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Draft UNFC Supplemental Specifications for Groundwater Resources

**Prepared by the Groundwater Resources Working Group of the Expert Group on Resource Management
made available for Public Comments**

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The United Nations Framework Classification for Resources (UNFC) Update 2019¹ declares, without substantiating or providing reasoning, UNFC as applicable to water, yet water (including groundwater) is completely different from all resources that UNFC has been applied to: it is a public good and mainly developed for public service, it is dynamic and flows across administrative and State borders, and may be subject to significant natural variability with the hydrological conditions.

A Need for Supplemental Groundwater Specifications is presented in the Draft as follows: “UNFC is designed to apply to all resource projects to enhance resource management and make better decisions. Its generic specifications are meant to harmonize resource projects and quantity-reporting across diverse resource types.” The present Draft document actually does not make a very clear case of what would be the added value of UNFC’s application to groundwater, nor explain the supposed demand for such Specifications. Some listing of anticipated uses up-front could be helpful.

The Draft Specifications mentions e.g. co-production of saline groundwater during petroleum production and groundwater produced to dewater a mine or excavation. As UNFC is mainly applied to mineral and energy resources, for some such related groundwater co-productions UNFC may have more relevance than other contexts and uses.

Most relevant alternative to a settlement to developing a new groundwater resource might in fact be reduction of water leaks in the water supply system by modernization and repair, or development of other water sources. The vast majority of groundwater resource development is for public water supply for use within relatively short distances, influenced by local circumstances and considerations. Comparatively, private developers (internationally in particular) would be planning groundwater abstractions as commercial activities probably represents a very small share. Therefore, while the UNFC coding system may facilitate comparing mineral projects, the utility of this in the case of groundwater bodies or aquifers internationally, commonly subject to very local decisions, leaves some doubt.

The costs of developing or expanding water supply of settlements is an important consideration for public projects also. However, the reasons and the decisions of developing groundwater resources do not follow the commercial logic of a commodity’s development. So “economic viability” does not seem to have the same sense as with mineral resources, the price of which is determined on international markets and consideration of market prices is commonly a major consideration of UNFC’s E-axis. The price for water (and wastewater) services is commonly set locally, desirably to fully cover the cost of providing the service². It is more a question of water utilities’ and local authorities’ obligations to provide water to population and

¹ Referred to at: https://unece.org/fileadmin/DAM/energy/se/pdfs/UNFC/publ/UNFC_ES61_Update_2019.pdf

² <https://www.wareg.org/articles/european-water-pricing-principles/>

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their means of financing. Provision of drinking water may have a priority over other uses protected by national law. Overall the regulatory aspects related to (ground)water are manifold and there are also obligations from international law that may apply.

It is good that a category of “Socially Necessary Groundwater Projects” is recognized. They might merit further consideration as a lot of groundwater supply projects could be seen as “socially necessary”. The document refers to UNFC evaluators but it is somewhat unclear who they would be in this case and what is the added value of UNFC for assessing groundwater resources and of “UNFC project assessments”.

The management of groundwater resources as part of integrated water resources management has other established standards and frameworks, with important regional and national specifics. A case in point is the European Union where Finland and other member States report on groundwater and its status based on the Water Framework Directive. It is difficult to see any relevance of UNFC application to groundwater from the perspective of resource management or reporting at this stage.

Section “Degree of Confidence in Groundwater Deliverability – The G-Axis Score”: Regarding “Factors that influence an evaluator’s confidence in the deliverability of a groundwater project”, in case of transboundary aquifers, availability of comparable information across borders is important to form a reliable picture of the size, quality and variability of the groundwater resources, and that a groundwater project would not have a significant transboundary impact. This would seem appropriate to mention.

Good that the transboundary aspect is mentioned even if in very general terms. Impacts and interactions maybe traversing administrative borders should be highlighted more. Overall, references to transboundary aspects are missing, and notably there are relevant ones on monitoring and assessment of transboundary water resources developed under the Convention on the Protection and Use of Transboundary Watercourses that would be good to refer to. These include “[Guidelines on Monitoring and Assessment of Transboundary Groundwaters](#)” (2000) and [Updated Strategies for Monitoring and Assessment of Transboundary Rivers, Lakes and Groundwaters](#) (2023).