International geoinformation managements to date

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Recent trend of geoinformation managements shows to cooperate to cross borders with interdisciplinary fields. The service providing business is promoting new trend of dissemination of information and managements in the world geological organizations and companies. The trend seems to be summarized as follows. We can review the historical development as follows.

1)Centralized and decoupled management of geoinformation was the common style in which organizations or companies in countries managed and operated as isolated systems of data and the database system. Many kinds of software and system of database management were widely distributed. There were not only the difficulty to integrate data in a nation, but also no consideration to cross border interoperability. The total cost of society eventually increased.

2)Interoperable system of geoinformation and the management is widely connected in the internet system in the world. The advanced internet activity made the information disclosure gradually. Many countries extended and advanced their clearing-houses with complementary standards using XML. Due to the commercial standard systems like as ArcGIS in many countries, the distributed interoperability could be realized practically. In turn, the cost of maintenance due to the specialized commercial middleware increased when the system capability incrased.

3) The dissemination of information through WEB-GIS has partly or weakly destructed the isolated information monopoly or so-called information islands by organizations or companies, then people accepted the advantage of interoperability of geoinformation. The necessary international standards are now constructed in recent a few years.

4)Data supply is increasing through the WEB-based system in low or free cost recently. The service type business to treat data contents is coming up now, the future of which will be discussed.