

DANGER - A SUBJECTIVE EVALUATION OF OBJECTIVE REALITY

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Abstract: The article is devoted to the ground of term «danger». Existent today numerous determinations of this term substantially differentiate on sense and are not general. In the article, taking logical and philosophical approaches, a new determination of this term is formulated. That was basic pre-condition, that danger, as well as safety, are notions subjective, which can change because of practical activity of man, development of science and society. These notions ascend to notions well and it is badly, which can be perceive even at an instinctive level. The decision of question of formulation of base terms is of not only interest from point of theoretical science, but it has an important practical aspect. In history there are the enough examples of good actions, including directed on the rise of safety, which turned around, farther more, by the calamities, catastrophes and etc.

The new definition of "danger" is as follows: danger - a subjective concept that refers to the possibility of circumstances in which the matter field, information, energy, or a combination thereof may affect the way a complex system, it would lead to consequences that are perceived and valued stakeholders (at the level of thinking, feeling or instincts) at a certain stage of development of the perceiver as negative until after the implementation of the risk or occurrence of adverse effects.

Keywords: Danger. Determinations. Circumstances.

1 INTRODUCTION

To this day, scientific and educational environment, which deals with security, have a free interpretation of the fundamental terms "risk", "security", and as a consequence many derived from them. Lack of a common science-based terminology is not only and not so much to prevent the extensive development of the science of security in general, and human security and human (science of security) in particular, but also promotes the wrong approach to the solution of a number of theoretical and practical issues of security.

The need to streamline and rationale used in security terms acute with the development of many fields of research in the field of security: international, political, environmental, human, social and technical systems, information, business and the like. The terms "risk", "risk", "security", and especially "life safety" are increasingly used by politicians, environmentalists, economists.

The analysis shows that today's society, science and practice use the dozens of interpretations of any term in the security industry. Often, these definitions are wrong on the approaches used, are private, and not general in nature and related to specific areas of science and technology and society, making the impossibility of unification and the creation of a unified system of terminology in the security industry. As a result, in the legislative, regulatory documents, dictionaries, scientific and educational literature used dozens of interpretations of the same term.

Question the validity of the terms and wording of the risk, security, and their derivatives are not just important - it's a matter of understanding the problem, the issue of protection from the risk strategy and to achieve security.

A detailed analysis of the most widely used definitions of the term "risk" has given the

opportunity to identify existing deficiencies and, based on using logical and philosophical approaches have a new definition of the term. The basic premise was that the hazard as security, are a subjective concept that may change as a result of practice, the development of science and society.

The issue of formulating the basic terms is not only interesting from the point of view of theoretical science, but it has an important practical aspect. Throughout history has many examples of good actions, including those aimed at improving the safety who turned around later, disasters and catastrophes.

2 THE FORMULATION OF THE TERM "DANGER"

The basic notion of all the terms and definitions in the security industry is the concept of "danger". After all, talk about human security, any object or system without terms of danger is impossible. The danger is a fundamental term of all science of security and safety.

A number of authors, determining the term "danger", justified it as a certain characteristic of one or other external factors. In particular S.V. Belov and others [1, 2] defines danger as a negative property of living or non-living matter, which could cause loss of matter itself: people, environment and material value. Following this definition, we must recognize that in every element of nature has some negative property. However, whether the drop of water, sand, flower have negative property? And here we are faced with a dilemma because on first sight any danger, for example, from the flower can not be, but then remember the many poisonous plants, and thus come to the conclusion that in some cases there may be a danger. But whether we are talking at the same time about the negative properties of matter of the same poisonous flower?

Of course not, because in certain circumstances it may even be beneficial, such as medicines or as an object of aesthetic pleasure, etc. Come take another example - flooding. What in this situation is the danger? Water? No, the water itself is not serious danger, the danger is many of water on the certain territory. Thus, in the water, we also find no negative properties.

Perhaps the author of the formulation of this thesis was referring to potential adverse properties of matter and objects, in this case, these potential negative properties must be objective and be an integral part of every object of the universe. But nothing like we have not seen. The danger is not the result of internal negative potential of the environment. Thus, talking about the negative properties, much less about the aggressiveness of a subject is pointless. Using the formulation of danger as the negative characteristics of the living or non-living matter, the person opposes himself against nature.

Sergey Belov believes that the danger is common to all systems that have the energy, chemical, biological, or other components that are not compatible with human life. At first glance, this definition seems quite convincing. However, it should be rephrased basis of the above, namely, that the danger may have all systems that have the energy, chemical and biological components. Actually except of the information all material objects up to an electron or even smaller particles have energies. So the dangerous is potentially any material object in the universe. Dangerous except of matter can also be a field and information - the latter does not have the energy or chemical or biological components. This leads to the conclusion that, first, the danger is not a property of objects or systems, it can result from their actions, and other output - can be dangerous not only material objects, but also information and field.

Third point, which is to find out what the author meant by the words "... incompatible with the life of man». If you use the argument that the danger can threaten only human, so it is a subjective concept. Then the question arises whether it is possible to speak of the danger to anything but human. Naturally this concept is used not only for the person, but also for technical systems, the environment, etc. Therefore, the use of the phrase "... incompatible with the life of man" in the formulation of danger would be too narrow. Besides it is necessary to justify what is a proper human life, and what is meant by incompatible with her influences.

Yaroshevskaya V. M. et al [3] in the formulation of the term "danger" except of the concept of incompatibility also introduced the concept of adverse human factor that is much more correct. In formulating these dangers authors started from the

concept of influence. As a result, the concept of "danger" is defined as an event or adverse effects on human or even incompatible with life factors.

Šimák L., Horáček J., Novák L., Németh L., Míka V. formulate the definition of danger: "Danger: The Hidden property of the system or its components, which can cause unexpected negative developments that violate security, threaten the stability and functioning of the system, and possibly its environment" [4, 5]. This definition is in some features similar to the definition given Belov S.V., because the authors in determining the danger use the thesis of hidden properties of system or its components, but they do not talk about the negative characteristics, but the property itself, which is quite acceptable. Each system has a number of properties inherent to it is that it is characterized. Depending on the characteristics of the system properties, it interacts with the environment, as well as undergoing internal changes. These properties or property may be obvious and hidden until a certain time, because the thesis of the hidden properties used by the authors would have extended to all properties (explicit and implicit). From the definition should be excluded thesis unexpected manifestations, because quite a number of hazards anticipated, and some just expected. Excluded from this definition as the thesis of the breach of security, as illogical to formulate a basic definition, which is the danger of using the derivative, which is the term in relation to the security. Consequence of the danger registered authors satisfactorily. This definition would benefit greatly if the stability and functioning of the added development. We will return to this point later.

Pistun I.P. [6] in the formulation of the term "danger" is not just talking about a phenomenon or effect, but also the specific conditions under which they operate. The term "danger", according to his definition, - the central concept of life safety, which combines phenomena, processes, objects that can in certain circumstances cause damage to human health. The disadvantage of this definition is the "fuzziness" of the concept, since the author has included in the definition of processes, phenomena and objects. This indicates a few liberties with the language. According to the Dictionary of Russian S.I. Ozhegov and N. Shvedova object is "... that which exists outside us and independently of our consciousness, the phenomenon of the external world». The second definition of the object: "The phenomenon, the subject of which is aimed at someone's work, someone's attention". [7] The phenomenon, according to the same dictionary - "manifestation or expression of essence, what she found. In general, any detectable manifestation of something." The process as defined in the same dictionary, "the course, the development of some

phenomenon, a succession of states in the development of something».

Thus, based on the definition of danger, which is formulated by Pistun I.P. is not clear what is, after all, the danger - the subject or process, that agree is principle point. This definition has the same drawback as the definition of S.V. Belov, since the author formulates the danger through the possibility of "cause damage to human health," thus eliminating not only the technical, biological, and other systems, but also significantly curtailing impact on the livelihoods person, limited only by his health.

As for the term "certain conditions" which used Pistun I.P., its use without additional interpretation does not allow to understand will develop or not these terms and what they actually mean. That is why the formulation of the term "danger" to introduce the concept of the possibility and / or the reliability of the onset of these conditions. After all danger - an action that has not happened yet, but it may happen in the near or distant future, or not implemented at all. The danger is only a possibility (probability) influence on a person or a particular system. About in this context formulate a definition of danger in modern dictionaries, some editions of scientific literature.

In Big Dictionary of modern Ukrainian language, the term "danger" is treated as an opportunity to some trouble, misfortune, a disaster, harm, and the like. Figuratively - a condition where someone or something is being threatened. [8] In practice, the same wording find in the explanatory dictionary of the Russian language S.I. Ozhegov and N. Shvedova [9] - a possibility threat of something very bad, some misfortune. The adjective "dangerous" - one that is able to cause, any harm, misfortune.

Lipcan A.V. [10] in the textbook science of security ("Bezpekoznavstvo" in Ukrainian, approx.'s) Gives the following definition of danger - this is possible or actual phenomena, events and processes that can harm a person, social group, people, society, the state, the planet or even destroy them, to harm their well-being, to destroy the material, spiritual or natural values, degrade, close the road to development. This definition first cumbersome. Lipcan A.V. when formulating did the same thing as Pistun A.R. while introducing the concept of phenomena, events and processes. Event in accordance with the wording contained in the dictionary of the Russian language S.I. Ozhegova and N.Y. Shvedova - "... what happened, or other significant event, the fact that public and private life.

"Thus, the definition of the concept of nature is present, the process and complete the process (the event), which further blurs the concept of danger. Use in determining the possibility and reality can not tell what is the danger - is performed or completed action or possible occurrence of such. By the

formulation of the concept of risk includes not only the person as an individual and his life, but also a social group, people, society, the state, the planet. He says he is not just about the negative effects and degradation, destruction, destruction of property, termination of development, thus significantly expanding the investigation to the danger of the threat level. However, the question is whether the author takes into account all the manifestations of danger, would it not be an exception error of biological, technical, and other systems. Restricting what or systems narrows the concept of danger.

The dictionary reference to life safety Karmazinov F.V, Rusak O.N, Grebennikov S.F, Osevkova V.N [11] hazard is defined as a situation (in the nature or the technosphere), which may cause events or processes that are able to infect humans, cause material damage, destroy the environment of man. This definition differs from the previous ones, because it determines the danger is not a phenomenon, object or process, but as the situation. Actually, the situation has to be understood as "the totality of the circumstances, the situation of the situation," according to the dictionary, S.I. Ozhegova and N.Y. Shvedova, or as "the situation, the situation is created in the result of a combination of circumstances," according to the dictionary Ephraim T.F. [12] or the "totality of the circumstances," according to the dictionary S.I. Ozhegov. The concept of danger is thus transferred from the material objects, and the field of information on a system that includes the aforementioned components. Actually, such a system should also include and the victim. As a result, the term refers to the circumstances of danger is, that is, the relationship and interaction, not just the objects themselves, the field of energy or information.

Zhelibo E.P., Zaveruha N.M., V.V. Zatsarny [13] in determining the danger of adding more to the situation and conditions. In their work they give several determination of dangers. One definition of these authors borrow from S.V. Belov several expanding it: "Danger - negative property of living and non-living matter capable of causing damage to the fabric of: people, environment, and material values». The second is stated as follows: "Danger - this is a condition or situation that exists in the environment and can lead to undesirable release of energy, which can cause physical harm, injury and / or damage».

Considering this definition, we determine first whether you want to be entered in a specific situation, except for another condition.

Condition, according to the dictionary, S.I. Ozhegova and N.Y. Shvedova means: "The circumstances by which exist in which there is something». Comparing this with the definition of

the situation, we conclude that the meanings are very close. Because in the definition would be sufficient to one, in principle, any of these terms. Recalling in danger suggested by these authors, significantly narrows the concept of danger, limiting its release of energy. Do not forget that danger may also be information functionality that is not directly related to the release of energy. They also narrowed the results of the danger - limiting the definition in the first matter, in particular people, the natural environment, objects, and the second physical harm, injury and damage. What Zhelibo E.P. and others used in their work are two definitions indicating significant problems with the formulation of the term danger.

The precise formulation of risk requires one parameter, namely the definition - the ability to influence what exactly is the danger. For the formulation of this concept the authors, as already mentioned, different approaches, present some variants of the ones mentioned above definitions:

- damages of matter itself: people, environment and material value. (Sergey Belov and others)
- negative manifestations. Breach of security threat to the stability and functioning of the system, and possibly its environment. (Šimák L., Horáček J., Novák L., Németh L., Míka V.)
- damages to human health. (Pistun I.P)
- defeat people, causing property damage, the destruction of the human environment. (Karmazinov F.V, Rusak O.N, Grebennikov S.F, Osevkov V.N)
- trouble, misfortune, some catastrophe, damage, etc.
- cause harm to a person, social group, people, society, the state, the planet, or even destroy them, damage their well-being, the destruction of material, spiritual or natural materials, the occurrence of degradation, sing the road to development. (Lipcan A.V.)
- unwanted release of energy, which may result in physical harm, injury and / or damage. (Zhelibo E.P., Zaveruha N.M., Zatsarny V.V)

None of these statements can not be used successfully in scientific theory and practice, because such definitions require additional parameters, for example, specify what kind of "some catastrophe," or what is meant by a loss of matter itself, because the matter does not disappear, it just converted from one form to another, as becomes a mountain in the sand on the wind. In order to generalize the influence of dangerous consequences appropriate to use the term "negative impact which partly entered in its definition Šimák L., Horáček J., Novák L., Németh L., Míka V. The concepts of negative and negatory most common, and combine all of the above formulation of the negative impact, damage, disaster, etc. In Russian, the two words are

used interchangeably. [14] Choosing from two similar terms "negative" and "negatory" in the dictionary, we use the definitions of S.I. Ozhegova and N.Y. Shvedova "Negative - the same as the negatory". From the German or French negativ (négatif), comes from the Latin. Negative - contains a denial, rejecting anything. Have poor characteristics, qualities. In mathematics: is the value taken from the "minus" (-), less than zero. Tracing the Latin scientific term negativus, compare Latin negativus 'denies, rejects'".

Widespread use of the term negative in other languages gives it a particular priority in the use. However, for a more convincing, consider the use of these terms in other languages, in particular, in Ukrainian. Here synonymous negative (negative, in Ukrainian. Approx.'s) Also have a negative word (*vid'emny*, in Ukrainian. Approx.'s) Are more explanatory dictionary of the Ukrainian language [15] gives a definition of the concept of "negative": "Bad to the properties, characteristics, destination, etc., which is not approved and should be condemned, which does not cause the approval or positive attitude to someone-or something, poor». The term "adverse" in the same dictionary is formulated as one that is not conducive to someone, something, inconvenient for someone, something. The term "negative" is defined as bad, negative, the negative of less than zero, the same thing as negative. "

Analysis of the use of the term negative in other languages has shown its wide distribution, so in English it sounds like - negative, in Slovak - negativny, in Czech - negativní, French - négative, in Spanish - negativo, in Italian - negativo, in German - negativ, in Polish - negatywny.

Given the characteristics of word negative and negatory, used in determining the danger of harmful effects and the best word negative, with particular on the basis of the wide spread of the term in other languages.

The conduct of subsequent negative term phraseological research shows that it is often formulated using the word "bad». The dictionary of Ozhegov [16] gave the following interpretation of the word "negative" - "one that has poor properties, one that has in itself an objection, which discards anything». This leads to the need to define the word "bad", in fact it is a fundamental characteristic of speech is negative. According to the Big Dictionary of the Ukrainian language [15] the word "bad" means:

- one that has no good qualities, properties, not the same as it should, which causes a negative evaluation;
- their unpleasant qualities, properties (tasteless, smelly, etc., etc.);
- useless or harmful, adverse, gloomy (weather, day, etc., etc.);

- one that does not meet the necessary conditions, does not meet the specific needs, made perfect, clumsily;
- inept;
- one that does not meet the normal standards of changes from the normal (on the state, feeling, vital body functions, and so on);
- unhealthy, sick (of body organs, body);
- one that does not bode well, foreshadows trouble, danger or a nuisance;
- disconsolate, sad, unhappy;
- cruel;
- one that portends trouble, danger or a nuisance;
- one which is characterized by a negative moral qualities (of a man);
- one that is worthy of condemnation (of manners, behavior, actions, etc., etc.);
- one that shames, spot someone (a man);
- rude, obscene;
- what is reprehensible;
- one that causes condemnation, disapproving, negative;
- unattractive, ugly or disgusting in appearance;
- dirty, unclean;
- one that causes hatred, bloody;
- worthless, vile.

As we see from the definition of the word "bad", the wording and the wording as a consequence of the term "danger" is based on people's perceptions of right and wrong (good and bad). The concept of good and evil can not exist without certain conditions, and the most transparent, there is no man. Therefore, the concept of danger exists as a concept that shows some people's ideas about the bad (negative). It is based on a world view, views, developed over the centuries, research, and always meet certain conditions of human existence, the level of civilization, ideas, moral principles, and the like.

Consider the situation from a different angle. In nature there are various processes of destruction and creation, not affecting the person. These processes could be qualified person as good and bad or dangerous and safe. Arise and are destroyed mountains, planets, stars, life arises, there are new forms of it and go with the evolutionary arena old. What is in these processes, good or bad, safe or dangerous? For example, if the mountain by the wind, sun, temperature and other meteorological parameters turns to sand, is there any sense to talk about the danger to the mountain itself. Yes and no. If we assume that the mountain has feelings and trying to maintain their individuality and then maybe we could talk about the danger to the mountains, and

if the mountain does not have feelings, and the process of transformation is an objective set pattern then is meaningless to talk about the danger.

Is it dangerous the death of a living organism or an entire species, the loss of an entire planet? This question can be answered only by knowing the purpose of the universe, and then the danger is relative to this. Thus, the danger appears as a subjective concept that can be applied only to the goals, interests, etc. It is logical to consider the danger as a subjective concept in relation to man. Concept of danger arises only when there is a feeling, but it is inherent in man. It can be assumed that the plant and animal world too there is some notion of risk, respectively, but at our level. After all, plants and the more animals react to certain effects that may be harmful or beneficial for them not only to our own, but from their point of view.

Natural question arises, what a feeling of man lies in the basis of the concept of danger. One of the key is self-preservation, it is often treated as a natural instinct. In this case, the danger is inherent in the concept of the common wildlife, including elementary, plants and animals. Sense of self - a desire to save himself or one or another system in the same state or in a state of a certain direction of development. Usually we talk about the danger only when it comes to a person or certain of its interests. Hurricane in desert or on Jupiter for us only a hurricane, it's only a natural phenomenon, but it is turning into a dangerous, if will take place in the territory in which the activities of people, where they were doing or which depend. Now it becomes clear why there are so many different formulations of the concept of danger and why most definitely say it was a man.

Needs to be clarified, one more thing. Is it correct to speak of the dangers of this or other technical systems, environmental hazards, etc.? Usually justified. The concept of danger is used when it comes to any object (mechanism, construction, etc.), with which somehow interacts people and with respect to which a person has certain desires.

Such an approach to the concept of risk accurately determine which case, the risk is and where it is absent, and in the future to assess the level of security. For example, if we destroy the old house to build in its place a new best. This is not dangerous, it's a welcome and controlled process, but the same destruction of, say, an explosion, even if the house was people already treated as a danger.

As a result, it can be concluded that the term "risk" is expedient to use only in cases when the impact (negative) is directed to an object or a subject to which a person has some kind of relationship, or is interested in it, and in those cases, when

considering the impact in terms of the other systems: animal, plant and other biological objects, or even inanimate objects. As a consequence, we can talk about the danger of the destruction of the same mountain, if we consider the process "in terms of" the mountain itself.

Thus, we conclude that the danger - the concept of the subjective and do not exist without regard concepts (principles or properties) of danger. The concept of risk is always associated with certain feelings, goals, ideas, people, animals, plants, or other complex systems which are capable of it, and thus will be different for each of the above categories. For example, water is as dangerous to humans as air for fish, Haloxylon will not grow in the tundra and moss will die in the desert.

Danger - the possibility of a certain negative impact. That is why, for the definition of the term "danger" to clarify a number of issues. What exactly can make this effect? What quantitative and qualitative features have a negative impact, how it differs from the positive (positive) and can be the effect of neutral?

What can affect the complex system (and of course the person)? Can affect everything that exists in Nature - any material object, field, information, energy, and their combination. The definition of risk, which was formulated by the author in previous works in this way: "The danger: it is the possibility of emergence of the circumstances under which the matter, field, information, or a combination of them may influence the complex system, it would lead to a deterioration or failure of the operation and development", in particular in [5, 17], there was no one of the most important elements, namely energy. Energy - a scalar physical quantity that is a common measure of the various forms of motion and transition measure of the movement of matter from one form to another. [18] In this case, the energy can not exist by itself, it must always have a tangible medium. Actually because it is often the energy impact and interaction in the material world. It is possible that in nature there is something unknown, so far, the basic elements, but to date, we introduce into the concept of danger 4 elements: matter (in the sense of objects, objects), field, information and energy in all their possible combinations.

Actual impact, according to the dictionary of the Russian language [19] - "action exerted by someone, something to someone, something, the impact». Impact - it is only the effect, this term does not describe the quality (negative, neutral, positive) and to assess its possible effect on the results of a system, respectively, from the point of view of a person or other systems. Depending on the results of the effect may be different: negative or positive. If the result could not be fixed using existing techniques or tools, or the result will manifest itself directly or indirectly, to estimate its direct action or

long-term effects is not possible then we can talk about a neutral impact.

Speaking about the impact, we usually are referring to external (exogenous effects) environment. But the system (in particular the person) carry a very strong influence of endogenous factors (the physical condition of the body, the mind, the psyche, and the like). Today, science has not given a clear answer, whether all the changes associated with the consciousness and psyche are directly or indirectly related to environmental factors. In other words, can occur in humans any changes, occur ideas, desires, and so on, the cause of which is not in the external world, that is, they are generated solely by the man himself? This issue is so complex, the reasons so many relationships that allow it in this work is not possible. Therefore, leaving the question open, we assume, for simplicity, that any change in one or the other system do have external causes, and appeared as a result of these or other external influences. Often some external influence is in the system processes of internal transformation that directly begin to change its state. During the study of such phenomena, it is easy to take the internal processes of the root cause (and that they characterize as the basic risk), which leads to erroneous conclusions, and, therefore, erroneous actions to protect. For example, kidney stones in a man are but a consequence, even though they are dangerous, but the primary dangers caused by their emergence could be food or water used by man, life and the like. The deeper causes are analyzed, the greater the accuracy of the identified core, primary danger. Namely protection from it can fundamentally solve this or that problem of security of the system.

The term "adverse effect" has previously been formulated by the author in "The terminology of the science of security" [17], as an action on a complex system (human), which leads to the deterioration of its development, operation, or its complete destruction. From the standpoint of modern science the negative impact of such a definition is not acceptable. For example, for the road is required to destroy the mountain, or to destroy the old house to build a new one, cut the tumor, destroying bacteria or viruses in the body during illness or destroy harmful insects, kill the enemy, etc. What should be the consequences to them to recognize negative? Obviously, they are those that we believe are negative because of our understanding, development, mentality and level of development of science and society, the possibility of predicting long-term outcomes. Further development of the science and society will give more opportunities to establish relationships between different phenomena, to predict not only the immediate consequences, but also very, very distant. Based on the foregoing, we formulate a new concept of "adverse effect" –

it is such an influence on a complex system, which leads to consequences perceived, evaluated and predicted as negative, at this stage of development of society and science. Using the formulation of the term "negative impact" state the following derivative term "negative consequences" - the result of a specific effect which is perceived, evaluated and expected to be negative, at this stage of development of society and science. It should be borne in mind that the negative effects and therefore the negative impact can be treated (perceived, evaluated, predicted) in different ways, depending on the set of external conditions and internal factors.

Using the term "danger" we do not mean the inevitable negative impact on the complex system (human), that is, the terms "hazard" and "adverse effect" are two different things. The negative impact it is a process when the danger passes to the actual manifestation - namely a negative effect. The danger, in turn, is understood not as an influence, but merely as a definite possibility of such influence. Moreover, the formulation of the term danger is not necessary to specify the value of danger - its magnitude or likelihood of exposure. The danger is the subjective perception of the possible negative processes in the direction of the objective reality.

For the final definition of "danger" let us give the definition of other key concepts in accordance with the explanatory dictionary [9], which are used to describe the danger:

- Threat - a possible danger.
- Ability - a means, conditions, circumstances are necessary to carry anything.
- The condition - a circumstance from which something depends. Situation in which there is something.
- Object - something that exists outside of us and independently of our consciousness, the phenomena of the external world. Phenomenon, a subject on which someone directed activity, someone's attention.
- The process - the process of a phenomenon, the consistent change in the state in the development of something.
- The Happening - manifestation or expression of the essence, what it is. In general, any detected manifestation of something.
- The situation - set of circumstances, position, situation.

More detailed look at some of these statements and the potential and feasibility of their use in the formulation of the term "danger".

The term "threat». The term in its meaning is very close to the term danger. Detailed definition of the term "threat" leads Korzeniowski L. [20], considering it as a potential cause of an unexpected state. The threat, in his view and that of Świniarski J.

[21], Kaczmarek J., Skowroński A. [22] is not a separate category, it is always related to a specific subject, for which is destructive. The threat may be significant (negative) for life, existence, stability, improvement and development facility. It is through the concept of "threat" Korzeniowski L. formulates the concept of "security". In this context it is necessary to establish whether the concept of "danger" and "threat" is synonymous. The term "threat," according to the explanatory dictionary [9] is a possible danger. According to the dictionary of the Russian language [20]: "The threat is a promise to cause any harm, nuisance. The possibility of the danger of a disaster, misfortune, bad events. One who (or what) can cause harm, trouble. "" Threat "in other dictionaries considered as bullying, promise to cause anyone harm, evil.

A comparison of the term "threat" to the above formulation of the term "danger" indicates that the concept of danger is much wider and it points to the possibility of adverse effects in principle, therefore, to use the term "danger" is better in general terms.

For example, you can say, "for this man there is a danger," without specifying what kind of danger exists or what its consequences. The term "threat" is usually used with the definitions of the danger that threatens the proper, for example, sick, fall, etc. or indicate that it is a threat, for example, the threat of a storm, earthquake. Often the term "threat" is used to show that the probability of an adverse event is high enough or dramatically improved. Thus, the term "threat" appears as a definition of a derivative of the term danger.

Further logical premises put us in front of her with one very important issue, namely the need to define what is actually dangerous. Based on the above danger is the possibility of a certain impact. To this effect could carry out the necessary conditions. Almost equal number of terms that denote the complex existing in time and space relationships, "conditions", "situation", "circumstances" will choose the term "circumstances».

With a view of the final wording of the term "danger" consider Fig. 1, in which all the components necessary for the formulation of the concept. These is: a complex system, an object that with the flow of energy, matter, fields or information affects the system, the probability of occurrence of certain circumstances in which this impact can not only occur, but will be negative.

Based on this, we formulate a common definition of danger: "Danger - a subjective concept that refers to the possibility of the circumstances under which the matter, field, information, energy, or both of them may influence the complex system, it would lead to consequences that are measured or perceived as negative at this stage of development of science and society.

Would it be a universal definition? From a philosophical point of view, no, because it is formulated with respect to human. If we assume the existence of certain concepts among animals, plants and other highly complex systems, which are living organisms. In this case, a danger assessment will sound a little differently: "Danger - a subjective concept that refers to the possibility of the circumstances under which the matter, field, information, energy, or both of them may influence the complex system, it would lead to consequences that are, or valued stakeholders (at the level of thinking, feeling or instinct) at a certain stage of development of the perceiver as negative. "

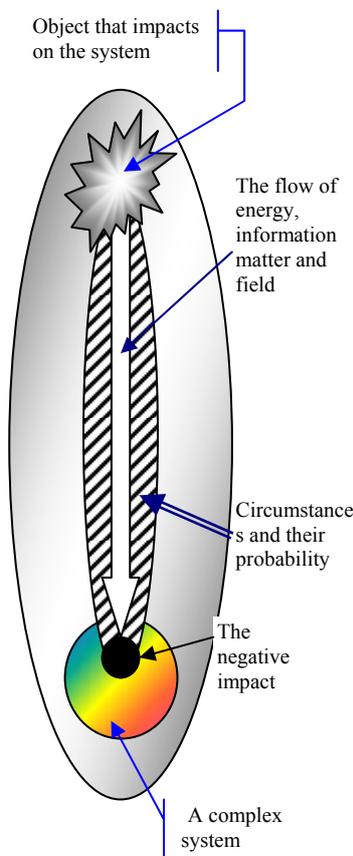


Fig. 1 Schematic definition of danger

This definition of risk can be successfully applied in all areas. With this definition we can explain why in China at the time killed sparrows as pests fields, why were widely used hazardous substances in agriculture, such as DDT, which are now banned. This all happened just because at some stage in the development of science and society has long-term negative effects could not be assessed or received.

With this definition it is easy to explain, for example, why the children do not understand and do not feel the danger. Children are at an early stage and have them compared with older, long-term

forecasting is much weaker due to lack of experience and knowledge, which means that they can not evaluate the possible long-term effects of various processes. However, the real danger to the child can exist even if he does not feel and do not perceive it. In that case, a risk assessment has a major drawback, and should sound different, because the criterion of danger appears negative consequence, which can occur much later and will not be understood or assessed at the time of its implementation, and in the near or distant future. Then the definition of danger will be as follows:

"Danger - a subjective concept that refers to the possibility of the circumstances under which the matter, field, information, energy, or both of them may influence the complex system, it would lead to consequences that are, or valued stakeholders (at the level of thinking, feeling or instinct) at a certain stage of development of the perceiver as negative".

This eliminates the need to anticipate danger, and it can already serve as an objective reason for the negative consequences that can assess both before and after its occurrence.

A feature of this definition is that, first, it defines danger as the subjective evaluation of objective reality. Second, formulated not only for the person, but with respect to any complex system, which is endowed with certain feelings and in our understanding of a living system. Apply this definition can also concerning any complex system, which can only contain a living, such as ecological community and the like, and in theory, even a relatively lifeless feeling of replacing it (understanding) of their ideas.

Third, the wording says that dangerous can be all that exists in nature, because the world is a combination of matter, fields, energy and information.

Fourth, danger is defined as a possibility. There is a danger is not seen as a real action or influence, but as a potential course of action.

Fifth danger is the possible negative impact not only on the person, society, government and the like, and in any complex system.

Sixthly, the negative effects as the main criterion in the decision on the assessment of possible actions (impact) and the definition of its dangerous, are considered not only from the standpoint of the present, a theory, regulations, institutions and individuals but with the position of any entity that is currently estimated hazard or can appreciate it in the future.

Seventh, especially the concept of danger is that its evaluation is not in compliance with certain of its properties, and in accordance with the possible future impact. Therefore, the evaluation of hazards to be more accurate, the better you can predict future impacts. In addition, the criterion of danger serves

the negative consequences that can occur much later than the time of hazard and will not be understood or will be assessed at the time of its implementation, but only in the near or distant future. Thus, the possibility of a specific effect can be described as a threat not only to or at the time of its implementation, but after the negative effects.

The above definition of danger can be successfully applied in all fields of science and practice. By this definition can be explained by the small and big mistakes made in the development of every person and of civilization in general. Just at a certain stage of development, there was not enough knowledge to anticipate the effects of early and changed development priorities.

Using this definition of danger is easily explained, for example, why children often do not understand and do not feel the danger that adults understand. Children are at an early stage of development, and they have as compared to adults, long-term forecasting is much weaker due to lack of experience and knowledge, which means that they can not evaluate the possible long-term effects of these or other processes. However, the real danger to the child can exist even if he does not feel and do not perceive it.

3 CONCLUSION

The new definition is somewhat complicated, but in general satisfactorily defines the term. The definition takes into account almost all details related to this term. Danger, based on this language does not appear as something permanent, but as a subjective concept that can change depending on external and internal conditions of the "expert". So-called experts can not act any complex system but only that which is endowed with certain abilities or instincts that, somehow, to assess the possible consequences of an action. Today, such complex systems should include all biological objects, but does not exclude the possibility of existence is not biological (in today's sense) life.

The new definition of the term "danger" in the future will be the basis of formulating a number of derivatives, such as "security", "risk" and many others.

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