On the 25th anniversary of the membership of the Slovenian Association of Geodesy and Geophysics SZGG in the International Union of Geodesy and Geophysics IUGG

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The Slovenian Association of Geodesy and Geophysics was founded in February 1993. On 26th February, the founding assembly of 46 founders of the SZGG gathered at the Slovenian Academy of Sciences and Arts SAZU. The meeting was also attended by the President of the International Union of Geodesy and Geophysics (IUGG), Acad. Prof. Dr. Helmut Moritz from Austria. So 27 years have passed since the founding assembly.

Then it took another two years for SZGG to be admitted to IUGG. On 3 March 1994, a per-rollam vote unanimously confirmed acceptance of membership, and formally, at the General Assembly in Boulder, on 2 July 1995, the IUGG Council unanimously voted in favor of accepting the SZGG for full membership. So in half a year - in July 2020 - 25 years will have passed since then.

The foundation of IUGG 100 years ago

International integrations in Earth sciences are already quite old. E.g. Alexander von Humboldt coordinated international measurements and observations for the study of magnetism as early as the first decade of the 19 century and after him Karl Friedrich Gauss several decades later. The International Association of Geodesy was founded in 1886. It was mainly due to the needs of maritime transport that meteorology was linked internationally. First the 1872 Conference, then the International Meteorological Congress in Leipzig in 1872, commissioned the Standing Meteorological Committee to prepare the rules and statutes of the International Meteorological Organization (IMO) to facilitate the exchange of weather information across national borders. The task was carried out in Utrecht in 1878, and IMO arose at the International Meteorological Congress, which was held in Rome the following year¹. Seismology established the Permanent Seismological Commission in 1899, which was transformed four years later into the International Seismological Association. In 1900 the Prince of Monaco Albert I organized the Oceanographic Maritime Association. Obviously, the need for international connectivity was more or less recognized by all the sciences studying our planet - Earth. Thus, before World War I, there were international organizations for geodesy, seismology, meteorology (including geomagnetism and geoelectrics) and oceanography (according to EOS 2009, vol. 51, available at http://www.iugg.org/).

Following the end of World War I, scientists from several countries gathered in London and Paris in 1918 to form the International Research Council (Brussels, 1919). It established on 28 July 1919 the International Union of Geodesy and Geophysics (IUGG) as an international non-governmental and non-profit organization - initially with only nine

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¹ IMO was formally transformed 1950 into a United Nations agency - the World Meteorological Organization (WMO).

Member States and six sections for geodesy, seismology, meteorology, terrestrial magnetism and electricity, physical oceanography and volcanology. Three years later, the hydrology section also joined, while the cryosphere section is very young - within IUGG since 2007.

Slovenian Society for Geodesy and Geophysics SZGG

What was the reason for the establishment of the SZGG and what the emmediate cause? There were several:

- Slovenia became an independent state and was joining international organizations, conventions and associations. One of them is the IUGG - International Society for Geodesy and Geophysics².
- Some of the current sections have had their own associations or associations before, but some have not: and instead of setting up their own associations, they have encouraged a more ambitious venture a national body according to the IUGG.
- It was also an immediate cause ...

It appears that the immediate cause for the establishment of the Slovenian Association of Geodesy and Geophysics was the event at the meeting of the European Seismological Commission (ESC) in Prague from 7 to 12 September 1992. A month earlier - on 2 August - the Deputy Director of the Seismological Institute of the Republic of Slovenia dr. Janez Lapajne was invited the by the Secretary General of the ESC to a meeting being appointed national representative of Slovenia - ad hoc, at least for the forthcoming meeting in Prague. At that meeting, however, Greece did not allow Slovenia, Croatia and Macedonia to participate in the work of the ESC Council and vetoed (almost certainly not because of Slovenia or Croatia).

This encouraged dr. Lapajne to look for alternative ways to get involved in international connections. He reviewed the rules of the International Association of Geodesy (IAG) and the International Association of Geodesy and Geophysics (IUGG) and found that it was best for Slovenian geodesy and geophysics to join the IUGG.

He first checked the idea over the phone with several colleagues and decided who to invite to the National Committee initiative. Then, a seismologist, he invited a hydrologist, four geodesist, two geophysicists (in the narrowest sense of the word), a meteorologist, two oceanographers and a volcanologist / geologist to a first meeting of the National Committee of the International Union of Geodesy and Geophysics.

All of the eleven invited could not attend that first meeting on October 1, 1922, but joined later. At the meeting of the Initiative Group on 1 October, three substantive decisions were adopted in addition to discussing how and when to establish the SZGG:

• the Committee should express its scientific and research perspective,

² Yugoslavia was a member from 1924 to 1991 - from the International Handbook of Earthquake & Engineering Seismology, Part 2, p. 1557, office. William H.K. Lee, Hiroo Kanamori, Paul Jennings, Carl Kisslinger

- meteorologists from the University of Ljubljana should also be invited to participate,
- the constituent assembly should show individual activities.

The IUGG was informed by the initiative group and received congratulations from the Secretary-General Georges Balmin (gravimetrist) for its enthusiasm. The Secretry-General also announced that he had informed the then President of IUGG Akad. Prof. Dr. Helmut Moritz, a surveyor from Graz about the initiative. This was a lucky convenience, since the President was pleased to attend the Constituent Assembly in Ljubljana - for example, if being from the other end of the world, it would be harder to attract him.

The Slovenian Association for Geodesy and Geophysics was then founded on February 26, 1993, when 46 founders met at the SZGG Founding Assembly. The meeting was also attended by the President of IUGG Acad. Prof. Dr. Helmut Moritz.

In February 1993, the founding assembly appointed the thirteen founders of the association to register the SZGG in court (finally there were then ten). An executive board was elected, a as well as supervisory board and an honorary tribunal. The assembly also decided that the Executive Committee (except Treasurer) represented the Slovenian National Committee of IUGG.

After the constituent assembly, it was necessary to do this and that. The Executive Board elected the first President of the SZGG - this became the seismologist Dr. Janez Lapajne, then Deputy Director of the Seismological Institute of the Republic of Slovenia³.

On June 29, 1993, the association was registered in the Slovenian Register of Societies, in September it received a bank account and on September 28 it informed the Ministry of Science and Technology that it intended to join IUGG and announced that it hoped that Ministry would be able to pay membership in IUGG (due to small size of SZGG a minimum fee possible - US \$ 1000). In September 1993, the SZGG submitted an application for admission to the IUGG and on 9 March 1994 the President of the IUGG informed it and congratulated that Slovenia had been unanimously per-rollam elected as a member of the IUGG. According to the rules, the IUGG Assembly had yet to vote and on 2 July 1995 the SZGG was formally admitted to the IUGG membership - at the General Assembly in Boulder, USA - already under the new IUGG President Peter J. Wyllie (petrologist).

So let's repeate: 27 years have passed since the founding assembly of the SZGG, and 25 years will have passed since its adoption at the IUGG. Let us also note that at the end of 1995 the SZGG organized its first annual professional meeting on December 5, 1995. Therefore, the annual meetings are celebrating their anniversary as well - this year is the 25th in a row - at the same time as the 25th anniversary of SZGG's admission to IUGG and at 100 IUGG years.

³ Until 1980, the Seismological Service was formally part of the Astronomical Geophysical Observatory AGO at the Faculty of Mathematics and Physics, FMF, which was engaged in astronomy, astrophysics, gravity and seismology.

After joining the IUGG

When it was founded, SZGG had seven sections - just like IUGG then.

Seven presidents have led it so far: 1993-1997 Janez Lapajne, physicist and seizmologist, 1998-2001 Florjan Vodopivec, geodesist and mining engineer, 2002-2006 Mitja Brilly, hydrologist, 2006-2010 Polona Kralj, geologist and volcanologist, 2010-2014 Jože Rakovec, meteorologist, 2014-2018 Rudi Čop, electrical ingeneer and 2018 - Polona Vreča, geologist.

As mentioned: 25 years ago, SZGG also organized its first professional meeting and published its first annual proceedings. This was entirely devoted to the development of some geodetic and geophysical sciences in Slovenia - but not to the volcanology and chemistry of the Earth's interior, geomagnetism and aeronomy (as well as non-cryology - which was only created in IUGG only in 2007). The second volume also had similar content.

At the fourth annual meeting, the annual reports of the sections were presented for the first time, and then volcanology and chemistry of the Earth's interior were presented, at the fifth for the first time aeronomy and geomagnetism, and the research in the cryosphere was first presented later - in the Proceedings of 2011. Next year, when the report on newly established sections for cryology was first presented at the annual meeting, the amendment to the SZGG statute on January 29, 2013 included the missing section - the eighth section for cryology. Since then, SZGG has the same sections as IUGG. But the aeronomy and geomagnetism section did not really live long: e.g. The minutes of the Annual General Meeting in January 2006 note that no one is involved in these areas and this section was "re-established" in January 2009.

The title of honorary member of the SZGG has so far been given to: dr. Janez Lapajne, Prof. Danilo Ravnik, Prof. Helmut Moritz from the University of Graz, Prof. Janko Bleiweis, Prof. Januzs Śledzinski from the University of Warsaw, Prof. Florjan Vodopivec, Prof. Jože Rakovec and Prof. Mitja Brilly.

At the regular Annual General Meeting on December 12, 2002, the then President, Prof. Mitja Brilly announced that the SZGG Executive Board had also adopted the SZGG Award Rules. So far, 17 SZGG awards have been awarded, mostly for successful doctoral theses. At most, 11 were proposed by the hydrological science section, 4 by the geodesy section and 2 by the seismology and physics of the Earth's interior section. Other fields, however, have not nominated their masters and doctorates for SZGG honors.