An open based architecture for disaster management

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There are four phases in traditional disaster management, mitigation, preparedness, response and recovery. Because of its complicated nature, disaster management is a interdisciplinary science, hence, interoperate with various territories is being the essential thing of it, and that's the reason why open standard has been standing a critical point in related field. We proposed an open based architecture for debris flow disaster management, under the security basis, several open standards have been adopted. OGC SWE architecture and IEEE 1451 for sensor based integration, OGF OGSA for grid computing, OGC WMS, WPS for data sharing and data processing, respectively, and, OASIS WS-* for web services security. We also implement the latest OGC WPS for grid processing specification in order to accelerate the computation of precipitation interpolation with UNICORE.