National Mapping Agencies – A new model for the 21st Century

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ABSTRACT

Many countries cannot afford to run a modern capital intensive national mapping agency (NMA). This paper proposes a new model for NMAs as Centres for Geographic Information, supported where appropriate, by International Mapping Agencies (IMAs). Traditionally, NMAs have been responsible for topographic mapping (based on 19th Century military requirements) and cadastral mapping (concentrating on property boundary beacons). Much of the mapping is out of date or covers only parts of a country. The data, though necessary, is insufficient for the needs of a modern society.

Two proposals are put forward. The first is to develop local data gatherers operating with simple equipment but feeding up-to-date and relevant information into the national spatial data network. These new-model surveyors will collect much more data than that currently gathered by cadastral surveyors. The second is to help the less developed countries in their basic geodetic, topographic and database management work through franchises, in the way that national airlines are run by international carriers.

The paper considers such a model from an organisational perspective and suggests its strengths, weaknesses, opportunities and threats. It identifies the costs and benefits and considers a possible role for the International Federation of Surveyors (FIG) in facilitating the re-engineering of national mapping agencies.

NMAs must change if they are to survive. This paper suggests a way forward.

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