

Session 6: Status and Outlook System: IT Infrastructure and Systems

Development (Group A Reporter: Sung Kim)

1. Hydro SOS can be operated based on meteorological hydrological data, so it must interact with existing IT infrastructure and systems where these data are collected and operated. However, further study is needed to determine which systems should be interconnected.
2. Open sources technology issue is very important. From the development stage, it may be advantageous to apply the open sources technology policy in order to activate the participation of the hydrological service organizations in each country and develop them into a system for practical application. However, due to the exposure of related technologies, it may deteriorate the willingness of private companies to participate, which may hinder the development of related industries.
3. The HydroSOS requires heavy computer power for basic calculations. Since the construction and operation of such an infrastructure requires a great deal of cost and manpower, it is advantageous to install a central center at one point. It is desirable that offices for collection and application of local data should be installed at the necessary points in connection with the national hydrological service, and the primary output produced by the center should be received and processed according to demand.
4. The HydroSOS must have benefits and ownership to ensure sustainability and data sharing. The system should have the benefit of providing products that are economically beneficial and data that can be used for related tasks. Stakeholders should be involved from the beginning of the development plan to institutionalize their ownership and participation in development and operation. It is also important to secure stable finances. Participation and financial burdens of each hydrological service institution are required, and a business model that receives fees from benefiting private companies can also be considered.
5. To design the HydroSOS, hydro status and outlook related protocols should be derived and standardized in NMHSs at the CHy level. There are several agencies involved in each country, and it is institutionally and financially undesirable to deal with them for data collection. At the WMO level, each country must designate a leading agency and provide data in an integrated manner.