Conference topics and attendance (2012-2015)

The Commission organised a total of five meetings during the reporting period (Tab. 4).

Tab. 4: Commission meetings held in the period 2012-2016

Location	**Dates**	**Type**	**No. of participants***
Cologne, Germany	26-30 Aug. 2012	IGU Congress	60
Kyoto, Japan	11-15 Aug. 2013	IGU Regional Conference	50
Lanzhou, China	12-17 Aug. 2013	Commission Meeting	150
Dubrovnik, Croatia	24-28 Aug. 2014	Commission Meeting	50
Moscow, Russia	17-22 Aug. 2015	IGU Regional Conference	50

*estimated

B. Brief summary

The themes, no. of sessions and papers as well as highlights and new ideas/ theories are summarised in Tab. 3.

Tab. 5: Statistics on meetings of the Commission held from 2012 to 2016

Meeting (City, year)	**No. of sessions**	**Themes,** chairs, no of papers/session	**No. of papers/ posters**	**Fieldtrip**
Cologne 2012	10	1. GIS in water research (Hydro GIS) 2. Hydrological Process and Watershed Management in Arid Regions 3. Water and mining (Water pollution) 4. Water in urban environments 1+2 5. Climate change impacts on large scale areas 6. Climate change impacts on mesoscale regions 7. Water resources and management hydrological budget and hydraulic emergencies 1-3	**38** oral papers accepted + x posters	none
Kyoto 2013	4	1. Water resources and climate change [Joint session with the Commission on Climatology] 2. Water pollution and water in urban environments 3. Groundwater management 4. Hydrological processes and watershed management	**13** oral papers	Lake Biwa
Lanzhou 2013	8	1. Climate change and hydrological cycle 1-3 2. Landscape processes and patterns 1+2 3. Water resources management 4. Water and Ecosystem Services	**37** (41) oral papers + 15 posters	Lake Qinghai, Hexi Corridor
Dubrovnik 2014	3	1. Human impacts on the hydrological cycle - threats to the sustainability 2. Climate change and water availability 3. GIS and cartography in hydrological research	**17** oral papers	Ombla karst spring (planned underground HPP), Neretva Delta, City of Ston
Moscow 2015	8	1. Hydrological processes and management of stressed water resources 1-4, 2. Modelling, VGE and GIS applications in hydrological research 1+2 3. Water quality, health and human impacts 1+2,	**28** oral papers, 5 posters	Central Moscow

An overview on the statistics for the held meetings is provided in Fig. 2.

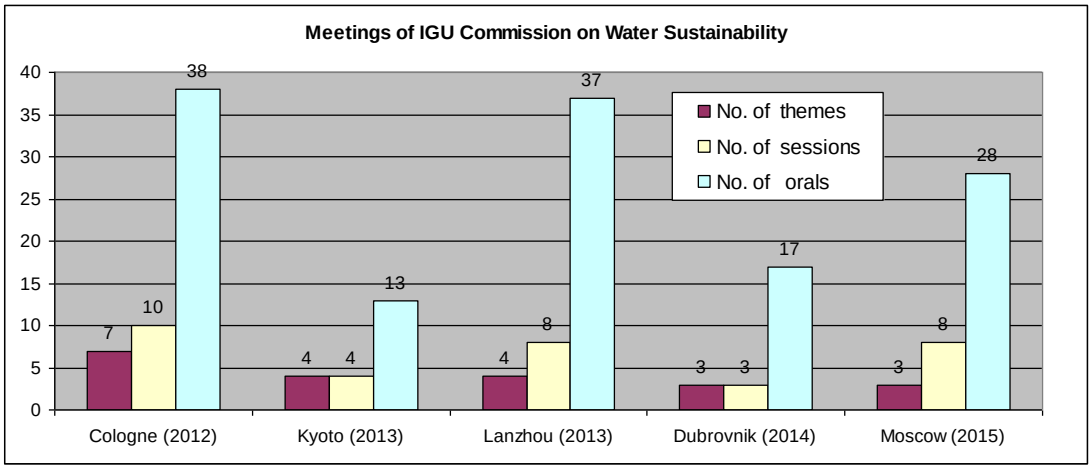

Fig. 5: No. of themes, sessions and oral papers presented at Commission meetings (2012-2015)

The geographical origin of speakers (i.e. not the study area covered in the paper) is depicted in Fig. 3.

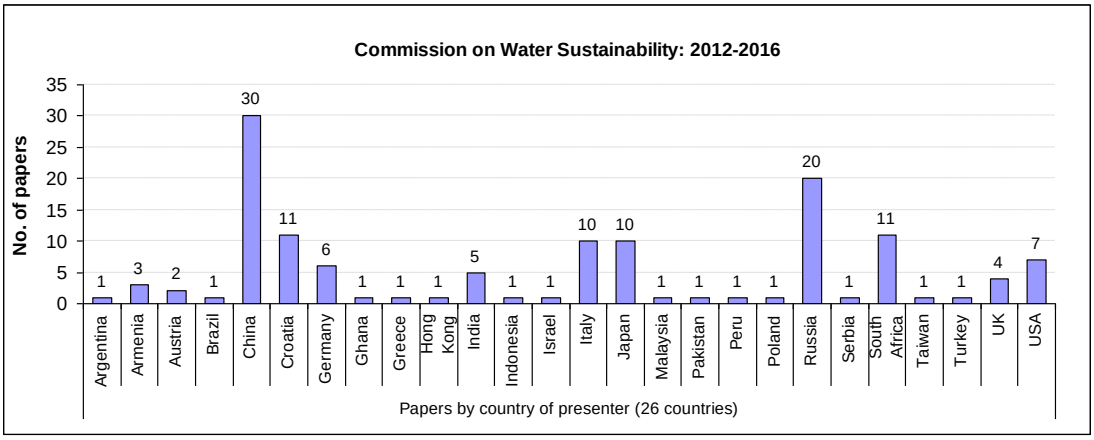

Fig. 6: Total no. of oral papers per country of presenter given at the 5 meetings of the Commission during 2012 to 2015

With a total of 26 countries the papers presented during the reporting period account for 81% of all countries represented on the Commission's mailing list.

There are however significant differences between the number of papers per country ranging from one for a total of 14 countries to 30 for Chinese authors. The latter is followed by Russia (20 papers). Croatia (11) and South Africa (11).

The high numbers of paper from China, Russia and Croatia are mostly due to the fact that three of the Commission meetings were held in these countries (Lanzhou 2013, Dubrovnik 2014 and Moscow 2015 respectively) drawing a large contingent of local scientists.

In contrast, the elevated number of papers from SA, Italy and Japan are mainly due to the frequent attendance of longstanding members form these countries (Winde, Cassardo, Mori and Oyagi. The fact that the majority of attendees comes from the host country is also illustrated in Fig. 4.

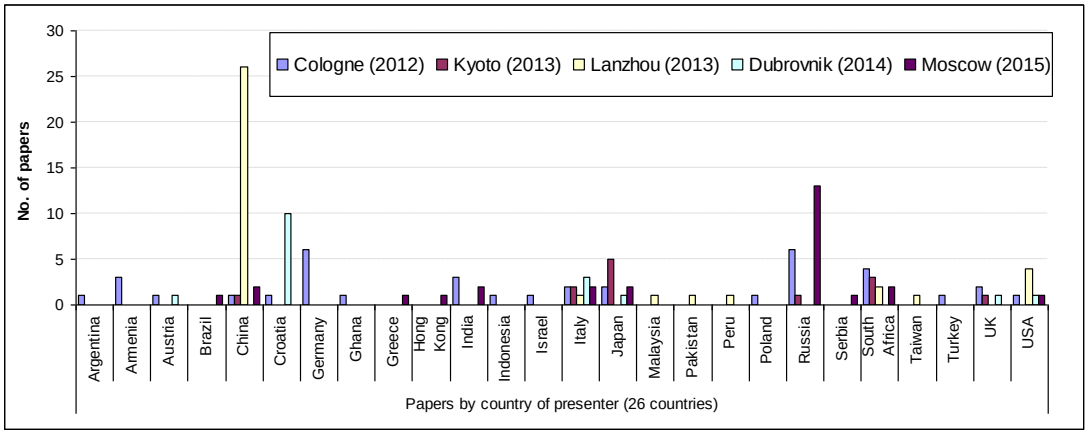

Fig. 4: No. of oral papers per country of presenter fro each of the 5 meetings 2012 to 2015

The above diagram indicates the highest number of German presenters (6) for the Cologne Congress, the highest number of Chinese authors (27) for the Lanzhou meeting, the highest number presenters from Croatia (10) for Dubrovnik and the largest number of papers from Russian scientists for Moscow (14). Over the past 5 meetings, local participants accounted for an average of 46% of all papers ranging from 16% in Cologne to 70% in Lanzhou (Kyoto: 38%, Dubrovnik: 59% and Moscow: 46%). Acknowledging this fact the Commission now made a deliberate attempt when drafting the themes for Beijing 2016 to specifically accommodate water issues that are of local relevance to the host country. The relative dominance of local scientists at Commission meetings over the past five conferences also confirms long-term experiences of the Commission and appears to be largely related to affordability of access with costs for international travel posing significant challenges for many members from developing countries. In order to lower the obstacles for members to attend Commission meetings overseas we proposed to the LOC of the IGC in Beijing to explore the use of Skype or a similar technology for members to present from their home countries at a somewhat reduced conference fee.

Regarding the *geographical representativity of study areas* it appears that presenters from developing countries primarily focus on local problems in their respective nations while scientists from developed countries such as Germany, Japan, USA and Israel tend to report on water issues in developing nations (e.g. Pakistan, Namibia…) rather than on domestic topics.

Tab. 5 summarises the number of oral presentation per theme presented at the various meetings.

Tab. 4: No. of papers relating to general themes presented at the Commission meetings 2012-15

Theme	**Conference**						
	Cologne 2012	*Kyoto 2013*	*Lanzhou 2013*	*Dubrovnik 2014*	*Moscow 2015*	**total**	*%*
Water Management	4	4	4		15	**27**	23%
Water pollution: urban, mining, health	13	4		8	1	**26**	22%
Climate change impacts	7		9	4		**20**	17%
Water cycle + landscape processes			8	7		**15**	13%
Hydro GIS	3			3	6	**12**	10%
Hydraulic emergencies	12					**12**	10%
Groundwater		4			1	**5**	4%
Water Ecosystem Services			4			**4**	3%
total						121	

Owing to differing degree of generality between the individual themes (which are generated for the purpose of the report aiming to summarise somewhat differently phrased topics) the associated no. of papers are not directly comparable. There is, of course, also a degree of overlap between the categories. Keeping these uncertainties in mind it appears that *Water Management* in its broadest sense is a major focus followed by *Water Quality* issues (pollution,

water issues in urban and mining areas) together accounting for nearly half of all papers (45%). A third focal point is on *Impacts of Climate Change* on water resources and *General Hydrological Processes* together accounting for 30%. Given the rather narrowly defined fields of *GIS* and *Hydraulic Emergencies* both are well represented with 10% each. Of lesser importance during the past 4 years were papers on *Groundwater* issues and *Ecoservices* of water. In order to broaden the spectrum and accommodate emerging themes we included the topic of Water and Energy in Beijing.