The Situation and Progress of Internet for ISPRS

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ABSTRACT

As Chairperson of WG VI/4, the author is in charge of Internet for ISPRS. This paper will present the current situation and the possible progress of the Internet for ISPRS for the next four years.

1 INTRODUCTION

The Internet and the World Wide Web (WWW) provide a superhighway for information access and transfer. As such, they offer an unprecedented source of information. Their potential for research purposes (the reason for the original creation of the Internet) and for education is immense. The use of powerful Internet search engines offers enormous potential for information retrieval and sharing.

Nonetheless, because of the sheer size of information available over the Internet, logical organization and clearly defined pointers to information sources is needed to greatly reduce search time.

ISPRS webpages should be established to respond to two important needs of today's Internet users: the webpages should allow for the easy and convenient use of the Internet as a global communication tool; and, the webpages should serve as a globally networked database to allow for the location, extraction and sharing of data for research and educational purposes.

Given these important needs, it is imperative that ISPRS-related webpages be created with a degree of overall coordination and network design efficiency, as well as creation of guidelines or parameters to improve their communication and graphical design. It is in ISPRS's own interest - and that of the hundreds of thousands of persons interested in the fields of photogrammetry and remote sensing - to establish a coordinated and versatile system for ISPRS webpages.

While ISPRS webpages will continue to be important for the communication, coordination and operations structure of ISPRS activities, it is also crucial that ISPRS-related webpages contribute to the goal of orderly and efficient location of relevant material in the global haystack of Internet information. This will not be achieved overnight, but can begin with the systematic development and compilation of useful webpages.

We acknowledge the fact that a number of ISPRS Technical Commissions and Working Groups have already actively spearheaded the use of the Internet in the 1990s. We applaud and encourage this effort, since it is a logical expectation that the ISPRS as a leading international professional society should be able to provide the best, most efficient and information-rich webpages in its related fields.

This is the challenge. Creating a webpage is now not much more difficult than operating a wordprocessor; what is important is the grooming of the webpage so that it efficiently and clearly provides access to needed information, and that it presents an interesting and absorbing overall design. Maintaining a webpage can be compared to managing a plant nursery: it is a place that one visits in order to acquire new plants. Establishing a healthy and friendly competition between webpage creators could help to maintain overall webpage usefulness.

The combined assemblage of the ISPRS Journal, the ISPRS Highlights, ISPRS webpages and Commission or Working Group Newsletters should form an integrated whole. This whole should also preferably include: assemblages of webpage links to related Journals; links to webpages of National Members; links to webpages of education and research

institutions, national government institutions, private companies and, last but not least, personal homepages in related fields.

With this in mind we propose that the Council provide periodically a Best Webpage Award for ISPRS Webpages.

Given this background, we propose the following guidelines to the Council:

2 GUIDELINES FOR PREPARATION AND MAINTENANCE OF ISPRS WEBPAGES

2.1 Introduction

The World Wide Web (WWW) will be a major, and probably vital, data sharing system for humankind in the 21st Century.

Because of its position as an international nexus for photogrammetry, remote sensing and GIS technology, it is very important that the ISPRS maintain a very visible and active position on the WWW through the creation of colorful, exciting and informative webpages. However, the primary function of these webpages will be to convey, share and distribute information. Therefore, the provision of information should not be secondary to graphical design. The provision of "text-only" optional or duplicate pages should be provided whenever possible, considering the fact that many users may not have access to advanced Internet technology. Lengthy download times should be avoided for crucial information.

Conveyance of important information is paramount, yet overall success relies on aspects that need to be stressed repeatedly: that these webpages be informative, creative, and entertaining, constituting an intelligent, practical and resourceful promotion of the ISPRS and its activities.

2.2 General

- A. All ISPRS Member Organizations, Commissions, Working Groups and Technical Commissions should in the near future use Internet webpage media to promote their work related to their area of expertise.
- B. ISPRS mandated restrictions placed on the development of webpages will be few. While daunting or intimidating technical complexity is not encouraged, nonetheless the ISPRS is promoting the creation of advanced webpages, with the emphasis on both the clarity of the message conveyed and the innovative creativity that will go into their creation.
- C. ISPRS webpages are not only for ISPRS Members, but for the larger world audience that is interested in the ever-growing fields of photogrammetry, remote sensing, GIS and related technologies and issues. Therefore, the ISPRS certainly encourages the creation of creative and entertaining webpages that will appeal to a larger audience.
- D. A downloadable webpage that can be used as a basic template upon which a webpage can be built will be provided at the ISPRS Website: http://www.isprs.org/samples.html

2.3 Web Page Design/Content

- A. Clear and Understandable. All ISPRS webpages are to be clearly and logically organized, so that their purpose and information can be easily and quickly understood. The information should be concise, accurate and laid out simply. Testing of the webpage by requesting all ISPRS officers to read and comment on it before posting on the WWW is recommended.
- B. Graphic and non-graphical. All ISPRS webpages shall be provided in both a graphics-included format and in a non-graphical format. This should be done to accommodate those users who may not be able to easily view or download advanced or graphics-heavy webpages.
- C. Logo. While ISPRS seeks to minimize webpage design restrictions, all ISPRS webpages should clearly and prominently display the official ISPRS logo on every webpage (downloadable from http://www.isprs.org/samples/logos.html).
- D. ISPRS Affiliation. Besides the ISPRS logo, a reference to the ISPRS and the function of the Working Group or

Technical Commission should be stated clearly at the front of the web page

- E. Images. Since image acquisition, management and processing is the main line of ISPRS, an array of images that demonstrate ISPRS activities should be included where necessary (although for webpages with numerous images, or very advanced webpage options, non-graphical options shall be provided see 2.3B above). However, images with lengthy potential downloading times (especially to users in countries with weaker Internet or telecommunications links) could perhaps be provided in an FTP format.
- F. Hypertext Links. All ISPRS webpages must include hypertext links to the ISPRS Homepage and to other ISPRS Technical Commissions. Links to associated sister- organizations could be provided as well on the webpage.
- G. Design Ideas. ISPRS webpages should include the following items:
 - 1. All webpages should include the name and address of the Web Master, as well as the date of the last update to the webpage:
 - 2. Highlighting of new items on the webpage clearly and prominently (the placing of a "What's New" item at the start of each webpage is desirable;
 - 3. Links to pages related to interest areas of the ISPRS Member Organizations, Technical Commission, and Working Group;
 - 4. Coordination between all Working Groups in a particular Commission with regard to similarities in webpage design or form is encouraged.
- H. ISPRS Member Organizations Webpages should contain the following: names, pictures/photographs, phone numbers, fax numbers, postal and email addresses of Member Organizations, Commission and Working Group officers; important activities of the Member; necessary hyperlinks including to ISPRS homepage and to relevant Working Group homepages; and an email subscription system (list server).
- I. Technical Commission Webpages should contain at least the following: the name and Terms Of Reference (TOR) of the Technical Commission; names, pictures/photographs, phone numbers, fax numbers, and email addresses of all Commission and Working Group officers; Symposiums and Commission/WG events with on-line registration forms; and hyperlinks to the ISPRS, Working Group homepages and other important websites.
- J. Working Group Webpages should contain at least the following: the name and Terms Of Reference (TOR) of the Working Group; names, pictures/photographs, phone numbers, fax numbers, and emails of the Working Group chair, co-chair and members; dates and locations of Working Group meetings and workshops with on-line registration forms; and necessary hyperlinks.

2.4 Technical Issues

- A. Pathnames. The use of relative or absolute pathnames to link documents or to connect files should be considered for its practicality and user friendliness.
- B. Browser. Webpages should be designed and updated for the most popular browsers in use at the time. The use of a good and fast browser facilitates a quicker acquisition of images.
- C. Links. Links should be checked periodically and updated. Each page should have a link at its end to the top of the homepage.
- D. Bulk Data. Documents made available in postscript format should be compressed first and an indication of their approximate size and how the data was compressed should be given. A decoder should be made available when needed.
- E. Java. Java script and applets can be used, but critical elements of webpages should not depend on Java.

2.5 Other Issues.

- A. Public Domain Software. It is reasonable to mention the use of public domain software in constructing webpages.
- B. Cultural Sensitivity. As ISPRS is an international organization, with webpage readers from all over the world,

one should avoid comments that could be misconstrued by readers from different cultures.

- C. Liability. The following phrases (or variants of them) should be considered for inclusion in webpages:
 - 1. "Inclusion in this page is not to be taken as an advertisement or endorsement nor exclusion as a criticism" or
 - 2. "The authors will not be held responsible for any actions arising from the use of the included data, although the utmost has been done to ensure its accuracy. Please contact the authors at the address below."
- D. Ownership. Data or articles made available through an ISPRS webpage should be available for copying or downloading. Sensitive data or copyrighted articles can be requested by email or from a reference URL.
- E. Language. All ISPRS webpages shall be in English. Creation of webpages in a language other than English is encouraged as long as an English version of the webpage is available.
- F. ISPRS Notification. All groups who are preparing an ISPRS-related webpage shall inform the ISPRS Web Master, so that all webpages that feature ISPRS can be properly referenced and promoted.
- G. Obsolescence and Data Purging All webpages shall be deleted from all search registers within 6 months of completion of the event to which they refer, or closure of an ISPRS Working Group. Similarly, Commission Symposia and ISPRS Congress webpages shall be purged within 6 months of their conclusion.
- H. System Administration and Security. Provisions for reduction of network load, reliability and security should be made. Prevent automatic logging onto any other hosts on the same network. Provide facilities for logging and security options on software made available on the server. Back up the data for possible damage or loss.
- I. Task Force. ISPRS will make available a Task Force of experts that has extensive WWW experience for assistance in certain elements of WWW page creation and maintenance.

3. ANNOUNCEMENT TO ALL ISPRS ORDINARY MEMBERS

Please read this announcement carefully, because it asks you to respond by the end of July 2000.

The Chairs of Working Group 4 of ISPRS Technical Commission VI – "Internet Resources and Spatial Data Sharing" – respectfully ask that each ISPRS Ordinary Member create their own personal homepage for the World Wide Web (WWW) by the end of July 2000.

WG VI/4 is actively promoting the creation of homepages for all ISPRS Ordinary Members, and facilitating their coordinated linkages through the ISPRS central web page (http://www.isprs.org). This activity, which aims to use the tremendous communication power of the Internet to bring all ISPRS Members together for communication and cooperation from across the globe, was approved by ISPRS Council as part of formulation of ISPRS WWW Guidelines, created by WG VI/4.

For quick information on how to set-up and create your homepage in a manner that is suitable for linkage to the ISPRS central WWW page, please click the link entitled "Sample Pages" (http://www.isprs.org/samples.html) on the ISPRS main WWW homepage (http://www.isprs.org). This reference, kindly created by Dr. André Streilein for ISPRS, gives examples of sample ISPRS WebPages, including sample html language, as well as providing additional links to html tutorials. Also, importantly, official ISPRS logos, icons and background images can be downloaded from this location for inclusion in your ISPRS homepages (http://www.isprs.org/samples/logos.html).

Once your web pages are completed, please inform the Chairs of WG VI/4 by email of the homepage http address so that a hyperlink for your homepage can be placed onto the ISPRS central web page

Please email your http locations to the WG VI/4 Chairs, Tuan-chih Chen and John Felkner, at the following email addresses:

1.) Tuan-chih Chen: profchen@ms13.hinet.net
2.) John Felkner: gsd97jif@gsd.harvard.edu

WG VI/4 thanks you very much for supporting ISPRS through this activity. The creation of Member homepages and their linkages to the ISPRS homepage will link the international ISPRS community to a degree never before possible.

4. ANNOUNCEMENT OF REQUST FOR IMPORTANT WQLD WIDE WEB LINKS ΘR THE ISPRS HOMEPAGE

TO: ALL ISPRS ORDINARY MEMBERS, REGIONAL MEMBERS, & SUSTAINING MEMERS

WG VI/4 GREATLY APPRECIATE YOUR RESPONSES TO THIS ANNOUNCEMENT BY THE END OF JULY 2000

Working Group 4 of Technical Commission VI is asking all Members of the ISPRS to submit important and relevant World Wide Web links that will be included in the ISPRS Homepage (http://www.isprs.org).

All Members are asked to submit links by the end of July 2000 that they consider to be important and relevant for the larger goals and for the community of the ISPRS. These links should fall under any or all of the following categories:

- 1.) Important Web sites that provide on-line <u>data</u> that is relevant to the goals, purposes and interests of the ISPRS and the ISPRS community;
- 2.) important Web sites that offer <u>educational courses</u> in topics that are aligned with the larger goals, purposes and interests of the ISPRS and the ISPRS community;
- 3.) important Web sites that offer <u>freeware</u> that could be useful for researchers, students, educators and professionals that are working in areas that are aligned with the larger goals, purposes and interests of the ISPRS;
- 4.) important Web sites that offer <u>feeware</u> that is of use to the larger ISPRS community, to allow for the pursuit of research or applications in areas that fall under the overall goals of the ISPRS.

The Chairs of Working Group VI/4 need the help of all ISPRS Members to assemble these important WWW links. These links will be placed on the ISPRS Homepage and will be continuously revised in order to provide a truly information-rich central ISPRS Web nexus for relevant and useful Internet links.

It is our goal and hope that all in the ISPRS community will make use of these links for research, information exchange and global communication for those in the ISPRS community.

ALL MEMBERS are asked to submit any important links that fall under the categories described above to the Chairs of WG VI/4 by email. Please email your links by the end of July 2000. The links will then be categorized and placed on the ISPRS homepage.

Please email your suggested Web site locations to:

Professor Tuan-chih Chen at profehen@ms13.hinet.net
or, Dr. John Felkner at gsd97jjf@gsd.harvard.edu

Thank you very much for your support and your assistance in furthering this important ISPRS activity.

5. DRAFT OF RESOLUTION VI.4 INTERNET OPPORTUNITIES

5.1 Noting

- that the Internet and the World Wide Web (WWW) provide a superhighway for information access and transfer;
- that the potential of Internet for research purposes and for education is immense;
- that the use of powerful Internet search engines offers enormous potential for information retrieval and sharing;

5.2 Recognizing

- that we need a recommendation on the most appropriate formats for Internet and Web Pages;
- that the combined assemblage of the ISPRS Journal, the ISPRS Highlights, Member Reports, ISPRS webpages, commission or Working Group Newsletters, and links to webpages of education and research institutions, national government institutions, private companies should form an integrated whole;

5.3 Recommends

the existing working group of Internet for ISPRS should continue their efforts to investigate internet resources in photogrammetry, remote sensing, and spatial information systems.

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REFERENCES

André Streilein, Annual Report of WWW for ISPRS, ISPRS Highlights, Vol.4, No.1., March 1999.