

THE DESIGN AND IMPLEMENTATION OF INTEROPERABILITY FRAMEWORK FOR CROSS-NATIONS FLOOD DISASTER WARNING SYSTEM

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ABSTRACT

Information technologies have been widely applied to natural resources and disaster management for decades. This study aims to develop a highly standardized system and to solve the integration problem of two case study watershed at the border of Canada and the U.S. Even both of the contributory countries used OGC standards at designing their own national system, gathering and analyzing the data is complicated because of the differences in realization of the standards. Because of the lack of the cross-border data, flood warning was not able to use data provided by the other country for the same watershed, which caused a lack of service in early warnings. Planning an integrated system also gave the opportunity to improve quality of services and set up new methods and realizations.

KEYWORDS: Interoperability, OGC Standards, Flood Awareness System, Hydro Information