The World Meteorological Organization (WMO) is working to organize the WMO Information system (WIS), which is the single coordinated global infrastructure responsible for the telecommunications and data management functions of all programs of WMO. It will be core component of the GEOSS Information System of Systems for weather, water, climate.

According to agreement in the Fifteenth World Meteorological Congress in 2007, WIS is developed in two parallel parts. The Part A is evolution of the Global Telecommunication System (GTS), which has served for time-critical and operation-critical data since 1960s. The Part B is newly-extended information services through flexible data discovery, access, and retrieval to authorized users, as well as flexible timely delivery services.

The WIS network consists of three kinds of centers: the Global Information System Centre (GISC) relays data for global distribution, and centralizes metadata of entire WIS to provide online catalog (clearinghouse); the Data Collection and Product Centre (DCPC) is a hub of regional data distribution and/or provider of specialized product; and all WMO members operates the National Centre (NC). Technical developments for online catalog involves ISO I9115 standard, OAI-PMH and SRU protocols.

This talk will also present lessons from experiences in Japan Meteorological Agency.

Keywords: Meteorology, WMO, Telecommunication, Clearinghouse, Metadata, GEOSS