PROCEEDINGS OF THE ISPRS STUDENT CONSORTIUM: PARTICIPATION OF THE YOUTH FOR A SUSTAINABLE SOCIETY

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ABSTRACT:

Every day is a new revolution in today's world with the developments in the fields of science and technology. With easy access to knowledge and high technology possibilities, now the knowledge is in everywhere at anytime. From that point of view, even the students at the far distant part of the world have a chance to improve their skills. On the other hand, new possibilities increased the demands of the highly qualified professional circular and standards. To contrast this, during the recent years the number of students who attended to the institutes and departments related to the fields of ISPRS has significantly decreased in many countries. More, in some countries the lack of highly qualified young graduates has become a major problem. Another fact is that many young professionals and students are not connected to the scientific and technical structures; where ISPRS itself is unknown among young graduates. Regarding the issues mentioned above, ISPRS Council took a bold step during the XX.th ISPRS Congress, Istanbul in 2004 and established a student-young professional unit under the Working Group VI/5 to represent the next generation and fill the gaps in the Professional Body. Since its establishment, Student Consortium mission to secure the presence of the continuum of the knowledge and traditions of ISPRS, creating an interest to join to ISPRS from the early days of an undergraduate's life up to a senior in the lifecycle of a professional. Today, ISPRS Student Consortium provides a platform for students and young researchers to meet each other, exchange information, organize student-specific ISPRS events including summer schools, workshops and a special day dedicated to the Youth of the profession at the 4-yearly held Congresses. This paper describes the needs, importance of representing youth in such organizations, participation and the integration of the young researchers and professionals in the Scientific Society from point of view of young graduates, with example works of ISPRS Student Consortium (SC). The achievements and problems faced during the first 4 years of the SC are discussed with possible solutions and referring a sustainable future.

1. INTRODUCTION

Every day is a new revolution in today's world with the developments in the fields of science and technology. With the easy access to knowledge and high technology possibilities, now the knowledge is in everywhere at anytime. From that point of view, the next generation of the profession has great opportunities. Considering that education is the key of the future world and the knowledge is the power, young scientists and students have never ever been so lucky with the possibilities achieved today. Technology based, up to date education of institutes, e-learning projects and the exchange programs such as International Association of Exchange of Students for Technical Experience (IAESTE) and European Union Higher Education Exchange Program (Erasmus) are the means to improve their skills. More, with these different offers, even the students at the far distant part of the world who are with lack of opportunities and don't have a chance of taking equal education as their colleges in developed countries, are helped and encouraged to use the benefits of the technology with e-learning. On the other hand, new possibilities increased the demands of the highly qualified professional circular and standards.

The need of the professional standards and vision is coming out with more fresh ideas and synchronization of the knowledge all over the world. To help the progress of uniting the profession's future, many nationwide student communities and university geomatics students' clubs have been running for years, annually

organizing meetings not only to get to know each other but also to discuss the future of their careers. In addition to this, many international organizations are now willing to provide special opportunities to promote and to meet the students. International scientific meetings and summer schools, workshops on specific technical topics are nowadays in trend, where the young professionals can attend to improve their skills and knowledge according to their study of special interests. (Kivilcim, Tatli, Gunes, 2007)

With all these fascinating possibilities, youth is the key to the tomorrow's future of the world. Different working commissions are in act to provide tomorrow's professional standards and free movement of the professionals. Moreover, in order to provide the seamless model of the professional society, special projects are in progress to provide the bridge between the "young" and "experienced".

Today, from Australia to Finland, South America to Middle East, Students and Young Professionals are united with the network of ISPRS SC. They have the possibility to communicate in local, regional and global networks, to learn new technical issues, to organize their own specific scientific-educational events and to meet each other from different cultures. Examples of successful works and the fundamentals of building such a sustainable dynamic networks are presented in the following chapters.

2. NEED AND DEMANDS FOR STUDENT CONSORTIUM

ISPRS Student Consortium plays a major role to fill the gaps between the generations. With the increasing interest to students, young researchers and professionals are aware of the fact that they represent the next generation of the ISPRS and tomorrow's world. On the other hand, experienced professionals and academicians are eager to transfer their knowledge, not only from technical aspects but also as a role model, to explain their role in local and international society. ISPRS SC is the keystone of a bridge where young and experienced professionals meet each other. Furthermore, members of the SC are expected as the tomorrows promising scientists, academicians, professionals and even chairs within the ISPRS Technical Commissions. In the next few years SC can be expected as one of the main sources for recruiting officers of ISPRS itself.

The rapid changes in the science and technology have significantly affected the member profile of ISPRS and enlarged the content of the organization. The disciplines from Photogrammetry, Remote Sensing and Spatial Information sciences are perhaps can be named among the most developing and changing topics with the new trends and technologies. For instance laser scanning technology, 3D modelling techniques are a few examples to the recent modern developments in modern remote sensing techniques. The scientific arena needs more individuals and collaboration of nations and groups for a sustainable development in the technical fields.

2.1 Needs of Students and Young Professionals

From the student point of view, there are numerous needs and questions of each individual who attends to study the disciplines related to ISPRS. For most of the students, the first day of university life has also another meaning; it becomes a new era in many lives, bringing many questions and worries about future.

Usually students from various countries get together in local, regional or international student meetings such as International Geodetic Students Meetings-IGSM which is a European Countries originate, yearly held event in one of the member universities. In the recent years of the IGSM meetings, many workshops were held to understand the problems of students in different countries. Among the participants of the ISPRS SC Workshop which was held in Poland in 2006, there are several questions observed about the complains of the disorientation in the departments and institutes from different countries, while many of the students accept that they even don't have any idea about what really people do who graduated a few years ago from Photogrammetry, remote sensing, geomatics subjects. However, this is a situation that is not limited to a few institutions or countries but it is observed in various regions all around the world in different student meetings.

The principle needs for students are to find a way to guidelines in order to establish their roadmaps for the following years of their studies and get more involved in the practical side of the profession. More, there is a huge interest to get to know different people in other countries who are in the same direction and parallel to theirs. The idea beyond this is of course to know their colleagues for the upcoming years.

A career path to provide strength curricular and get necessary instruments to develop their curriculum at the early stages is

what they demand for their career. To be an answer to all of these ideas and questions in the mind of a student can be expressed basically; to get familiarized with the profession and have a greater vision to the entire picture with guidelines to follow. This is the point where ISPRS SC is starting to assist them

2.2 Needs for a Sustainable Organization

There are many works and actions which have signalized the new approaches and decreasing interests to attend to ISPRS related sciences. As results of the recent activities, some of the universities claimed the departments of Geodesy, Photogrammetry and Geomatics are in subject to be shut down and put the students to under different institutes or departments. As an side effect of this gap in the profession, the significantly decrease of the contribution of youth is reported to ISPRS and ISPRS supported activities which started to ring the alarm signals for the current members and Council. As every organization, the continuation of the whole system is dependent to and enriched with the new blood of the upcoming generations.

3. ESTABLISHING STUDENT CONSORTIUM

3.1 History of Student Oriented Activities and Student Consortium in ISPRS

ISPRS was established in 1910. As it was the first umbrella organization in the scientific fields of imagery and information, in the year of 2004, the organization was once more the pioneer of the Society with efforts to integrate the generations in the ISPRS Congress in Istanbul. The importance of the youth was noticeably shown, as an international youth forum was organized and a summer camp for the students and young professionals was held near to the ancient city Troy, all organized by the young professionals and students. That was the first time of such activities made during a scientific congress in the history of ISPRS. As the organization aimed the contribution of the students who are related to mentioned sciences, during the ISPRS Congress in Istanbul, Officially, ISPRS Student Consortium (SC) was founded under the Commission VI /WG 5 with the motto "Promotion of Profession to Students". (ISPRS SC Report, 2005)

3.2 Network and Structure of SC

After the first student activities in Istanbul Congress, a group of students mainly from Turkey and other European countries have initialized the first steps for the SC. The first major activity of ISPRS SC was 1st Summer School in Istanbul in the year of 2005. After this summer school, major coordinators and local students who were involved to the organization of the summer school continued to their activity with different timelines. However, with the change of working group chair and some SC coordinators, first members became less active during the 2 years time. After the 2nd Summer School in Slovenia in the year of 2007, with the initiatives of new Chair, TC and ISPRS Council a new team of students from local groups and members filled in the existing and new positions of the ISPRS SC. From the beginning, SC was structured on the idea of active and passive memberships. Among the active members, there are a number of different roles for volunteers. The Consortium has broadened its existing network and entered to new countries and Continents since the beginning of the new period. To provide the main coordination, ISPRS SC Student Coordinator structure is distributed mainly on each continents and special regions such as Central America or East Asia. In addition to all, the major activities are coordinated by a Student Coordinator-in-Chief who is the main responsible for the communication between ISPRS TC VI, WGVI/5 and related ISPRS Council Members. More, there are Student Coordinators enlisted for specific actions: Newsletter, Website and database. Among this group, the specific and the regional coordinators work all together. Specific Coordinators organize and produces the main works of the structures and activities such as publishing electronic newsletter, maintaining the website and database, designing special documents and so on. Regional coordinators are the key persons to reach to local students and represent ISPRS SC in their territories. They introduce it to their regions; establish country and local structures of ISPRS SC for organizing specific events.

3.3 Activities and Initiatives

For first tasks, SC developed the necessary internal structures to provide a good interior communication and first initiatives were taken in order to create suitable conditions for this aim. To provide easy access to emails and announcements SC established different email groups by simply using yahoo groups on internet. In general, documentation and reports from coordinators and active members are produced for all the activities such as summer schools, workshops and presentations. In the first years SC founder members produced the basic infrastructure of communication, a website introducing SC, logo as seen in figure 1 of SC as well as documents regarding the activities.



Figure 1. ISPRS Student Consortium Logo Produced by SC Members

In 2007, the first issue of ISPRS SC Newsletter was published. The electronic newsletter is a product of international cooperation between the members within the SC. The idea behind to publish an electronic newsletter is announce the SC activities and publish interesting articles and interviews related to the society. This development was recognized as a very attractive establishment to form a continuously activity between the SC members and it became one of the major activities in the Consortium. Beside, newsletter is a unique way to distribute the information and activities of the SC and to get familiar the students with ISPRS. From cover design to content all the newsletters are designed and edited by the volunteer members. Periodic newsletter and related publications is the showcase of the SC.



Figure 2. Cover Design of the Second issue of ISPRS SC Newsletter

Another communication and introduction device, the website of the SC has been updated within the different timelines. However, the development of the website and database is continuing with the volunteer Works of the members and it will be more in use in the following months. This includes to organize a database of the individuals who are interested in SC and follow its activities.

For the first time a special booth dedicated to ISPRS SC will be presented at the technical exhibition area of the ISPRS Beijing Congress. The booth is aimed to be a meeting point for student and experienced professionals to meet each other. And the design of the booth will be also provided by ISPRS SC members.

Among the others volunteer works, student coordinators act with the WG,TC officers and ISPRS Council together for the general outlines and detailed planning of the ISPRS SC activities such as organizing summer schools with cooperation of the local committees and ISPRS. The summer schools are envy of the SC and they aim to exchange technical information on various subjects with theoretical lectures and practical applications including specific technical visits which can be a satellite control station or a helicopter geared with latest remote sensing techniques. With the very special promotions, the summer schools provide a unique opportunity where students learn the technical information from first hand and get socialized with the members of society all done with a very special and reasonable cost with the local and ISPRS sponsorships.



Figure 3. A picture from the technical visit of first summer school in Istanbul in 2005

With all these different initiatives, SC members not only find a chance to contribute to society, but also they find a way to

develop their skills such as managing a database for members, gaining international cooperation and leaderships and more important doing all this in an fruitful environment.

4. PROBLEMS FACED

During the establishment and the first four years of the student consortium a number of problems and difficulties were observed such as the change of student coordinators within time. With the lack of sufficient documentation and other priorities in the life of students, some progress in the SC couldn't become more than ideas. Although, SC covers a long term of a life of a young professional, the continuum of activities of students are usually limited due to the changes in their life as they become a young graduate. Therefore, from time to time the enlargement of the network had some problems. Recently, these issues were eliminated with the use of a good documentation for the roles and responsibilities of the active positions in the structure. Also, the idea to change individuals at positions within a periodic time schedule should be arranged.

5. BENEFITS OF STUDENT CONSORTIUM

With all the information given above, SC is a candle in the dark for the young graduates and students. It doesn't only provide technical knowledge of ISPRS but also helps to sustain the society of ISPRS with its traditions Hence, SC can be idealized as the keystone of a bridge which is provides the way to the young members of the society and help them for their orientation and choose the right paths through the different branches of the technology and science. With the demand of students to understand not only the outlines of the professions but also to have the complete picture of the field of activities, to taste the different fields of activities of the professional experiences, to get guidelines and a good back ground for curriculum, to have a balanced role in the academic and private sector.. Because of these, ISPRS SC became very important to the society. With the possibilities of SC, today each member get a chance to know each other from different countries and merge their experiences with others. As they get access to the knowledge and information, the students have the chance to understand more from the academicians and introduce themselves.

From the other side of the mirror, the benefits of the contribution of the youth to the organization is clear, ISPRS can only get a chance to survive with the newcomers to the club, where today not only young academicians at the universities but also the ones in private sectors, participation become favourable. The participation of the young graduates and scientist can bring more positive impact to the society and young scientist can also handle numerous tasks within the working groups and the organization. For instance, next generations are always one step ahead in dealing with technology than today's professionals and this will be a fact for always. As they get familiar with the body of the organization, they can participate to the development of the society. With such a joy of a student, it becomes an enjoyable habit to produce for the society.

Without any doubts, the benefits of the SC are numerous for both ways; young professionals and the organization. Important of all, these are done in an environment with rules and standards, but in a way of friendship.

6. FACING FUTURE OF SC AND ISPRS

As it is introduced in this paper, SC is not only a promotion for students but also a bridge between the future members of the society. With the establishment of SC, the lifecycle of a member of ISPRS has the chance to start earlier with ISPRS SC. Anyone interested in it and want to actively participate to the scientific and technical activities of ISPRS, technical commissions and working groups it is a good start to begin first with the SC.

As SC expends and provides a basic step to the gates of ISPRS society, new working group members, officers and future Councils of ISPRS could be expected from today's student members.

7. CONCLUSION

To provide a sustainable lifecycle of organizations has been a challenging task in recent years. The benefits of a unit for integrating the generations of the professional bodies are numerous. Following years of the establishment of SC, Summers Camps and Schools, workshops, Youth Forums have been organized, presentations and panels have been held for promoting the SC in different parts of the World. Students and young researches involved in the activities of ISPRS Student Consortium get many possibilities to have a good background for climbing the first steps of their careers. The activities of SC are maintained by the students, young professionals and scientists. The major principles, planning, work are produced by its active members and coordinators with supervisions and advices from WG VI/5, TC VI and ISPRS Council. As young individuals receive more encouragement from the experienced scientists and professionals, they get more involved in ISPRS and take responsibilities. Without any doubt ISPRS SC is a unique possibility for the life cycle of individuals and continuum of professional organization. From the point of a student ISPRS SC is a candle of light in the darkness, showing the path to a successful scientific life.

REFERENCES

Kivilcim C.O., TATLI P., GUNES S. 2007 The Bridge to the Future: Student Networks, Ekscentar No.9 pp92-93

Kosmatin Fras M., Lisec A., 2007. Theory and Application of Laser Scanning. Proceedings (SS), July 1-7, 2007, Ljubljana, Slovenia. Ljubljana, Faculty of Civil and Geodetic Engineering and ISPRS WG VI/5 & SC. ISBN 978-961-6167-83-3

Kosmatin Fras M., Lisec A., 2007. Report on ISPRS WG VI/5 and Student Consortium Summer School "Theory and Application of Laser Scanning" Ljubljana, Slovenia, 1-7 July 2007. ISPRS Highlights, October 2007.

Akkoca G., Tatli P., Nurhan Celik R., 2006. Organisation and Future of ISPRS Student Consortium. Technical Commission VI Symposium, Tokio, Japan, 27-30 June.

Erten E., Järvinen J., Kocman S., Shiraki Y., 2005. ISPRS Student Consortium - First Summer School, Istanbul, Turkey drom 19-26 June 2005. ISPRS Highlights, Vol. 10, Nb. 3.: 27-28