concept Note: United Nations Framework Classification for Resources and United Nations Resource Management System- Systems approach to enabling the resource as a service paradigm through blockchain technologies. ECE/ENERGY/GE.3/2022/5”, provides a summary of the concept of the RSS, and a list of references.

The concept of an RSS has a much broader and fundamental relevance than its use by blockchains.

A key point is that an aggregate system of resource supply is a complex system with limited predictability which has significant implications for resource management.

A more comprehensive paper is currently in the final stage of preparation and will hopefully provide the basis for further examination of this issue. Earlier drafts have been provided to Satinder (chair of TAG) and Hari.

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