



## **The detailed seismic zoning of Ukrainian southwest region**

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The actuality of the detailed seismic zoning studies is due to the necessity of the scientifically grounded estimation of seismic hazard for the territory of Ukraine for the purpose of its rational and safe use. The calculation results are shown on 3 maps with the scale of 1:1000000 for the recurrence periods of 100, 500 and 1000 years. Equally probable estimations of seismic intensity concussions are given within the limits of one map. During the next 50 years the probabilities  $P$  of the non-exceeding of the calculation seismic degree 40%, 10% and 5%, respectively, correspond to the above recurrence periods. For big cities such as Odessa and Ishmael, the calculation intensity is given for the last 200 years. On the detailed seismic zoning map with the recurrence period of  $T=100$  years the southwest region of Ukraine is referred to the area with  $I=7$  degree. Such cities and towns as Ishmael, Reni, Bolgrad, Kilia, Vilkovo and others are also in this area. This map can be used only for the construction of non-living accommodations with a small term of their destruction doesn't make any ecological harm to the population. The map with the recurrence period of  $T=500$  years is recommended by the international association as the basic one for mass civil and industrial construction. The calculations made using new methods and recent data have shown that the degree of seismic hazard of the southwest area of Ukraine is much higher than that envisaged by the normative documents currently in force.