The mission of IAG Commission 3 on Earth Rotation and Geodynamics, whose President is Michael Bevis of the USA, is to gain greater understanding of the rotational and geodynamical motion of the Earth by fostering and encouraging research in these areas. Commission 3 accomplishes its mission through the activities of its Sub-Commissions, Inter-Commission Projects, and Inter-Commission Study Groups. The four Sub-Commissions of Commission 3 are: (1) SC 3.1 on Earth Rotation and Earth Tides whose President is Gerhard Jentzsch of Germany, (2) SC 3.2 on Tectonic Deformation whose President is Markku Poutanen of Finland, (3) SC 3.3 on Geophysical Fluids whose President is Aleksander Brzezinski of Poland, and (4) SC3.4 on Cryospheric Change and Earth Deformation whose President is James Davis of the USA. The two Inter-Commission Projects in which Commission 3 participates are: (1) IC-P3.1 on the Global Geodynamics Project (GGP) that is joint with IAG Commission 2 and whose Chair is David Crossley of the USA, and (2) IC-P3.2 on the Working group of European Geoscientists for the Establishment of Networks for Earth science Research (WEGENER) that is joint with Commission 1 and whose Chair is Susanna Zerbini of Italy. The two Inter-Commission Study Groups in which Commission 3 participates are: (1) IC-SC6 on InSAR for Tectonophysics whose Chair is Masato Furuya of Japan, and (2) IC-SG7 on Temporal Variations of Deformation and Gravity whose Chair is Detlef Wolf of Germany. A report of the activities during 2007-2011 of IAG Commission 3 will be presented.