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Legal entropy in cybersecurity: a systematic method of aerospace monitoring

The legal entropy in modern cybersecurity is considered. Such a socially-legal phenomenon normatively determines a qualitatively new state of the individual, state and society in the process of its self-determination, procedurally provides fundamental knowledge in the system of special-legal sciences. It is assumed that the method of dispersion analysis in the aerospace communication system plays a special role.

In modern conditions of instability, when international life is characterized by globally economic and socio-political changes, the right appears as a specific form of social being, passes into a new qualitative state. It is in the system of regulating legal relations, as manifestations of a different level of uncertainty, chance, probability, entropic processes. Such an influence of entropic processes is possible only under condition of knowledge of the laws of these processes, their features, and this requires a special study of the essence and content of legal entropy. After all, the legal entropy is an objective and natural phenomenon, it enables us to better understand the essence, structure and dynamics of both specific legal systems and the legal system as a whole.

In addition, knowledge of legal entropy allows not only to understand the features of self-organization and self-government of legal system entities, but also to develop new approaches, methods for their implementation, in particular in the aerospace industry. It is the legal entropy, as the cumulative fundamental matrix of the social and legal phenomenon, that creates a conceptual theoretical model of the optimal development of legal systems in the process of their self-organization and self-determination at the level of the individual, state and society.

To study the space information system, which includes such a synonymous series as: universal planetaryity, the Universe, Nature, it is necessary to have a holistic fundamental knowledge in metaphysical and radiophysical directions of scientific knowledge, as well as by appropriate methods of mathematical modeling.

Under these conditions, it is permissible that the dispersive analysis of the results of mental observations plays a special role in the modern conditions of globalization changes in the space information system, one of the structural components of which is the earth's surface: social cataclysms and shocks, waves of migration crisis, as well as ecological and financial- economic crisis.

In this case, the universe, as a space information system, integrally reflects the dualistic nature of the evolutionary development of the respective civilizations. So, for example, the earthly civilization makes a pairwise parallel "similar" civilization in the harmonious sense of the Universe (living Nature).

As a researched factor, it is necessary to take a certain volume of exploratory fluid in the vital terrestrial world, which has a deformation property, as well as:

porosity, extraction coefficient, saturation, piezoconductivity, permeability, filtration coefficient of geological and geophysical properties of rocks, since time and space do not have power.

Since the approximation error is not accidental, but systemic, its effect on the accuracy of calculations of a certain volume of exploratory fluid in places (regions, zones) of social instability as conflict factors. In this section, as a local survey, one can take the ATO zone located in the Donbass.

Technogenic geodynamics

Time shows that all modern local conflicts occur in places of oil, gas, coal, etc. as technogenic geodynamics in the system of risk.

In this aspect, the correctness of determining the geometric parameters of the reservoir (causative agent, generator, amplifier of the conflict zone, etc.) in direct dependence are such components of technogenic geodynamics as the volume of compression (decompression) of the pore space, the total volume by growth (decrease) of the conflict zone as a productive life collector in which the earth's surface settles and deforms. Neglecting the error in determining the geometric parameters of the conflict zone (collector of life), one can obtain a distorted representation based on the results of modeling the stress-strain state, in particular, the conflict zone in the Donbas as a generative basis of vital activity, rocks, its host, subsidence and deformations of the earth's surface above the natural deposit in space information system.

The formula for calculating the volume of the exploratory fluid as the corresponding dependence of the human creative resource on natural deposits can be expressed in this form:

$$V_{exp.f.} = \left(k^2 - \frac{k^3}{3}\right) \pi a_n b_n c_n, \quad (1)$$

a_n, b_n – semiaxes of the ellipsoid, by which the area of the trap is approximated (localized location);

c_n – height of the trap;

k – the trap filling ratio, that is, the ratio of the height (power of the electromagnetic waves) to the height (power) of the trap (zone, section, sector).

Thus, if the localized place is close in shape to the half-ellipsoid, then the volume of the reservoir (exciter in the ATO zone) must be calculated according to the formula. But in practice there are cases when, for various reasons, the zone of the conflict itself is approximated by the semi-ellipsoid, the human factor (resource, potential, capital) and its volume are calculated as the volume of the half-ellipsoid by the formula:

$$V_{exp.f.} = \frac{2}{3} \pi a_k b_k c_k \quad (2)$$

a_k, b_k – semiaxis of the ellipsoid, which approximates the area of the exciter in the ATO zone;

c_k – power of electromagnetic waves in a localized location.

Therefore, the approximation error (m_v), arises, which is expressed by the following formula with the help of the fill factor of the trap (conflict zone):

$$m_v = \frac{1-k}{3-k} \cdot 100\%, \quad (3)$$

m_v – the error in the volume of the place of the local conflict (trap), arises from the approximation of its half-ellipsoid, %;

k – fill-factor of the trap.

This error has a systematic character and constantly leads to an overestimation of the volume. For this, it is necessary to take for the half-ellipsoid not the causative agent of a life-threatening conflict, but the very zone of a local conflict and calculate the volume by the formula (1).

Consequently, the proposed method for the use in the space information system of the method of dispersion analysis of the results of mental observations, in particular in the ATO zone in the Donbass as a geodynamic range, together with the parameters of the corresponding field, can to some extent optimize the effectiveness of the influence of the geopolitical and economic interests of the individual and the ethnic group in contemporary globalization changes due to technogenic geodynamics. It is precisely this deformation of the earth's surface for the arrangement of fields in which there is a local conflict, is an aggregate matrix of both dualism of the earth and "unearthly" (like) civilizations in the space information system.

Infoglobalization as a manifestation of modern innovation trends

The development of modern infoglobalistics in the space system is associated with the identification of innovative trends in the development of the information society. The current state characterizes the information society as a cosmic model of social development, which causes the emergence of such innovations that meet the traditions, norms, cultural characteristics of the spiritual capital of wisdom at the level of different countries.

In this sense, the emergence of an information society as a concept (Masuda), the theory of network society (M. Castells, P. Druner), the electronic society, the third wave society (A. Toffler), the post-industrial society (D. Bell) was characterized by the development of universal universal models of society. Asian, European, American models of the space information system was associated with the practical realization of the main features of the information society American model of the system.

It should be noted that today is the integration of television, radio, mobile communications, with the Internet as a single space system. It characterizes the development of media civilizations, which opens the space for space information technology. In fact, informology continues as a comprehensive cosmic phenomenon in various spheres of social, managerial and corporate activities. All this creates the preconditions for overcoming the technological discrepancy that existed previously between the media sphere and the information sphere. At the same time, the need to create appropriate infrastructures and space environments that correspond to the modern world level of development of spiritual capital in education, science and education, which brings a new way of innovation.

Thus, the present stage of the development of infoglobalization, which requires the growth of the local features of the formation of the information society in the space system of different countries, determines the urgency of the transition from non-systemic implementation of information technologies in different spheres to the institutional development of the information society. Therefore, today it is necessary to move from quantitative growth to qualitative transformation, which involves the development of social institutions of the information society - information power. This is a qualitatively new stage of rethinking in innovative thinking (emotional intelligence), accelerated by the need for information warfare, cybersecurity and economic competitiveness.

It also means the need to develop theoretical models and pilot projects, such as the integration of science and practice in the space system, characterized by rapid changes in the implementation of technological innovations and their chaotic expansion in various spheres of public life. Such a fractal (fractional) structure has macrocosms (star clusters, galaxies, universe) and microcosms (necessary macromolecules, human genome, DNA structure, water, light, sound, electromagnetic waves, etc.) in a single space information system.

Conclusions

Asserts that legal entropy procedurally provides the fundamental knowledge in the system of special-law sciences as an optimum in society. It is shown that all modern local conflicts take place in places of natural deposits of oil, gas, coal, etc. as man-made geodynamics in the risk system. After all, the new modern stage of the individual, state and society characterizes infoglobalization in the cosmic system as a manifestation of modern innovation trends from the review of categorical measurement of legal entropy. This corresponds, first of all, to the mental features of the wisdom of the peoples of the world.

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