

Proposal for Establishing an IAA Study Group S 5.4

Title of Study:

Space to Promote Peace - Initial Focus on Re-construction of Afghanistan.

Proposer(s):

K. Kasturirangan

Primary IAA Commission Preference:

(From Commission 1 to Commission 6)

Secondary IAA Commission Interests:

(From Commission 1 to Commission 6)

Members of Study Team:**Chairs:**

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Members:

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Short Description of Scope:

Poverty and under-development are manifest in many societies of the world – especially so in war-ravaged and countries without proper governance. Improving the quality of life in these countries – especially in terms of raising the literacy levels with a proper education backbone for the people; provision of health services and maintaining sustainable levels of development poses a challenge. More so because it becomes difficult for aid-personnel and aid authorities to position large number of people in these areas to undertake developmental support – even though anchor-personnel on the ground would be available. There are many countries of this category – especially in the Africa, Asia, Eurasia and the Middle East.

From a survey of major UN and international efforts, the following goals for reconstruction and peace efforts appear to be the focus in such areas:

- Restoring food security through agriculture and increasing family income;
- Expanding education and health services;
- Stabilizing the country through the integrated community involvement efforts;
- Infrastructure repair and development – especially civic amenities, communications infrastructure etc;

- Establishing suitable emergency response systems;
- Anti-mining operations;
- Building the legitimacy and capacity of local governance.

Can Space make a difference in these countries? This is a moot question that countries having the capabilities of space have to answer and make a combined effort to pitch in support of promoting space and bring in an improvement in the quality of life of these people.

Space offers a unique tool and solution that can aid in some of the international efforts of reconstruction and promotion of peace – by providing much essential connectivity and communications support; information on resources and the land from the Earth Observation (EO) satellite images and immense opportunities for education and training of experts/managers on space applications. Specific developmental support through establishment Decision Support Systems (DSS) for natural resources management, drought combating, environmental monitoring, infrastructure development, satellite communications applications of telemedicine, tele-education and providing connectivity within and outside the country can be key elements of a space-based initiative in support of reconstruction efforts and promotion of peace in war-ravaged and under-developed nations. Initial efforts can be towards providing solutions that fit into the already existing development and international programmes – but in the long run it is enabling the people of such nations themselves to utilize technology and benefit from them must be the goal.

Space technology and applications cannot lead to development directly on a stand-alone basis but will need to be appropriately integrated with inputs from ground systems. Thus, the institutional framework for such applications calls for partnership between space agencies and other international and aid agencies – like UNDP, UNEP, USAID, UNESCO, UNCHR and so on.

The case of Afghanistan can be the test-bed for such combined efforts and initiatives to address space applications for peace and raising the quality of life of the Afghan people. The most devastated and ravaged country of recent times is Afghanistan – which presents one of the most difficult humanitarian and development challenges the world community has ever faced. Years of civil war, compounded by the worst drought in memory, have devastated the country. Building a new state in Afghanistan has been a major agenda of the United Nations and many nations of the world and it is recognized that in this effort, the role is not of trusteeship but the provision of support, resources, technical assistance, advice, and capacity-building to an Afghan led administration and its communities. During the last several months, the world community has played a leading role in meeting the Afghans' immediate needs for food, water, shelter and medicine.

It is proposed to make a study report that will outline how space-based efforts could support reconstruction activities in Afghanistan and identify specific initiatives that can be taken up jointly by the international community – especially the aid agencies and the space agencies. Speed of actions will be a major imperative and

thus it would be best to take up next actions through a specific project task team of experts with targeted milestones.

Methodology:

ISRO will make a draft report and submit it for technical review by the IAA Study team. The capabilities of space across the world – especially the possible participating agencies in such an international venture will be documented with emphasis on applications of the kind that are required to promote peace.

Taking Afghanistan as a test-bed, a set of initiatives would be identified – outlining how space efforts can help reconstruction of Afghanistan. There are 3 prime areas where space support can be integrated into the reconstruction efforts in Afghanistan:

- Space can be seen as a provider of connectivity and networking areas – thus addressing applications that require using connectivity infrastructure. Satellite communications can be visualized to provide broadcasting networks and interactive VSAT networks for the purpose of improving communications outreach for specialised applications like tele-medicine, tele-education, and developmental communications.

- Space can also be seen to provide EO images of various resolutions – thus supporting the much needed, accurate and up-to-date information support on the land, water, infrastructure and natural resources so that local re-construction agencies and workers have access to the latest information of the areas. EO images could establish a good spatial data infrastructure for the country – that can be used not only for reconstruction activities but also can be the base for further development and national programmes. Finally, the same system can be used for monitoring and assessing the changes over time.

- Education and training opportunities for Afghans in the area of space technology and applications – an effort towards enabling the country to indigenously utilize space technology in support of its own development activities. This will be relevant in the context of human resources development for the Afghan people so that they benefit from the utilisation of space systems.

The report will identify the peace and development requirements of war-ravaged nations and under-developed nations – basically as a systems analysis of the needs categorised by regions and communities and keeping in mind the traditions and culture of societies.

The review is proposed to be carried out by an IAA international team. IAA could help in organising the Study team – which will mainly work through emails, telecons and finalise its Review report.

Time Line:

ISRO Report for Review – mid July, 2002
IAA Study proposal acceptance - mid July, 2002
Formation of IAA Study team - mid July, 2002
First Telecon for Study team review activities – end July, 2002
Inputs from different members – mid August, 2002
1st draft of IAA review report – end August, 2002
Comment/suggestions and improvements – end September, 2002
Final IAA Review Report – end September 2002

Final Product:

An IAA Review Report, which will outline space capabilities to promote peace and will specifically address initiatives for Afghanistan.

Target Community:

This report can be an input to international community to implement such initiatives – through the offices of international and aid agencies – like the UN system, international funding agencies, regional bodies etc.

Support Needed:

Secretarial support at ISRO
Technical and management guidance through the various mechanisms of IAA.

Potential Co-Sponsors:

ISRO, IAA, NASA, CNES and other space agencies.

To be returned to IAA Secretariat Paris fax: 33 1 47 23 82 16 email: sgeneral@iaa.net.org

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