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## TOPOGEODESIC SUPPORT OF THE ARMED FORCES OF THE REPUBLIC OF KAZAKHSTAN

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Topogeodesic support is one of the main types of ensuring the effective development of the economy, strengthening the defense and security of the country and is a set of management, production, scientific and educational measures to create, store and bring to consumers state geodetic data and state topographic maps on the territory and zones of economic interests of the Republic of Kazakhstan.

The creation and use of cartographic and geodetic data is one of the most important factors contributing to the solution of key tasks of the state policy of the Republic of Kazakhstan, in particular, the creation of new high-performance jobs, increasing the share of high-tech and knowledge-intensive industries in the gross domestic product and increasing labor productivity.

Currently, topogeodesic support of the Armed Forces includes: creation, accumulation, updating of stocks of topographic maps, catalogues of geodesic and gravimetric points, bringing them to the troops; production of digital and electronic maps for automated control systems of troops (forces) and weapons; preparation of geodesic basis for providing missile launches, aviation flights, artillery firing and combat use of radio-technical complexes for various purposes; production of special maps, photographic documents of the area, combat graphic documents and other means of topogeodesic information; performance of geodesic, topographic and cartographic works in the interests of military infrastructure. Practice survey support in modern conditions is determined by a number of key provisions, which establish the connection between the development of weapons and content survey support, including the necessary it costs. Thus, the availability of geospatial information is a prerequisite for the functioning of control, intelligence, navigation, and targeting systems based on the latest information technologies.

Operational (combat) documents are documents related to the preparation and conduct of operations (combat operations), regrouping of troops or their location on the spot. Operational (combat) documents can be text, graphic, or tabular.

When developing operational (combat) documents, the following requirements must be met: develop only documents necessary for practical use in the combat management of troops; their content must be concise, clear, precise, not allowing for double interpretation, excluding General theoretical, well-known provisions; the structure and form of documents should be simple, clear and easy to work with, the volume - optimally short, but at the same time revealing all the really necessary content, which is achieved by using unification methods, formalized forms, abbreviated terms and phrases.

Graphic documents must be visual, meet the requirements of automated processing systems, provide the ability to quickly reproduce and bring (transfer) to the performers, the situation displayed on them and all elements of the solution must be clearly drawn, without excessive coloring and detail, without clogging the topographic basis of the map.

## List of sources used

- 1. Map Generalization: Making Rules for Knowledge Representation. (1991). Buttenfield B.P. and McMaster R.B. (1991) Eds., Longman Scientific and Technical, London, 1991.
- 2. Abstracting geographic Information in a Data Rich World. Methodologies and Applications of Map Generalisation (2014). (Burghardt D, Duchêne C., Mackaness W. eds). Springer. Cécile Springer International Publishing Switzerland 2014. 412 p.
- 3. Bugaevsky, Л.М. Mathematical cartography. Textbook. M .: Zlatoust. 1998. 400 р.
- 4. Kuroshev, G.D. Topography. Textbook. M.: Academy. 2011 .-- 192 s.
- 5. Atoyan L.V. Computer Cartography: Lecture Course. Minsk .: BSU, 2004. 77 p.