

MAPPS RESPONSE: IMAGERY FOR THE NATION (IFTN) RFI

Formed in 1982, MAPPS is the only national association exclusively comprised of private sector firms in the remote sensing, spatial data and geographic information systems field in the United States. The MAPPS membership of 180+ member firms spans the entire spectrum of the geospatial community, including Member Firms engaged in satellite and airborne remote sensing, surveying, photogrammetry, aerial photography, LIDAR, hydrography, bathymetry, charting, aerial and satellite image processing, GPS, and GIS data collection and conversion services. MAPPS also includes Associate Member Firms, which are companies that provide hardware, software, products and services to the geospatial profession in the United States and other firms from around the world. Independent Consultant Members are sole proprietors engaged in consulting in or to the geospatial profession, or provides a consulting service of interest to the geospatial profession. For more information on the capabilities of MAPPS member firms, please visit "Meet Our Member Firms" page at www.mapps.org.

With the recent increase in remote sensing imagery programs being developed by some firms in the private sector, certain questions arise, thus prompting the issuance of the request for information (RFI) concerning the "Imagery for the Nation" (IFTN) proposal. It is legitimate to ask, why does the government need national geospatial image maps and can this be left entirely to the private sector?

MAPPS has long supported the concept of IFTN. We also strongly support government reliance on the private sector to the maximum extent possible for commercially available services, data, products, and technologies. We do not believe the government should compete with, or duplicate, the private sector.

MAPPS does not endorse any specific business model or data, product or service offering of any of its more than 180+ member firms. We believe the power of a competitive free market should determine the selection of various commercial offerings. We also believe that government should not create, favor, utilize, or subsidize a monopoly or oligopoly when a competitive market exists. A competitive free market provides the greatest value to the economy, and to the taxpayers, by encouraging innovation. This innovation drives the continual improvement of technology and the "value" of products and services delivered.

The FGDC has conducted a study of the capabilities of the private sector to provide the requirements contemplated in IFTN. That study concluded that a competitive and qualified private sector exists with the capacity to accomplish IFTN in accordance to the technical requirements and schedule that has long been discussed. MAPPS believes that such private sector capacity, capability and competitiveness should be utilized in the government's acquisition of IFTN deliverables.

With specific regard to a national ortho-image program, MAPPS believes data quality and fulfillment of user needs and applications, not cost, should drive such a program. Conceivably, a low-cost national ortho-image program can be implemented using LANDSAT; however very few requirements of Federal, state, regional, tribal or local government clients would be met by such an approach. Similarly, there may be other proposals to offer nationwide ortho image maps at a seemingly lower cost, but such programs may not provide the quality data or utility that the IFTN proposal has long envisioned.

There are compelling reasons why a program, like IFTN, as it has been discussed in the community for the past several years, is necessary for all levels of government. Because inefficient, ad hoc, uncoordinated acquisition occurs today, Federal, state, regional, tribal and local governments need a coordinated effort to ensure high-value, high-resolution (1 meter to 0.5 meter) and very high resolution (1 foot and 6 inch) imagery is made available without costly duplication of effort. As a result of the investment the private sector has made in imaging sensor technologies, a coordinated and efficient acquisition across vast areas of the country will realize a favorable return on investment for the taxpayers by achieving an economy of scale that will decrease costs and increase the actual value of the products and services delivered. An IFTN strategy, including its acquisition/contracting strategy, must be developed in close coordination with state and local governments which can take advantage of cost-sharing opportunities.

Additional justifications for IFTN include the following:

"Authoritative Data". The government must substantiate the accuracy and quality of the imagery based on applicable standards. Without governmental standards, inspection, and approval, users of the data are left unsure of its integrity. Geospatial information derived from the imagery will not be consistent with prior or surrounding information. In the past, users have relied upon non-authoritative data, resulting in costly issues of information fusion and even legal liabilities. In the view of MAPPS, standard-setting (with participation by universities and the private sector) and compliance/enforcement, vis-à-vis government standards, is an inherently government function. Without such standards, the likelihood of consistent, uniformed "authoritative" data is diminished. Nevertheless, management of IFTN by a lead Federal agency will enhance the long-term success of the program by providing leadership and ensuring consistent quality of the final ortho image map. The RFI discusses visual quality checks to verify the deliveries for the imagery providers. MAPPS would recommend the lead agency look to third-party private sector organizations to conduct the QA/QC of deliverables to this agency. There are several private firms that provide QA/QC services on geospatial deliveries. Contracting for this commercially-available activity has been successfully implemented by numerous Federal agencies.

Timeliness and Currency. Inadequate and piecemeal funding has led to a lack of data timeliness and currency. Too often, important areas do not have the necessary information in a timely manner. By the time some licensed data is available to the public domain, it can already be out-of-date. The currency of coverage is inadequate in many areas of the country. While many experts believe very high resolution data is needed for municipalities on at least a 2 year cycle, it is common to find areas that are unable to achieve even 4 and 5 year cycles. With urban growth and the need for infrastructure planning and design not supported by imagery and derived geospatial data, important information is unavailable. IFTN must have a mission that ensures timeliness and currency to support government geospatial

activities. With consistent funding of the program to support annual timelines, IFTN should be a dataset that government at all levels and the private sector can count on as a long-term resource. A consistent and long-term approach to this important program will enable the private sector to develop resources and business models to provide the best quality imagery, quickly and efficiently.

Public Domain Imagery. There are situations where government purchases of licensed imagery and other geospatial data (raster and vector) is appropriate, necessary and desirable. As an agent of the public, it is a governmental responsibility to ensure that information, including imagery, paid for with tax dollars is placed into the public domain, and available for distribution with no or limited licensing restrictions. Currently, information sharing between government entities of "public domain imagery" is limited and even restrictive because of policies and practices of these government entities, not because of licensing restrictions. With the hundreds of millions of dollars invested by the government on an annual basis, the lack of imagery data in the public domain has led to duplicative efforts, wasteful spending, and lack of access. This has in turn hampered economic development in a wide array of markets and applications that can directly benefit from more, and more current, orthoimagery. The IFTN orthoimagery should be placed in the public domain, free for use by the public and value-added commercial enterprises, and any agreed upon commercial data licensing agreement should serve the public interest and provide public access to the maximum extent possible while respecting the intellectual property rights of the supplier.

State, Local, and Tribal Participation. The federal government must more effectively engage in partnering, via cost-sharing, with state, local, and tribal concerns. The resolution requirements of this group are higher than federal requirements (~30 cm). The IFTN mechanism must allow for a partnering strategy that allows non-federal entities to "buy-up" to 6" and better resolutions that are critical to their needs.

Since 2006, MAPPS has petitioned the FGDC to address certain issues with regard to its IFTN strategy. These issues are still unresolved, and must not only be answered, but taken into account when deciding on a course of action on an IFTN strategy. They are:

Consistent with the longstanding policy of the Federal Government, first established in Bureau of the Budget Circular 55-4 in 1955, and the President's Commercial Remote Sensing Policy, IFTN should stipulate that data acquisition and conversion services shall be performed by the private sector. Government agencies should not own, operate or acquire aircraft, sensors or processing equipment to accomplish the IFTN data collection and processing activities that are otherwise available through a competitive procedure (SEE: 10 U.S.C. § 2302(2)(a) and 41 U.S.C. § 259(b)) from the private sector;

In order to assure sound management, program efficiency, and other savings to the taxpayer, a single lead agency must be designated;

Inasmuch as one of the advantages of IFTN is to foster consolidation and avoid duplication among activities of various Federal agencies, an effort must be undertaken by agencies individually and collectively through FGDC, to identify current Federal activities that IFTN will replace;

A contracting strategy for IFTN professional services in data acquisition, conversion, and production must be developed, with the strategy addressing the following –

- The contracting strategy must be developed in consultation with the private sector so that the
 needs and schedules of IFTN meet the capacity and production requirements of meeting the
 technical specifications of IFTN;
- In order to assure ample opportunities for firms of all sizes, and to provide for adequate small business participation, a contracting strategy to achieve this goal must be part of IFTN;
- The strategy should follow an indefinite delivery/indefinite quantity process, similar to that successfully implemented in a number of successful Federal agency geospatial contracting programs; and
- All contracts for IFTN must be awarded in accordance with the selection procedures in 40 USC 1101 et. seq. and sub part 36.6 of the Federal Acquisition Regulation by a lead Federal agency experienced and competent to perform and manage such acquisitions.
- Moreover, it should be noted that the deliverables (ortho image maps) contemplated by IFTN fall within the state licensing law definitions of several states, requiring the collection and processing of such data to be performed under the supervision or responsible charge of a professional surveyor licensed in the state being mapped. Compliance with such state laws must be honored, consistent with the President Obama's policy, as reported in the media ("'The president believes that federal resources should not be used to circumvent state laws, and as he continues to appoint senior leadership to fill out the ranks of the federal government, he expects them to review their policies with that in mind,' White House spokesman Nick Shapiro said," Washington Times, February 5, 2009).

MAPPS respectfully urges consideration of these comments in the development of IFTN and stands ready to work and cooperate with all Federal entities on its decision-making and deliberations of the IFTN concept to deliver products and services to the American taxpayer that have maximal value and benefit.