



32.1 Report of IPAC

Gunter Schreier, Chair

1. IPAC Chair, Members and Organisation

New IPAC Chair

In 2012, Mr. Gunter Schreier, deputy director of the German Remote Sensing Data Center at DLR in Oberpfaffenhofen, Germany, was appointed by the ISPRS Council as new Chair of the International Policy Advisory Committee (IPAC). The Council and all IPAC members thanked the outgoing chair, Mr. Rainer Sandau, for his excellent service for IPAC during the previous years.

New IPAC Members and Membership ToRs

One of the first tasks of IPAC, in 2012, was to review its structure and the membership composition of its committee. The ISPRS council accepted a proposal by the IPAC Chair which reviewed the IPAC membership. Therein, 5 members have finished their duties with IPAC and new members have been invited to join. The new members have been selected to better represent international organizations (such as GEO and space agencies), Earth observation companies, an increased representation from Africa and South America and more women. In total, the IPAC membership has been enlarged to now 16 members. The names of the IPAC members are displayed at the IPAC web site under: <http://www.isprs.org/structure/ipac.aspx>.

The membership list is planned to be updated in 2016, as quite a few members have changed their affiliation.

Also, a revision of the terms of membership has been discussed. This aims for more flexibility and balance in the representation of groups and organizations involved in ISPRS and interested in ISPRS related policy issues.

IPAC Terms of Reference

The new IPAC also reviewed the IPAC ToRs. The general ToRs remained the same, while a specific expression “legal issues... in the context of ISPRS” has been added and the reference to specific international bodies has been generalized. The new ToRs are displayed at the IPAC web site.

IPAC Work Plan

In 2012, IPAC discussed a new work plan for the coming years. Apart from the standard duties to provide the ISPRS council with early warning of relevant international policy issues and the representation of ISPRS in international organizations and fora, the work plan proposed IPAC to be more active on establishing fora for exchange and publishing relevant papers and documents. Specifically, the work plan asked for the conduction of an IPAC specific workshop, addressing a variety of topics.

2. Representation at International Organizations

Amongst the duties of the IPAC chairs is the representation of ISPRS in selected international organizations. The IPAC Chair participated at the UNOOSA meetings in Vienna (Feb. 2013/Feb 2014). Material from COSPAR was received, but no specific actions w.r.t. COSPAR were taken.

The IPAC Chair is also active as the Chairman of the Earth Observation Committee of the International Astronautical Federation (IAF) and therefore is looking for synergies between ISPRS and IAF.

With regards to Earth observation data policy, the IPAC chair and several IPAC members (e.g. from GEO, ESA, USGS) are deeply involved in defining policies for large scale Earth observation programs (e.g. Copernicus, Landsat-8). Within Copernicus (i.e. the Sentinel satellite series), one success for the international science community and value adding companies was the acceptance of a “free and open” data policy, which was officially announced by a representative of the European Commission during the IPAC workshop, November 15th, 2013. IPAC supports and welcomes this Copernicus data policy.

3. IPAC Support to the ISPRS Council

In late 2014 and early 2015, IPAC supported the ISPRS Council in the approach to restructure the ISPRS technical commissions. IPAC commented the draft documents and actively contributed to the corresponding blog. Comments and recommendations were specifically addressing IPAC issues, such as the inclusion of data policy and space law in the new structure of the technical commissions.

IPAC also commented the “Prague declaration”, which shall be approved by delegates at the XXXIII ISPRS Congress and calls on international communities to work together and promote multi-disciplinary collaboration towards providing reliable global geospatial information to support Future Earth. IPAC reviewed the text of the declaration and noted issues on sharing of resources, computing cloud providers and in general the consideration of the European Copernicus programme as a potential policy driver.

4. Workshops Organized by IPAC or Involvement of IPAC

IPAC workshop: Maximizing the Utility of Earth Observation Data in the Internet Age; Antalya, Turkey; November 11-17; 2013

IPAC was happy to accept the invitation of the local organizers of the ISPRS-2013 SSG conference, hosted from November 11-17, 2013 in Antalya, Turkey, to have the IPAC workshop included in the conference venue. The IPAC workshop was conducted one full day on November 15th. The IPAC workshop aimed to solicit expert opinions on EO data policy and data sharing in today’s age of internet computing and enhanced capabilities to manage and access large amounts of EO data and information.



Final discussion panel during the IPAC workshop in Antalya

The workshop solicited perspectives from local and national agencies, international organizations, and academia. Three sessions with 12 speakers, partly representing IPAC and partly invited members, focused on various aspects of data policy and the challenges and opportunities Earth observation, photogrammetry and image science is facing from new internet based technologies. Hence, the final presentation was held by Google. The workshop was concluded by a round table discussion with active participation from the audience.

The presentations of the IPAC workshop can be found on the conference web page under: <http://www.isprs2013-ssg.org/scientific-program/>.

IPAC workshop: Maximizing the Utility of Earth Observation Data in the Internet Age;

Agenda and Speakers:

Morning Session 1: Programmatic Perspectives

Gunter Schreier	DLR, ISPRS IPAC Chair
Astrid-Christine Koch	EC Copernicus Office, Brussels
Thomas Beer	ESA GMES office
Ali Baygeldi	Directorate General of Aeronautics and Space Technologies

Morning Session 2: User Perspectives

ChenJun	ISPRS, President
Barbara Ryan	GEO, Director
John Murtagh	ASTRIUM
Irmgard Niemeyer	Forschungszentrum Jülich GmbH

Afternoon Session 3: Technological Perspectives

Sias Mostert	Space Advisory Company
Ian Dowmann	UCL, ISAC Chair
Peter Spruyt	JRC, European Commission
Ed Parsons	Google

Afternoon Session 4: ISRSE IPAC Round Table "Earth Observation Data in the Internet Age"

Moderator & selected panelists

IPAC Workshop during the ISRSE Conference in Berlin, Tuesday, May 12th, 2015

IPAC organized a meeting aside the International Symposium of Remote Sensing of Environment (ISRSE), May 12th, 2015 at the BCC in Berlin, Germany. Next to the IPAC Chair, eight participants (IPAC members and guests) attended the meeting.

The topics of the agenda focussed on the IPAC ToR, the IPAC Plans and actual initiatives. Specific presentations were given by Orhan Altan (on the ISPRS reform and on contribution of ISPRS on disaster management and working together in this domain with UN and other international players) and Lena Halounova (on the forthcoming ISPRS congress). On the latter, Lena Halounova reported on the Space Agency Forum and a National Mapping and Cadastral Agency Forum to be organized during the congress. IPAC agreed to support specifically the Space Agency Forum (see below).

Barbara Ryan, GEO Chair reported on the GEO Plenary and ministerial summit being held in Mexico City during the week of 9-13 November, 2015.

Adam Keith, Euroconsult, gave a presentation on the status and overview on new Earth observation systems, specifically the new commercial ventures starting earth observation activities with new satellite systems and constellations.

Agenda for the IPAC Workshop May 12th, 2015, Berlin

- See relation to IAF and others
- ISRSE (ICORSE) Berlin conference
- IPAC Meeting during ISRSE in Berlin
- Support to ISPRS Commission restructuring
- Representing ISPRS at UNOOSA in Vienna
- Attending Newcastle Meeting
- IAA-ISPRS Space Agency Forum

Participants of the workshop

Gunter Schreier	DLR, Chair IPAC
Josef Aschbacher	ESA, member IPAC
Barbara Ryan	GEO, member IPAC
George Cho	Uni Canberra, member IPAC
Irmgard Niemeyer	FZ Jülich, member IPAC
Orhan Altan	TU Istanbul, member ISPRS council
Lena Halounová	CTU Prague, member ISPRS council
Adam Keith	Euroconsult, guest

36th International Symposium on Remote Sensing of Environment (ISRSE 36) May 11-15, 2015, Berlin, Germany

ISRSE is not exactly an ISPRS conference, however, ICORSE a Committee of ISPRS under the ISPRS council, is in charge to organise this bi-yearly event. Several ISPRS council members attended the conference. The IPAC Chair, Gunter Schreier, was the head of the international programme committee, supported by many others, especially from the ISPRS community.

In order to link the ISRSE more closely in the ISPRS series of documents, it was decided to add all ISRSE conference papers to the ISPRS archives. Hence the same “conference organizer” (Copernicus Conference Services) having a frame contract with ISPRS was contracted to the ISRSE to organize the web based abstract management and the ISPRS related review process was adopted to the ISRSE abstract review.

In addition, selected papers have been invited to be published in a special edition of the ISPRS journal. John Trinder and Björn Waske are acting as editors of this special edition. According to latest information (John Trinder, May 2016) 13 prospective authors proposed a paper and after about 10 months in the review process, 2 papers have been accepted with one further paper likely to be accepted soon. Therefore it is likely that the theme issue of the ISPRS Journal will include 3 papers. Quote John Trinder: *“This result is disappointing, but it demonstrates the difference between papers submitted for a conference and those submitted for the journal”*.

An ICORSE Committee meeting also took place during the conference. Therein, a new chair for ICORSE was appointed (Lawrence Friedl, NASA HQ) and the outgoing chair (Per Erik Skrovseth, Norwegian Space Center) was thanked for his service during the last years. A closer coordination between ICORSE and ISPRS council was also agreed, with a prospective meeting during the ISPRS congress in Prague.

ISRSE-36 Summary:

The 36th International Symposium on Remotes Sensing of Environment (ISRSE36), was hosted by the German Aerospace Center DLR, from 11-15 May 2015 in Berlin, Germany. Key figures of the ISRSE36 include:

- 738 participants from 66 countries
- 415 oral presentations and 167 posters in 81 technical sessions across 12 themes
- 29 keynote contributions in 5 plenary sessions
- 7 special sessions
- 3 social events and 1 technical tour

ISRSE36 took place while other initiatives are addressing Earth Observation:

- The process to define the UN global development agenda post 2015 with its Sustainability Development Goals was finalized in 2015.
- The Future Earth initiative has been created as a global platform to deliver solution-orientated research for sustainability. Among its key challenges are innovative approaches to integrate knowledge systems (data, observation, modelling, etc.), including remote sensing of the environment.
- A second Hyogo Framework of Action with its goal to substantially reduce disaster losses was launched in 2015, where Earth observation approaches play an increasing role in making societies resilient to disasters.
- The global Group on Earth Observations (GEO), together with its partners, such as the Committee on Earth Observing Satellites (CEOS), addresses these political and scientific agendas while it currently prepares for its second implementation phase 2016-2025.
- International science organizations, such as the International Society of Photogrammetry and Remote Sensing (ISPRS) are adapting their structure to master the research and development included in these challenges.

ISRSE-36 was an excellent forum to present results from past and current scientific achievements related to such international developments, as well as to discuss future plans for them. It featured recent milestones in the development of Earth observation programmes addressing sustainable development, global environmental issues and resilience to disasters. It was an outstanding opportunity to learn about major EO programmes, such as the European Copernicus Programme or DLR's missions, and their first results. It was an important forum to present applications based on these new missions and to exchange views on future directions of Earth Observation technology and geographic information management.



The Symposium included plenary and thematic sessions, poster sessions and special events on issues of interest to scientists, policy makers and resource managers in the public and private sectors. Its programme featured speakers from around the globe sharing their experiences and knowledge on Earth observation applications and programmes. By attending the ISRSE-36, practitioners, scientists, policy makers, system engineers and students were able to get a full view of the current situation in Remote Sensing now deemed critical in the Earth's sustainable management.

The ISRSE 37 is planned by the South African National Space Agency, the International Centre for Remote Sensing of Environment (ICRSE) and the International Committee on Remote Sensing of Environment (ICORSE) under the overarching theme of "Earth Observation for Development and Adaptation to a Changing World".

It will take place at the CSIR International Convention Centre (CSIR ICC), Tshwane, South Africa, from 8 – 12 May, 2017.

ISPRS UN-GGIM National Mapping and Cadastre Agency (NMCAF) and ISPRS-IAA Space Agency (SAF) Forum, 14 – 15 July 2016, Prague

The International Society for Photogrammetry and Remote Sensing (ISPRS) together with United Nations Initiative on Global Geospatial Information Management (UN-GGIM) is proud to announce the First ISPRS – UN-GGIM National Mapping and Cadastral Agency Forum.

Sessions of these two forums will comprise invited and presented papers. One session of the Forum will be a joint session of the National Mapping and Cadastral Agencies and Space Agencies. It will be dedicated to two questions:

- How do NMCAs use satellite remote sensing data, what would they like to see improved, etc.?
- What are the plans of Space Agencies in the sphere of data for NMCAs, how can this cooperation be strengthened?

Ian Dowman and Gunter Schreier (supported by Lena Halounova and Christian Heipke) specifically contributed to the definition of the agenda and the invitation of the speakers for the Space Agency Forum.

As of May 2016, the four sessions dedicated to the Space Agency Forum feature the following invited speakers:

Perspectives on International Earth Observation Missions

- Lawrence Friedl, NASA
- Volker Liebig, ESA
- Haiyi Cao, CAST
- Shizuo Yamamoto, JAXA

Remote sensing for environmental monitoring and societal benefit

- Barbara Ryan, GEO Secretariat;
- Stephen Briggs, GCOS,
- Hussein Farah, Regional Centre for Mapping of Resources for Development, Kenya;
- Kyaw Sann Oo (ID 2220), Myanmar Peace Center,

New Earth Observation technologies and applications: The commercial perspective

- Robbie Schingler, Planet Labs
- Wade Larson UrtheCast
- Wei Sun, 21Aerospace Technology, China
- Geoff Sawyer, EARSC

Earth Observation Data Policy and long-term Data Continuity

- Pascale Ehrenfreund, DLR
- Mario Hernandez, ISPRS Regional Coordinator for Latin America & Future Earth
- Andreas Weispak, European Commission European Commission, DG GROW I3
- Peter Baumann, Jacobs University, Bremen

The second day will be joint sessions with the National Mapping and Cadastral Agency Forum concluded by a round table discussion.