SYMPOSIUM ON INTEGRATED APPLICATIONS (B5)
Integrated Applications End-to-End Solutions (2)

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KARNATAKA-GIS – AN END-TO END GOVERNANCE SOLUTION USING SPACE AND GROUND DATA

Abstract

The state of Karnataka (in India) has defined a Karnataka (State) GIS (K-GIS) - to realise the true power of Earth Observation (EO) and Geographical Information System (GIS) by embedding them "within governance" and taken to "every citizen". Any support data/information systems have to be ready to use and not limited by the need to start getting organized.

Two of the 5 major elements of the K-GIS are key – one, a state-wide GIS Asset as an organised geo-database of EO images, satellite-based positioning data, digital maps, crowd-sourced data and geo-tagged attributes – all of these referenced and seamless as a GIS database that is constantly updated/maintained and served as "authoritative" data. Second, is the K-GIS Decision Support System (DSS) applications – a suite of GIS Applications services for different ministries/departments in government that enables better and informed governance; citizens – that empowers them with geographical content; to private enterprises for commercial GIS application services and for academia for education/research activities.

Detailed state-level discussions and workshops and stakeholder/user meetings have determined the states' needs in EO and GIS. The GI data needs are almost 60+ parameters and most of the GIS applications are to be "linked to cadastres" – very important at state-level. It is envisioned that if State-GIS are organised, they not only achieve key goals of National GIS but also trigger a set of GIS Apps at state-level - serving state-level governance and citizen-needs.

The paper outlines the vision of K-GIS with unique examples of GIS Applications DSS in agriculture, water resources, city planning and administration, publicly funded project monitoring - key/specific examples of EO-images and map based GIS decision support examples of governance.