HOW DID THE GEODESISTS CHANGE THE TAX POLICIES?

KAKO SU GEODETI PROMIJENILI POREZNU POLITIKU?

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The needs of the kings and their close government officials determined the tax policy in the middle Ages. To satisfy their desires, two different measures for the length and weights were used regarding the tax and trade relations. Landlords were allowed to determine the volume (hollow size) or weight in which you were subject to the tax. Added to this was the volume measurements, whether they should be measured in heaped (in bulk) or as just streaked from the edge. In trade relations with neighboring countries, they chose smaller dimensions than in the tax levy for the population when cereals or fruits were eligible for exchange, sale or tax levy.

Over time, length measurement, which was indispensable due to the taxation of agricultural, commercial and construction areas (especially because frequently changing ownership), became more important. This is how the origin of the modern multipurpose cadastral concept originated in Europe in the 8th and 9th centuries for tax purposes by dividing the parcels of land according to their type of use (Barr, 1983). The geodesists were the first to advocate a uniform measurement system in Europe and elsewhere in order to implement an internationally valid information concept for the volume, weight and length that corresponds to the real facts.

On March 26, 1791, the National Convention in France temporarily determined the meter as the legal unit of length as the ten millionth part of the length of an earth meridian between the North Pole and the equator. The Ar for the area, the Ster (1 m^3) as the spatial dimension for layered firewood, the liter for the volume and the gram for the weight were selected as further units. One gram corresponded to the mass of 1 cm^3 of pure water at the freezing point (Trapp, 1992).

This metric measurement system was introduced by law on April 7, 1795 in France. The first prototype of the meter was a line scale made of platinum (mètre provisoire). A kilogram piece was produced as a prototype for the weight unit. After completing the calculations of the degree measurements, the law of December 10, 1799 determined the final meter length (mètre vrai et définitive) with 443,296 Parisian lines of the Toise de Pérou. Subsequent reviews of the results of the French degree measurement revealed that the Earth's body is not rigid (deformable Earth's body). This led to the use of the physical quantities when determining the unit of length.

In 1867, the members of the second general conference of the European degree measurement (forerunner organization of the IAG - International Association for Geodesy) decided in Berlin that in the interest of science and especially geodesy in Europe a uniform system of weights and measures with decimal division should be introduced. The conference also recommended the establishment of a European office for measurement and weight (Trapp, 1992).

After a corresponding period of preparation, the international meter convention was then founded, the first meeting of which took place on August 8, 1870 in Paris. At the conference, the decision was taken to establish a permanent international committee for weights and measures to complete new prototypes for the meter and kilogram. The first general conference for measure and weight met in 1889, where the delegates from the signatory states defined the new prototypes for the meter and the kilogram. Some rtslons of the prototypes were also distributed by lot to the member states.

At the 11th General Conference on Weights and Measures in 1960 the name of the commission was changed to the International System of Units (Système International d'Unités) - SI - and an overall regulation for the units in the measuring system was introduced. Thus, for the princes and their successors, the possibility of using different measures for tax revenues was lost, even if the geodesists took a long time to do so.

Thank you dear geodesists for your contribution to a fairer tax policy.

References

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Who is a geodesist?

A geodesist uses different geometries to represent the figures, infrastructures, constructions on the geosphere or realities on the biosphere of the Earth. He calculates, but neither exceeds nor falls below the established confidence limit. He determines the errors that arises and distributes them in an acceptable fair manner. These qualities are more the character traits of a virtuous person than of a profession and is not be comparable with any other job.
In addition, a geodesist or a cartographer is an extremely humble person who instead of displaying their product above average, they even downsize it in millions of times.

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