

Japanese laws amended, allowing use of WGS in mapping and charting

A bill on amendments to the Japanese "Survey Law" and "Law for Hydrographic Activities" had been submitted to the National Diet in order to change the geodetic datum from the Tokyo Datum (TD) to the world geodetic system (WGS). The bill was passed at the plenary session of the House of Councillors on 30 May and the House of Representatives on 8 June, respectively, and finally adopted by the 151 session of the Diet held on 12 June 2001.

The Tokyo Datum (TD), a prevalent local datum established in 1870s and applicable only in and around Japan, had long been traditionally used in mapping and nautical charting in Japan. In recent years, however, WGS has become popular particularly in navigation with the proliferation of GPS. In the meantime, the revised SOLAS Chapter V will soon bring in a new mandatory requirement for automatic identification systems (AIS), and the ship's positions applied in this system AIS will also be based on WGS. It is known that there is a considerable difference of about 400 to 500 metres between the positions based on TD and on WGS. Such being the case, it was considered necessary that the geodetic datum adopted on Japanese nautical charts published by the Japan Coast Guard (JCG) should be transferred from TD to a global standard positional reference frame WGS.

The Japan Coast Guard (JCG) currently publishes a total of about 600 different nautical charts to cover the areas in and around Japan. Since April 2000, JCG has started a two-year programme to transfer those JCG charts from the Tokyo Datum (TD) to WGS-84 Datum, and about 200 charts covering Tokyo Wan, Ise Wan, Seto Naikai and other certain areas were already converted into those based on WGS before March 2001. Taking into account the rapid proliferation of GPS nowadays, the other 400 charts based on TD are scheduled to be converted into those on WGS by March 2002, when the programme will be completed. In order to minimize disruption to users of Japanese charts during their transitional period and to distinguish them easily, the land tinting of the chart has also been changed from "buff" used for the TD charts to "grey" for the WGS charts.