COMMENTS ON THE Draft United Nations Framework Classification For Resources Supplemental Groundwater Specifications (M Amakali, and A Mwetulundila)

The draft UNFC Classification for Resources – Supplementary Groundwater Specifications has been reviewed and the following comments are made.

- 1. In arid areas, where rainfall is limited and surface runoff is only available during the rainy season, there is always underground water that can be used during the dry season. As such, groundwater plays an important role in the development of many countries. Groundwater resources is recognised and used for drinking purposes.
- 2. Groundwater resources lying hundreds of metres below the surface, across countries, are tapped by deeply drilled boreholes. Like surface water sources, groundwater can also be renewed and replenished by rainwater filtering into the ground. The magnitude and sustainable yield of the groundwater sources are therefore determined by the size and extent of the aquifers, the conditions that facilitate the rate of recharge to the aquifers. Although surface water is generally used to supply the major urban areas in wet regions, groundwater is far more widely used to supply water and its importance in the water supply sector cannot be underestimated. Due to the arid and highly variable climate, water resource managers have focused their attention on improving efficiency of water resource use.
- 3. The SDG 6 is about ensuring availability and sustainable management of water and sanitation for all. This is to ensure equitable access, improve water quality by reducing pollution, increase water use efficiency across sectors to ensure water security and protect and restore water related ecosystems groundwater aquifers included. It should also be recognized that surface water and groundwater are not two independent components of the hydrological cycle. Integrated water resource management (IWRM) is the cornerstone of sustainable groundwater management, and it look at management at all levels, national and transboundary.
- 4. The need for the draft UNFC Supplemental Groundwater Specifications document is well motivated and recognises the "Socially Necessary Groundwater Projects". However, there are several challenges to groundwater resources management, in general and also in the context of groundwater projects development, and towards the implementation of the draft UNFC Classification for Resources Supplementary Groundwater Specifications across the globe. For example, the information required under Project categorization, Project classification and Project aggregation might not be readily available in all project regions/aquifer to conclude the Project Classification. Not all aquifers are quantified to give

the answers to the following requirements (from page 13): e.g. **Yield** (Y) < Maximum Capture (Qmax); **Response time** (tc) < Timescale of Human Interest (th). How is transboundary aquifer categorised if there is for example no operational mechanism like, River basin/aquifer commission? Can they be used across countries? The question then remains whether the needs and benefits of these Specifications are clearly defined.

- 5. Water unlike other minerals has social context, also an economic value. Water is developed firstly for human or domestic purposes and secondly for economic activities. Mining projects threatens the quality of groundwater and these Supplemental groundwater Specifications, must be imbedded in the minerals/mining specifications.
- 6. These Supplemental groundwater Specifications, although they can be applied to most commercial groundwater resource projects, and some countries, there will be challenges of implementation in other countries, given the nature of water as a basin human need whose social responsibility is to meet the SDG 6.
- 7. As such, to make the Supplemental Groundwater Specifications inclusive, if they are needed, there should be clarity to the level of applicability: e.g. to commercial (e.g. mining, industrial) projects, social (rural) projects, transboundary projects. The narrative or overview in this context should emphasise the integrated water resource management, and its use across sectors, national and transboundary level.