

150 Years of the International Association of Geodesy



At the invitation of the Prussian general Johann Jacob Baeyer, representatives of the states of Prussia, Austria and Saxony met in Berlin from 24 to 26 April 1862 to discuss Baeyer's 'Proposal for a Central European Arc Measurement' (Entwurf zu einer Mitteleuropäischen Gradmessung). By the end of 1862, 16 nation states had agreed to participate in the project. The IAG regards this international scientific initiative, and the organisation it spawned, as its origin and is therefore celebrating its 150th anniversary this year.

In October 1864, the first 'General Conference of the Representatives to the Central European Arc Measurement' took place in Berlin, which the IAG considers to be its first General Assembly. Baeyer was appointed director of the Central Bureau and Peter

Andreas Hansen appointed president of the Permanent Commission. The project extended rapidly to other European states and consequently the name of the organisation was changed in 1867 to Europäische Gradmessung, and in 1886 to Internationale Erdmessung ('Association Internationale de Géodésie') including the additional member states of Argentina, Chile, Japan, Mexico and USA.

International Cooperation: Some Lessons

The last 150 years span a remarkable historical era, from the mid-19th century – with its social turmoil, national rivalry and endless continental wars – to the present day, characterised by technological wizardry and unprecedented levels of globalisation. That so many countries, in such a short time, pledged to work together is an amazing achievement in itself.

What lessons can be drawn from this enterprise's success? A tentative list:

Strong personalities – contributing through expertise, drive and leadership

Rationale for cooperation – expected benefits included scientific results, engineering and practical outcomes

Well-defined structures – clear objectives, operational and analysis guidelines and a strong Central Bureau were key in the early years Active government involvement – critical early support by governments is mirrored by today's contributions from national mapping/geodetic organisations and space agencies

Range of activities – promotion of 'blue sky' research projects and development of standards and procedures address the needs of multiple stakeholders

Communications – regular reports and conferences encourage networking among scientists and national agencies.

Strong scientific focus – taking advantage of advances in data measurement technology and analysis theory to drive the generation of geodetic outputs of ever improving quality.

Service-oriented – outputs to serve science and society.

Adaptability – of the organisation, its objectives, structures and rules

The Way Forward

After Baeyer died in 1885, his successor, Friedrich Robert Helmert, moved the Central Bureau from Berlin to Potsdam, together with the Geodetic Institute, the predecessor of today's GeoForschungsZentrum (GFZ). The IAG evolved to become part of the International Union of Geodesy and Geophysics (IUGG) after its establishment in 1919 and later, in 1932, the organisation adopted the name 'International Association of Geodesy'.

While much has changed over the decades, the IAG is still strongly promoting increased global collaboration in order to advance the practice and science of geodesy. To celebrate its origins, the IAG will hold its regular quadrennial Scientific Assembly in 2013, between the dates of the foundation and first General Conference of the Mitteleuropäische Gradmessung, in Potsdam and Berlin.

Further Reading

Torge, W.: The International Association of Geodesy 1862 to 1922: from a regional project to Geodesy (78) 558-568, 2005.

https://www.gim-international.com/content/article/150-years-of-the-international-association-of-geodesy