

**PEER REVIEW REPORT:
“SPACE FOR PEACE, WITH AN INITIAL FOCUS ON AFGHANISTAN”**

Commission V received four peer reviews of the report. The peer review was conducted between April and June 2004. All were strongly positive in terms of the goals and content of the report. Among the general comments were:

Overall I evaluate the report as excellent

It is obvious that much work and thought has gone into the study.

I very much enjoyed reading the study, which is an excellent piece of work by a highly motivated and competent team. I very much admire the product!

It is extensive and well thought-out, and will make a significant contribution of IAA to peace and development of the world.

*My comments may sound pretty negative. I hope, though, that a very positive theme runs through them: that space-based technology can do a *lot* for Afghanistan and other developing countries. In fact, I think the report writers sell short the possibilities. I wasn't supposed to comment on content, but I would think that the information (i.e. on land use, weather, etc/communication aspects) are truly basic to everything about reconstruction.*

Following are selected reviewers' comments in response to the specific questions they were asked to address: (One reviewer did not provide detailed responses to specific questions, but evaluated the report positively on all of them.)

- 1. Does the Study Group Report meet the original IAA Study Group criteria:**
 - a. Be international**
 - b. Be interdisciplinary in scope**
 - c. Possess a clear target user**
 - d. Lead progress, and**
 - e. Be completed within three years.**

Reviewer A

1a: Yes.

1b: Yes with regard to different space applications. Legal aspects (data/telecom/export regulations; international/national Afghan law) are not very thoroughly reflected.

1c: Yes, UNESCO. But at some points it is not clear whether the study is addressed to UNESCO or/and to other funding sources.

1d: Certainly yes with regard to the topic. But contrary to other Cosmic Studies, this one does not really offer any new pathbreaking ideas for space activities/utilization. It could have been done also by a consultant. Sometimes it looks like a manual or an "Introduction to Satellite Applications". It contains too much basic well-known information compared with other IAA studies. This is the only point where the problem arises that this is not a voluntary activity by IAA members to present something completely new (space exploration, space traffic), but a commissioned study.

Reviewer B

According to the IAA study group criteria, the study group report is excellent :

- a. International criteria is met with the composition of study group and all organisations involved on the study and actions.
- b. The study is totally interdisciplinary (health, education, agriculture, forest, wather, infrastructure, environment....)
- c. The clear target user is Afghanistan
- d. By promoting the use of space technology for the development and reconstruction in Afghanistan , the study lead progress
- e. Study will be complete within three years.

Reviewer C

1a. International representation in the Study Group is heavily weighted toward European and North American countries. The prominent role of the IAA co-chair from India is a welcome feature because it provides a South-Central Asia presence. The same European and North America bias is repeated in the distribution of the invitees to the Bremen Workshop though, importantly, three more Afghans were brought into the discussions at that point. It is not apparent that there was any representation from other post-conflict situations where space-based technology has been adopted to provide for lateral input (perhaps no such country has adopted space-based technology for reconstruction?). The content reflects the first-world, cosmopolitan composition of the Study Group. It is not much informed by lateral examples from post-conflict situations, from very poor countries, or by grassroots concerns.

- b. The Study combines attention to interdisciplinary concerns in its holistic attention to matters such as economic development, health and education. Information and communication are at the core of the proposed projects, and as such these topics are intrinsically interdisciplinary.
- c. The breadth of this Study involves multiple possibilities for projects that have multiple possible users including the ATA, NGOs, and various UN bodies.
- d. The ideas described in the Study are creative and can contribute substantially to social and scientific progress in Afghanistan and elsewhere. They are extremely broad and ambitious.
- e. Completion in three years is feasible, depending on how one defines “completion.” If the main objective is to obtain funding for each of the four proposed demonstration projects and to implement them as pilots, then three years is feasible (if funding is quickly obtained). In order to conduct a more comprehensive impact study of the projects in terms of their benefits to Afghan society and reconstruction, that matter is further down the line. At this point, it seems that the ATA needs prompt assistance with reconstruction. Thus and immediate effects on Afghan stability and welfare are not possible and “short-term” goals are in fact “medium-term” goals.

2. Is the objective clearly described in the report? Are all objectives met?

Reviewer A

Yes, but the title is misleading, The study does not deal - as it might be expected- with security issues. It is a study on "Space for achieving development, which might have an effect on internal peace of a war-ravaged society". The objective, however, is certainly met.

Reviewer B

The objective is clearly described in the report, in chapter 1 and preface : “ how space based effort can be channelised to support peace effort and contribute to development” , with the initial focus of the reconstruction of Afghanistan . The next chapter and mainly the approach for implementation of 4 space initiatives provides answers to initial objective.

Reviewer C

The report lays out an array of objectives with the grandest being world peace and the most ground-level being training Afghan people in how to use GIS. Many mid-range objectives fall in between. If one cuts to the most concrete and core objectives of obtaining funding for and implementing the four demonstration projects, then the Study does succeed in laying out fairly clear steps toward achieving those objectives.

3. Is the report organized in a clear, concise manner? Is the report readable and understandable to non-experts?

Reviewer A

It would be more clear if the structure would have reflected the four issue areas/projects (as four visible chapters or subchapters) more closely. The report itself is very readable.

Reviewer B

The report is well and clearly organised, from the objectives to the solutions, but it is not concise enough and it presents some redundancy, mainly on the introduction part of each chapter. It is clearly readable and understandable to non-experts; technical aspects, space tools and space systems are presented and explained in a very simple and comprehensible way to the general public.

Reviewer C

The report appears to be still a work-in-progress. It would benefit from a stronger and clearer set of objectives that are presented in a working model rather than as laundry lists. Some decisions should be made as to how to trim and streamline the entire report to remove repetition. The report also needs final line-by-line editing to clarify the language. With trimming and editing, the report will be understandable and readable.

4. Is the report fair? Is its tone impartial and non-judgmental?

Reviewer A

Yes, but the tone is sometimes a little bit emotional and missionary.

Reviewer B

Concerning the overview of Afghanistan and need assessment for reconstruction the tone is impartial and non-judgmental, but the solutions which are studied are all space-oriented and they are not compared with others (ground capacities).

Reviewer C

The obvious intent to promote space-based technology over other kinds of reconstruction initiatives could be considered a “bias” I suppose. The lack of significant Afghan input could also be seen as a bias and perhaps unfair as well. The tone is impartial and non-judgmental.

5. Does the report reflect international and interdisciplinary considerations?

Reviewer A

Yes, but legal considerations are not fully developed.

Reviewer B

The report reflects fully international consideration (UN system, NGOs and other agencies, support and aid from different countries, space resources and tools.). Needs assessment and reconstruction goals cover a large interdisciplinary area (environment, agriculture and forest, water, energy supply, infrastructure, civil security, health, education, socio-economic aspect, employment) as described on chapter 3.

Reviewer C

The missing international aspect is from experts on post-conflict reconstruction, and especially experts who can speak to the role of space-based technology in reconstruction. Only three of the nine examples that are provided to demonstrate the usefulness of space-based technology (Appendix 3 Case Studies) are from developing countries; of these, two are from India and one from El Salvador. It would be far more convincing to have cases from postconflict situations (again, perhaps, Afghanistan is to be the pioneer in this area—if that is the case, then perhaps it is best to say so up front).

6. Does it contain input and analysis from a comprehensive set of sources?

Reviewer A

Yes, but a reflection on the UNISPACE III recommendations would have added to the acceptability.

Reviewer B

The study inputs (data and analyses) are from a set of sources which is clearly identified on a list of references. These sources are very large and diversified, from official data (UN documents or AIMS) to specific studies performed by personalities, organisations or agencies, and universities.

Reviewer C

Most of the sources are international donor reports about Afghanistan or scientific studies about space-based technology. The former provide basic information about the usual set of “needs” while the latter verifies the scientific credentials of the Study Group. The gap between the two bodies of literature includes literature on post-conflict reconstruction elsewhere and particularities of the Afghan social and political context. Attention to these

two missing bodies of knowledge would have allowed the authors to link their objectives much more concretely to the realities of Afghanistan. For an example of a more contextualized approach to reconstruction in Afghanistan, see Mohammed Haneef Atmar and Jonathan Goodhand, “Afghanistan: The Challenge of ‘Winning the Peace’” in Monique Mekenkamp, Paul van Tongeren and Hans van de Veen, eds., Searching for Peace in Central and South Asia (Lynne Reiner Publishers, 2002, pp 109-140).

The report is more non-disciplinary than interdisciplinary. Particularly missing are distinct voices from economics, political science and sociology/cultural anthropology. The study’s core mission of promoting the use of space-based technology for information and communication could be more linked to projected economic benefits for the nation and for individuals, to political benefits (the mention of e-governance, for example, is quite peripheral) and to social welfare and cultural appreciation.

7. Are the data and analyses handled competently? Are references given where appropriate?

Reviewer B

It is difficult to evaluate if references given are appropriate or not without being aware of the content of documents.

Reviewer C

Data analysis per se is not central to this study.

8. Are the findings, conclusions and recommendations adequately supported by evidence, analysis and rationale?

Reviewer B

Three main conclusions/recommendations are developed on chapter 8 (parag. 140, 141, 142):

First: *“space-based systems can contribute to the promotion of peace and to reconstruction of war-ravaged countries”*. This conclusion is based on the possibility to match space capacities to the reconstruction needs (confer tables 4.1 and 4.2)

Second: *“to use of space technologies is through implementation of ... projects that have been proven experimentally to be efficient”*. The report produces a series of eleven possible space-based initiatives, the most urgent needs, which support this conclusion.

Third: *“The implementation of projects should rely on the local government and organizations and should build on the existing local support in order to avoid doubling”*. To answer to this recommendation an implementation philosophy has been proposed (fig 7.1).

Reviewer C

The recommendation to move forward with four demonstration projects seems premature in that full participation by the Afghan counterparts has not yet been achieved (see, for example, several references in the report to places where Afghan review and input are still needed). It is, furthermore, not clear that the projects have been selected according to the set of criteria presented on page 9. As is the case with so many proposals, Afghanistan's major needs (as presented many times in the report) are in fact not being addressed by the four demonstration projects. Instead, the projects contribute in other directions, all valuable in their own right, but clearly more defined by the capabilities and interests of the international space community than, say, farmers facing water shortage, malnourished women refugees, or children at risk of encountering land mines.

- 9. Does the executive summary concisely and accurately describe the key findings and recommendations? Is it consistent with other sections of the report?**

Reviewer B

The executive summary is concise and gives the main issues (the four pilots projects) consistent with the other sections of the report, but recommendations are missing.

Reviewer C

The Executive Summary would be much more consistent with the rest of the report if the authors undertake bold trimming of the latter and focus more directly on their four proposed projects and why and how they are important to Afghanistan's future.

- 10. Are any sensitive policy issues treated with proper care? For example, if a recommendation requires involvement or approval from a particular organization or agency, are any challenges appropriately addressed?**

Reviewer A

Have all possible funding sources named in the report been contacted in advance?

Reviewer B

The implementation of the four initiatives mentioned requires the participation of Afghan authorities or agencies, others UN or space agencies and in addition the aid from other countries; the list of these organizations is complete but the implementation plan is too undefined, and a plan of actions to take is missing.

11. Are appendices relevant to the report content?

Reviewer B

Appendices present good complement and additional information.

Reviewer C

Appendix 2 seems excessively long and “generic” for this proposal. Nearly 30 pages in length, very little applies specifically to Afghanistan. I would suggest dropping it completely as its massive presence seems to underline the emphasis of the study on promoting space-based technology rather than, primarily, helping the people of Afghanistan. (The report’s tilt toward “using Afghanistan” to demonstrate the value of space-based technology is evident throughout the report, but see especially the first line on page 5. Isn’t it more appropriate to see Afghanistan “using” space-based technology...?)

Appendix 3 would be much more convincing if presented as a table of case studies with brief information points on the issue, the technological intervention, and the social/economic/political impact. More developing countries cases are needed as are examples from post-conflict situations.

12. Is the expected role of IAA clearly identified?

Reviewer A

With regard to the role of the IAA, it should be made more clear that this is a commissioned study.

Reviewer B

The expected role of IAA is not clearly enough identified

Reviewer C

I believe the role of the IAA is mainly catalytic in terms of providing ideas and perhaps helping secure funding for the pilots. If that is not the case, then perhaps some greater clarification is needed.

13. What other significant improvements, if any, might be made in the report?

Reviewer C

The major needs are streamlining and getting to the four pilots much more directly and quickly. I would suggest more forthrightness about value of the four pilot projects to particular issues rather than (vainly) attempting to connect them to world peace and peace in Afghanistan. They are in fact more convincing as valuable if presented as targeted at particular, focused niches of need and not as grassroots initiative. As described, both the tele-medicine and tele-education projects are quite elitist, involving links between specialty hospitals in the first instance, and specialized training in the latter. The project concerning disaster preparedness is the most socially equitable of the four. In other words, by being more accurate and realistic about the value of the four projects, I believe the case for their support will actually be more compelling and interesting to potential donors.