Missions / Status

Creation in 1951 by the International Association of Geodesy (IAG) of the IUGG (International Union in Geophysics and Geodesy)

Mission: Compilation, validation, archiving and redistribution of gravity data

Currents tasks

- **Activities of service**: data collection, validation, distribution (Global gravity databases: Land / Sea, Relative / Absolute)
- **Activities of diffusion** of gravity related information (Newton’s Bulletin, Bibliography database, software…)
- **Contribution to educational activities** (summer schools, tutorials…)
- **Contribution to Research & Development activities** (composition or validation for global or regional gravity models, software developments…)

BGI: an International & national service

- International Gravity Field Service (*IGFS/IAG*)
- Federation of Astronomical and Geophysical Services (*FAGS*)
- Service d’Observation INSU (*OMP*)

New proposal approved in 2007 (IUGG General Assembly, Perugia)
An International Service

IGFS (International Gravity Field Service)
Director Rene Forsberg (Danish National Space Center)

- International Gravimetric Bureau (IGB) - Director S. Bonvalet (IRD-OMP Toulouse, France)
  Collection, archiving and distribution of gravity data

- International Geoid Service (IGeS) - Director R. Barzaghi (POLIMI Milan, Italy)
  Collection and distribution of geoid model, geoid schools

- International Center for Earth Tides (ICET) - Director J-P. Bariot (Université du Pacifique, Tahiti)
  Collection and archiving of global earth tide data

- International Center for Global Earth Models (ICGEM) - Director J. Kusche (GFZ Potsdam, Germany)
  Distribution of satellite and surface spherical harmonic models

- International DEM Service (IDEMS) - Director P. Bany (DeMontfort University, UK)
  Global Digital Terrain Models

Technical Center of the IGFS - chief geodesist S. Kenyon (NGA'S Louis, USA)
Advise on global models, geoid and gravity, supplementing other services

IGFS

Advisory Board
Affiliate scientists

IGB (France)  IGeS (Italy)  ICET (Belgium)  ICGEM (Germany)  IDEMS (UK)

Structure of the IGFS (International Gravity Field Service) – Last update July 2007

FAGS (Federation of Astronomical and Geophysical Data Analysis Service)
President: N. Capitaine (International Astronomical Union)

- International Earth Rotation and Reference Systems Service (IERS)
- Bureau Gravimétrique International (BGI)
- International GNSS Service (IGS)
- International Center for Earth Tides (ICET)
- Permanent Service for Mean Sea Level (PSMSL)
- International Service of Geomagnetic Indices (ISGI)
- Quarterly Bulletin of Solar Activity (QBSA)
- International Space Environment Service (ISES)
- World Glacier Monitoring Service (WGMS)
- Centre de Données Astronomiques de Strasbourg (CDS)
- Solar Influences Data Analysis Center (SIDC)
- International VLBI Service for Geodesy and Astronomy (IVS)
International Gravimetric Bureau

Supporting national organizations

BRGM  Bureau de Recherches Géologiques et Minières
CNES  Centre National d’Etudes Spatiales
CNRS/INSU  Centre National de Recherche Scientifique / Institut National des Sciences de l’Univers
EOST  Ecole et Observatoire des Sciences de la Terre
ESGT  Ecole Supérieure des Géomètres et Topographes
IFREMER  Institut Français de Recherche pour l’Exploitation de la Mer
IGN  Institut Géographique National
IPGP  Institut de Physique du Globe de Paris
IRD  Institut de Recherche pour le Développement
SHOM  Service Hydrographique et Océanographique de la Marine
UM2/GM  Université Montpellier 2 / Geosciences Montpellier
OMP  Observatoire Midi-Pyrénées

Agreement 2007-2011: Definition of tasks and supports / Coordinating Committee

New contribution: Bundesamt für Kartographie und Geodäsie, Germany
On going projects (initiated in 2007)

Absolute Gravity database
- In collaboration with BKG Germany
- New global data base of Absolute measurements
- Google interface (access to metadata or raw data)

World Gravity Map (WGM) project
- In collaboration with CCGM (http://ccgm.free.fr)
- Contribution to Global Geological / Geophysical Maps
- Research/Educative purposes (digital map & grids, booklet)
- Integration of all terrestrial & marine data (request of new data sets to improve the BGI database)
- Integration of Satellite based products (EGM08, DNSC07…)
- Supports : IAG/IGFS, UNESCO, NGA…

New internet services
- New BGI web site (harmonization within IGFS/FAGS services…)
- Ease data access : direct download of gravity data and products
- Interoperability functionalities with other global & national gravity databases
BGI Staff (renewed in 2007)

Observatoire Midi-Pyrénées, Toulouse

Sylvain Bonvalot, Director of BGI .......................... 50%
Geophysicist, IRD France

Anne Briais, Deputy Director .................................. 50%
Marine Geophysicist, CNRS France

Nicole Lestieu, Secretary ........................................ 20%
CNRS France

Richard Biancale .................................................. 10%
Space geodesy, CNES France

Thierry Fayard, Software developer ......................... 75%
CNES France

Frank Reinquin, Database manager, Software developer .... 75%
CNES France

Hartmut Wziontek, Database manager, Software developer ...... 10%
BKG Germany