

## **IWA Specialist Group on Benchmarking and Performance Assessment of Urban Water Services**

This SG Annual Report gives a comprehensive overview of SG on Benchmarking and Performance Assessment of Urban Water Services and the trends for SG membership in 2013 and previous years. This report presents the trend of SG members in terms of years, age groups, genders, segments and geographical distributions. Furthermore, it also analyses membership crosslink among different Specialist Groups.

### **Introduction**

The BPA SG is the forum for discussing, promoting, create networking opportunities and improving the state of the art in all activities related to the performance assessment and benchmarking of water services.

The topics covered by the group include performance indicators systems and the comparison of indicators, as well as benchmarking and performance improvement. Group members include practitioners, academics, regulators and consultants. The group is open and always welcomes new members. If you wish to join, you can contact any of the group's officials or attend any of the group's meetings. Water utilities, associations, regulators and international bodies are welcome to use the group as a networking tool and a meeting environment to develop and extend their performance assessment and benchmarking efforts.

The BPA SG is in charge of the Pi Conference series (on benchmarking and performance assessment). The group meets at least once every year (in the IWA World Congresses or the Pi Conference of the alternate year). Pi2013 was held in spring 2013 in Medellin (Colombia).

For more information visit [www.iwabenchmarking.com](http://www.iwabenchmarking.com).

### **2013 Activities**

During 2013, the group had the following activities:

1. Specialist Conference Pi2013, held in Medellin (Colombia).
2. Drafting of the new Manual of Best Practices on Performance Indicators for Low and Medium Income Countries (ongoing).
3. Drafting of the 3rd edition of the Manual of Best Practices on Performance Indicators for Water Supply Services (ongoing).
4. Drafting of the 2nd edition of the Manual of Best Practices on Wastewater Services (ongoing).
5. Translation of the Manual of Best Practices on Benchmarking Water Services (Spanish).

**2014 Activities**

The following activities are scheduled for 2014:

1. Publication of the Manual of Best Practices on Benchmarking Water Services (Spanish).
2. Workshop on Benchmarking for Regulation of Water Services - WWC 2014 (pending approval).
3. Publication of the new Manual of Best Practices on Performance Indicators for Low and Medium Income Countries (ongoing).
4. Publication of the 3rd edition of the Manual of Best Practices on Performance Indicators for Water Supply Services (ongoing).
5. Publication of the 2nd edition of the Manual of Best Practices on Wastewater Services (ongoing).

**Analysis on Gender and Age Groups**

As of December 2013 there are 563 in total current members in the Benchmarking and Performance Assessment Group. Despite those who have not indicated their age (24 out of 563), among all these members, there are 121 (21% of 563) members who are 35 years or younger and there are 418 members older than 35. In addition, despite those who have not indicated their gender, there are 100 (18% of 563) members who are female.

From table 1 and figure 1 we can see that in the past 5 year:

- a. The total number of group members increased significantly, from 0 member in 2009 to 563 members in 2013.
- b. The number of YWP shows an upward trend.
- c. The number of female members shows an obviously increasing trend.

sg_63		2009	2010	2011	2012	2013
<b>Total Members</b>		<b>0</b>	<b>91</b>	<b>223</b>	<b>375</b>	<b>563</b>
<b>Age Group</b>	<b>35 and Under</b>	0	23	68	91	121
	<b>Senior Group</b>	6	63	144	281	418
	<b>Data Undisclosed</b>	0	5	11	3	24
<b>Gender</b>	<b>Female</b>	0	14	50	79	100
	<b>Male</b>	0	77	170	289	361
	<b>Data Undisclosed</b>	0	0	3	7	102

Table 1. Total numbers of members within different age groups and gender groups in the past 5 years

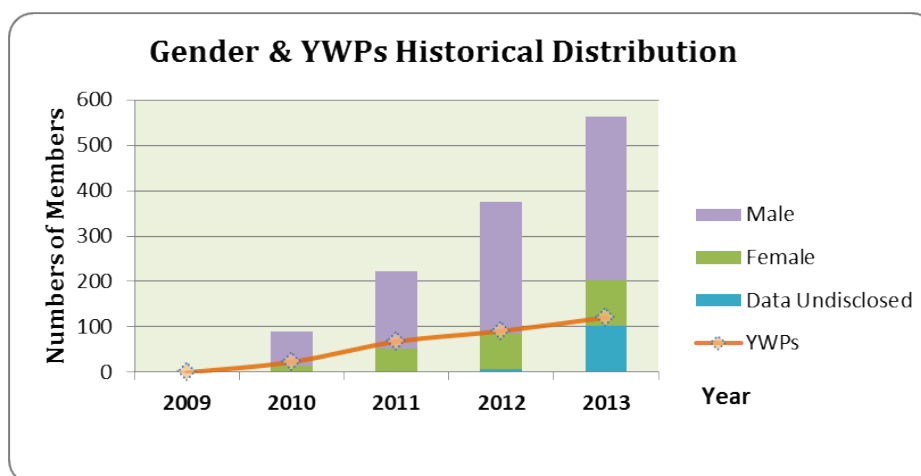


Figure 1. The Development of SG members in the past 5 years in terms of total number, gender and YWP

The percentages of young water professionals in other groups are also included in this report in order to compare with other groups (table 2).

SGs	Total Members	YWPs	Percentage
Modelling & Integrated Assessment	1124	346	31%
Water & Wastewater in Ancient Civilizations	530	163	31%
Water Safety Planning	676	205	30%
Winery Wastes Management	272	82	30%
Rainwater Harvesting and Management	1010	291	29%
Sustainability in the Water Sector	1806	518	29%
Environmental Engineering Education	1337	383	29%
Chemical Industries	497	140	28%
Microbial Ecology and Water Engineering	1282	360	28%
Nanoparticles	868	241	28%
Groundwater Restoration and Management	867	240	28%
Water Security & Safety Management	1065	288	27%
Metals & Related Substances in Drinking Water	677	182	27%
Resource Orientated Sanitation	588	156	27%
Hazardous Substances in Water (ACHSW)	1225	322	26%
Lake and Reservoir Management	725	189	26%
Hydroinformatics	550	142	26%
Water Loss	790	202	26%
Sanitation and Water Management in Developing Countries	1643	419	26%
Pretreatment of Industrial Wastewaters	1239	314	25%
Small Water & Wastewater Systems	2267	570	25%
Advanced Oxidation Processes	1221	301	25%
Forest Industry	175	43	25%
Statistics and Economics	761	185	24%
Wastewater Pond Technology	785	190	24%

SGs	Total Members	YWPs	Percentage
Efficient Urban Water Management	1736	418	24%
Particle Separation	798	190	24%
Wetland Systems for Water Pollution Control	569	135	24%
Nutrient Removal and Recovery	1955	460	24%
Biofilm	1383	323	23%
Design, O&M of DWTPs	1231	287	23%
Urban Drainage	944	219	23%
Water Reuse	2751	637	23%
Off-Flavor's in the Aquatic Environment	227	52	23%
Odours and Volatile Emissions	623	142	23%
Sludge Management	1663	375	23%
Diffuse Pollution	730	164	22%
Anaerobic Digestion	1647	370	22%
Watershed and River Basin Management	1396	312	22%
Public and Customer Communications	459	102	22%
Health-related Water Microbiology	1070	237	22%
Institutional Governance and Regulation	786	173	22%
Membrane Technology	2020	444	22%
Benchmarking and Performance Assessment	563	121	21%
Disinfection	1336	284	21%
Instrumentation, Control and Automation	979	207	21%
Strategic Asset Management	896	182	20%
Design, Operations & Costs of LWWTPs	1535	302	20%
Marine Outfall Systems	256	47	18%

Table 2. Young Water Professionals in all the groups.

## Analysis on Geographical Distributions

We have considered the regions of Africa, Central Asia, China, East Asia & the Pacific, Eastern Europe, Latin America & the Caribbean, North America, South Asia, The Middle East, Western Europe (total 10 regions) for the analysis of geographical distribution.

From table 3, figure 2 and 3 we can see that:

- a. In 2013, the majority of group members are from Western Europe, East Asia & the Pacific and North America. Except the figure in South Asia, every region experienced an increase in number of members at different levels between 2012 and 2013.
- b. In the past 5 years, SG membership figures have been growing continuously in most of regions. And the number of members from Western Europe and East Asia & the Pacific increased more quickly than that in other regions.

sg_63	YEAR				
	2009	2010	2011	2012	2013
Africa	0	8	18	30	56
Central Asia	0	1	1	1	3
China	0	1	8	12	20
East Asia & the Pacific	0	19	49	72	100
Eastern Europe	0	5	13	28	44
Latin America & the Caribbean	0	3	18	24	38
North America	0	14	34	52	72
South Asia	0	1	7	19	19
The Middle East	0	5	10	11	13
Western Europe	0	34	65	126	198
<b>Total</b>	<b>0</b>	<b>91</b>	<b>223</b>	<b>375</b>	<b>563</b>

Table 3. Total numbers of SG members within different regions

### Regional Distribution in 2013

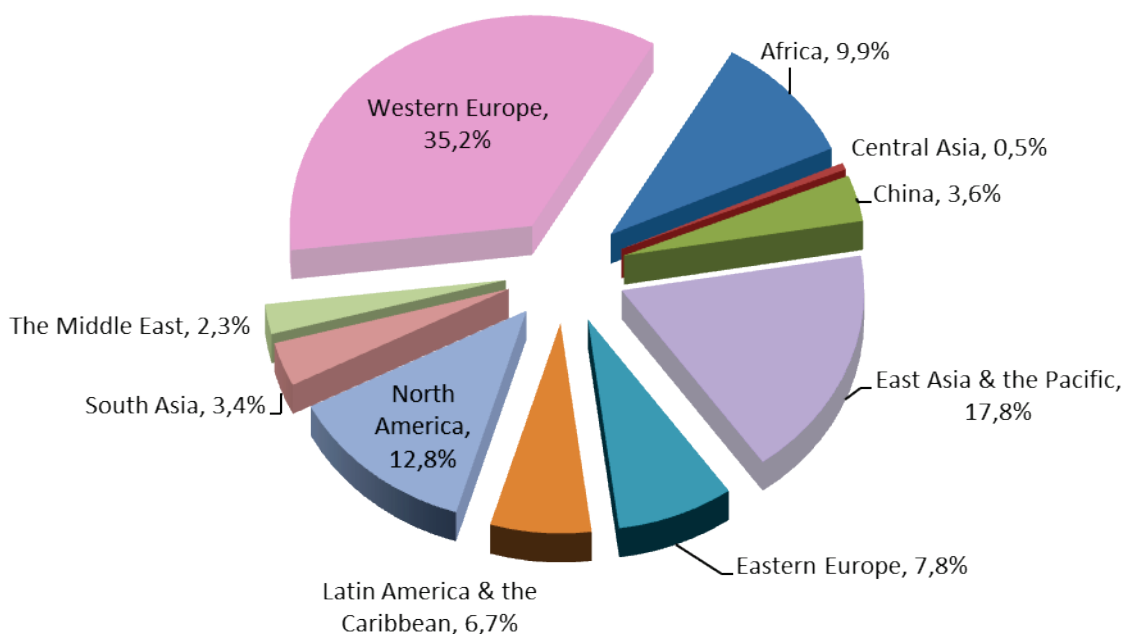


Figure 2. SG members within different regions in 2013

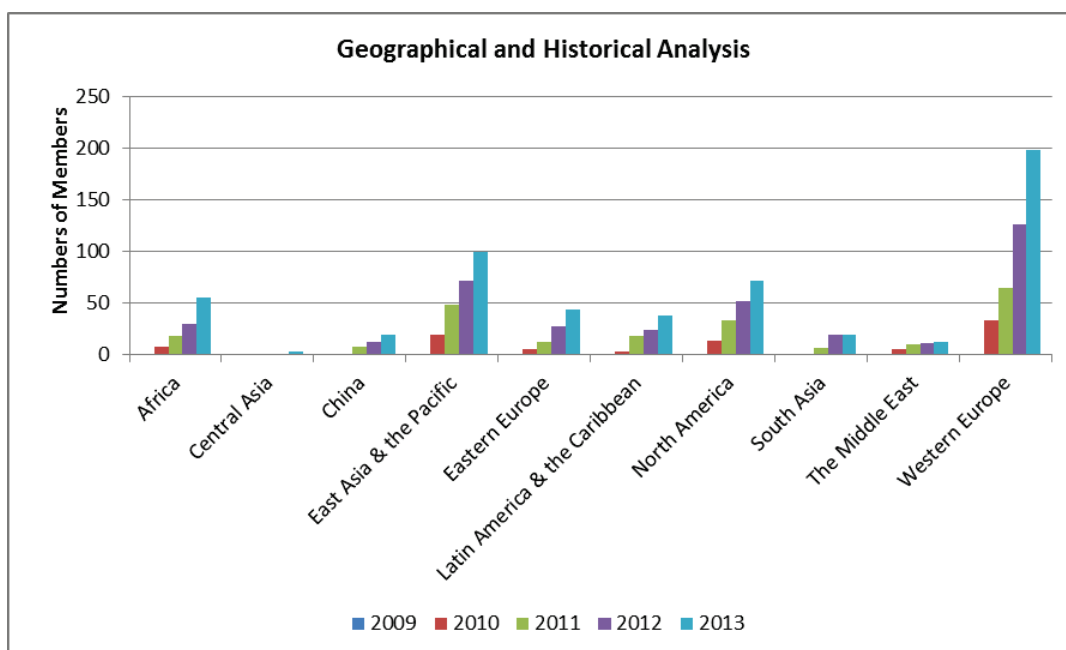


Figure 3. Trends of SG members in the past 5 years within different regions

### Analysis on Segments

Besides the members who have not indicated their segment, there are 10 segments considered in this analysis: Consultancy, Government Organizations, Industry, NGO, Regulator, Research Institute, Technology Suppliers, University, Utility and other.

As we can see from table 4, the highest number of SG members are from Consultancy, Utility and University, with 144 (25% of total numbers), 117 (20% of total numbers), and 105 (18% of total numbers) respectively.

sg_63	YEAR				
	2009	2010	2011	2012	2013
Consultancy	0	24	49	86	144
Government Organization	0	0	2	8	37
Industry	0	2	7	8	13
NGO	0	0	0	7	8
Other	0	8	23	24	37
Regulator	0	3	9	6	14
Research Institute	0	12	18	27	45
Technology Suppliers	0	5	11	18	24
University	0	15	39	67	105
Utility	0	22	58	108	117
Not Specified	0	0	7	16	30

Table 4.Total numbers of SG members within different segments

### Analysis on Members Overlapping with Other Groups

There are members of Benchmarking and Performance Assessment of Urban Water Services SG represented within the membership of each IWA SG. According to the information in Figure 4 and 5, 329 members (58%) of this SG are also members of the Efficient Urban Water Management group, which may indicate people who choose this SG also have great interest in Efficient Urban Water Management. The top 5 SGs which gained most attention of this SG are as follow:

<b>Group</b>	<b>Numbers of Members in Common</b>
Efficient Urban Water Management	329 (58% of this SG)
Sustainability in the Water Sector	310 (55% of this SG)
Water Reuse	274 (49% of this SG)
Strategic Asset Management	271 (48% of this SG)
Small Water & Wastewater Systems	264 (47% of this SG)

Interestingly, the link can be also interpreted from other perspectives. According to the information in Figure 4 and 6, 239 members (30%) of Water Loss SG are also members of this SG, which may indicate people who are interested in Water Loss SG also attach importance to this SG. The top 5 SGs which may put a high value on this SG are as follow:

<b>Group</b>	<b>Numbers of Members in Common</b>
Water Loss	239 (30% of Water Loss SG)
Strategic Asset Management	271 (30% of Strategic Asset Management SG)
Water Safety Planning	179 (26% of Water Safety Planning SG)
Public and Customer Communications	121 (26% of Public and Customer Communications SG)
Institutional Governance and Regulation	206 (26% of Institutional Governance and Regulation SG)

**Numbers of Members in common with other SGs**

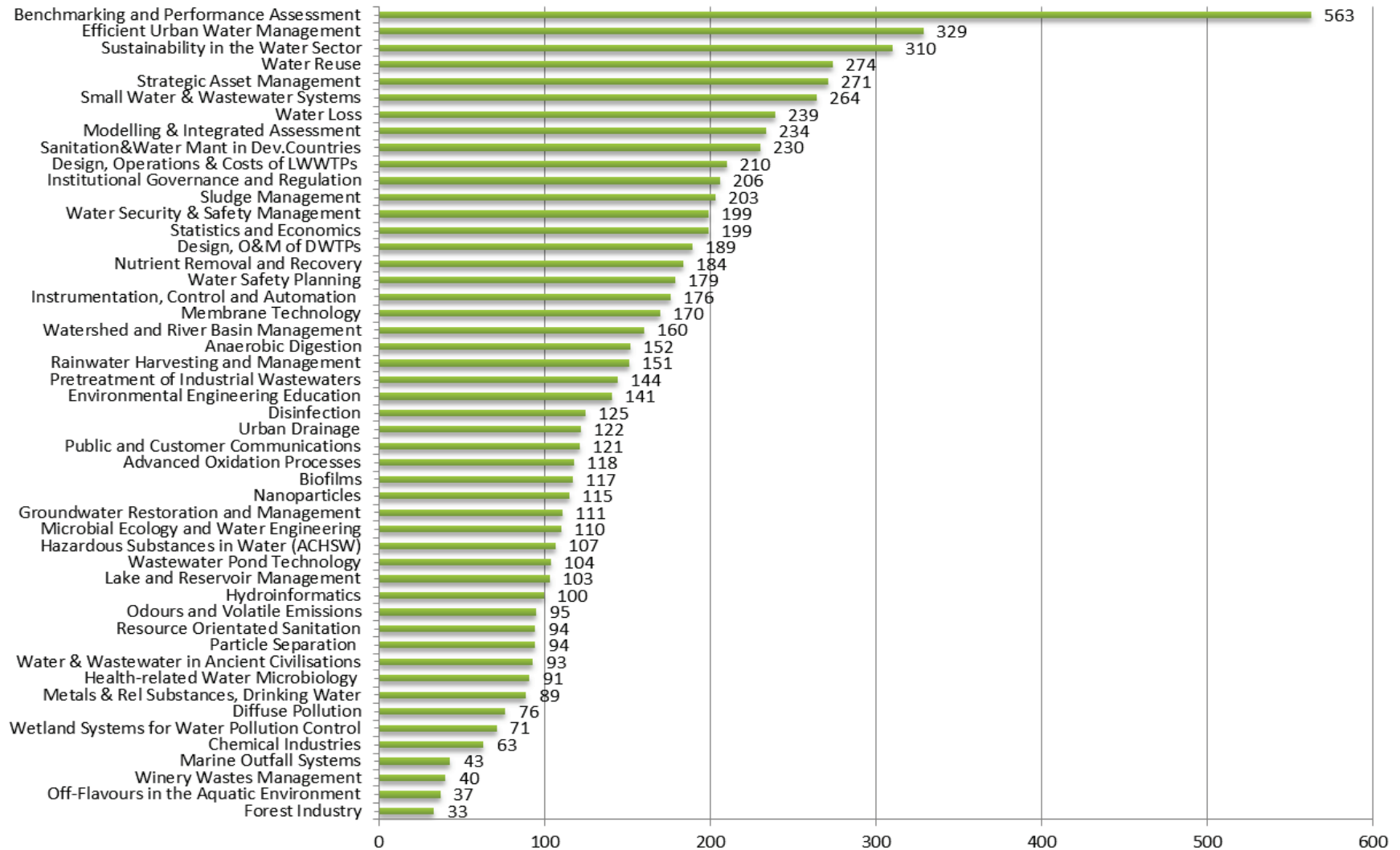


Figure 4. Numbers of members in common with other SGs



**Percentage: members in common vs. total members of this group**

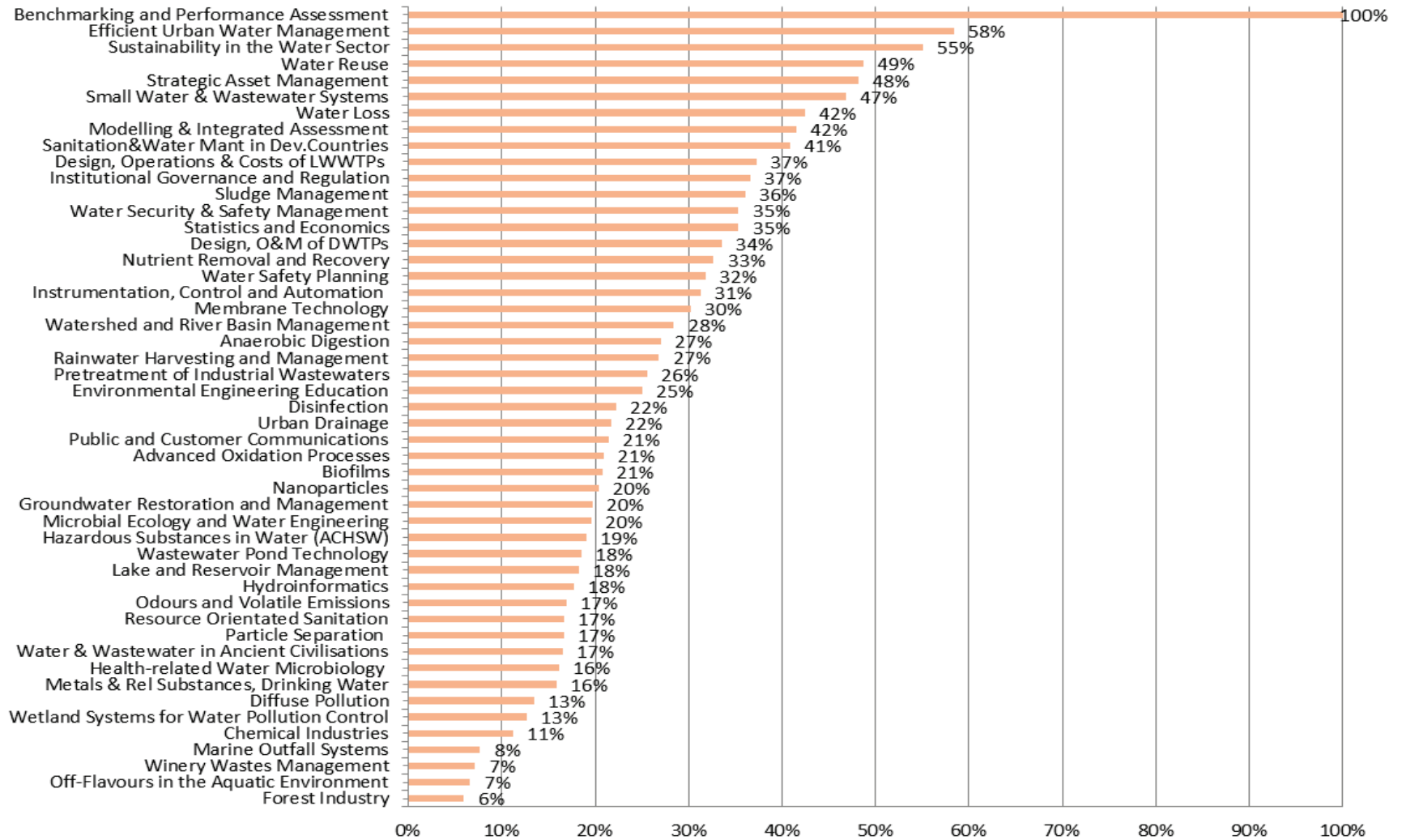


Figure 5. Percentage: members in common vs. total members of this group

Percentage: members in common vs. members of other SGs

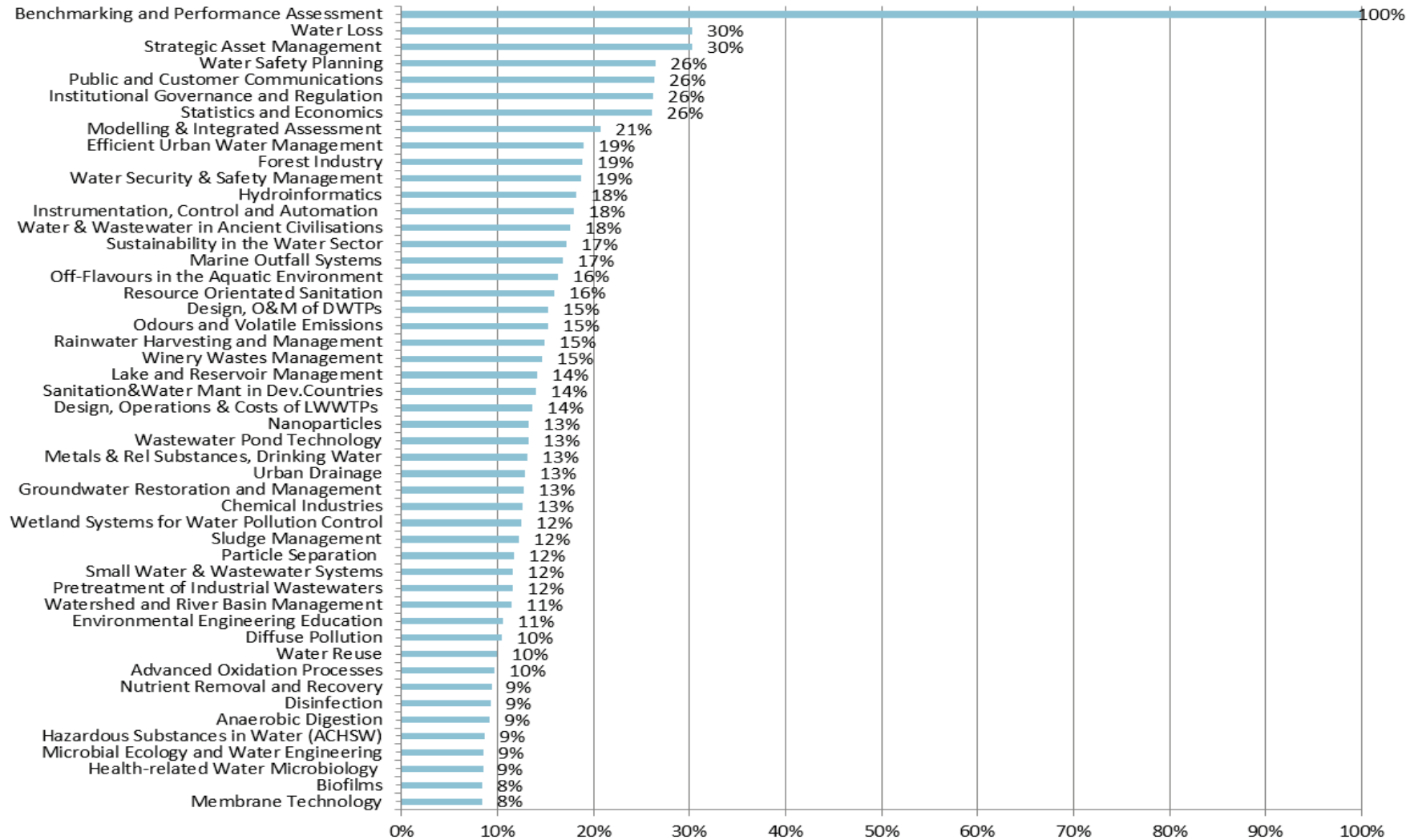


Figure 6. Percentage: members in common vs. members of other SGs