

PROPOSAL OF CHARACTER OF FUTURE EUROPE UNION SECURITY RESEARCH

KRALIKOVA, R[uzena]; PROCHADZKOVA, D[ana]; RUSKO, M[iroslav] & WESSELY, E[mil]

Abstract: *Security situation in the world and in each territory continuously changes with time, and therefore, it is necessary to form new safety culture for ensuring the human security and sustainable development in the EU. After experiencing many crises in the last few years, it is clear that the security and sustainable development concept of the EU should be changed. It should not cover only the inner market but also other areas supporting the real economy and mainly, it has to contain the systematic support of the European inhabitants. One of the targets is to build a safe community with a sufficient sustainability. The paper gives six scenarios of the human system sustainable development. Because the qualified research is very important for strategic management ensuring the conditions for security and sustainable development the six possible scenarios of disaster research and their management in the EU is created and tested.*

Keywords: *security; safety; sustainability*

1. INTRODUCTION

Security situation in the EU, world and in each territory continuously changes with time, and therefore, it is necessary to form new safety culture taking into account actual knowledge and experiences with interdependences among the public assets leading to extreme social crises (in history e.g. great famines). With regard to the historical development there are: a lot of preventive and mitigation measures that have been applied into practice by legal rules, technical standards and norms and public instructions; response systems; and renovation ways. However, it is true that their effectiveness decreases with time because new risks emerge and territory and human vulnerabilities increase in all domains. With regard to this reality the research would originate the optimal strategy for further development. Evaluating the present knowledge, experiences and conditions in the EU, the paper proposes six possible human system development scenarios and six possible research scenarios and results of their assessments from the viewpoint of optimal security and development of the EU up to 2035.

2. INFORMATION

Present goal of humans is to live at safe space, and therefore, the UN formulated the aim of a “safe human system” in 1994 and the EU “safe community” in 2004. In agreement with the EU and UN proclamations and the professional knowledge there is necessary for conservation and sustainable development of the human society to create the safe territory. With regard to present knowledge we should consider that we want to build safe open dynamically variable system that is a complex system the model of which is the system of systems

(SoS), i.e. several overlapping systems [1]. The concept of the EU security is described in detail in [2].

The human system security and development are disturbed by disasters, i.e. internal or external phenomena that lead or from a certain size can lead to damages, harms and losses on system assets. It means that human system safety is affected by both, the processes, actions and phenomena that are under way in human society, environment, planet system, galaxy and other higher systems, and the human management acts. Therefore, for safety reasons we must negotiate with risks of different origin and kind. The research performed under the FOCUS project deals with principles of negotiation with risk at stages of its mitigating and managing in selected sections of human system management and it gives tools for public administration for public affairs governance because it is responsible for territory governance and conditions. Especially, it concentrates to the EU governance. There are used results of sets of national and international projects realised in the EU, Member States and elsewhere in the world; e.g. the the USA (especially FEMA), Russian Federation, Japan, China, India, Brazil etc., which are documented by professional literature.

3. METHOD OF SCENARIO COMPILATION

Generally, the scenario is a set of isolated and interconnected processes or phenomena in time and space, which takes place at different spatial and temporal scales. Scenarios are used for different purposes. It is de facto succession, a chain of events in time, area, space or space-time. This string can be deterministically given or stochastically random and the degree of randomness can in some cases be evaluated by statistical methods, by methods based on fuzzy sets and by experts. In terms of present knowledge, we know that there are sets of events that seemingly have no visible internal connection, but the result of which is some specific state of the system. In these cases we talk about so-called deterministic chaos. In systems engineering, there exist methods to describe and understand it.

Scenario-as a tool of proactive management is historical-system model which describes the development of process in its different forms (variants) depending on the conditions or decisions taken. It mimics the mechanisms and processes that take place in the system. Its aim is primarily to identify critical phenomena or points, which affect further development, i.e. which provide alternative choices between different final states. For the purposes of emergency planning and crisis management in practice, we put together the

following types of scenarios: scenario of impact of any disaster, scenario of response to the occurrence of disasters; scenario management.

The FOCUS project aim is foresight, i.e. not prediction or prognosis, and therefore, the method of scenario compilation is rather liberal. In spite of this we respect at scenarios compilation the following steps:

- identification of key assumptions or factors that affect the form of scenarios,
- focusing on factors that have a high potential impact on the shape, size, scope, etc.,
- identification of factors with an uncertain nature and try alternative solution of the scenario.

A prerequisite, however, is a relatively small number of factors that could be incorporated into the possible variants.

Development of scenarios consists of:

- gathering of prognostic information about the system and its surroundings,
- identification of targets of studied system,
- identification of internal factors, or. barriers to development of the system,
- identification of external factors, or. barriers to development of the system,
- identification of alternative management strategies for the system (it is necessary to take into account existing management mechanism and its variants, which can be realized in future periods, simultaneously it is necessary to formulate a strategy for development of the system - which direction is desirable),
- compilation of scenario,
- interpretation of scenario.

In all the steps above given it is necessary to consider:

- assessment of current state and current decisions in terms of future development,
- qualitative factors and strategies of various participants,
- the fact that the future is uncertain and multidimensional,
- the fact that each system must be examined globally and systemically,
- the fact that the information and strategies are not neutral, but biased,
- multiple approaches that are complementary,
- the fact that there are biases in strategies of people and prevent them.

Management scenarios can have different forms, depending on the use intended. Development of scenarios from the perspective of strategic management has the strict procedure [3] but the FOCUS project scenarios are only foresight, and therefore they cannot respect the strict procedure as in engineering domain.

4. SCENARIOS

After experiencing many crises in the last few years, it is clear that the security and sustainable development concept of the EU should be changed. It should not cover only the inner market but also other areas supporting the real economy and mainly, it has to contain the systematic

support of the European inhabitants. One of the targets is to build a safe community with a sufficient sustainability. This means to correctly manage the observed area and to ensure the daily needs of the EU citizens, to render help after disasters, transform the way of financing of emergency situations based on insurance etc.

With regard to current knowledge, it is necessary to use a systematic approach and to seek consensus among the three basic systems that is the system of the environment, social system and technological system. The above-given systems create the human system representing every area at dealing with problems connected with sustainability and security.

4.1 Background for sustainability

On the basis of current knowledge, the fulfilment of physiological needs only is not sufficient for a human life anymore. H. Maslow [4] showed that there are other needs such as security and safety, self-realization and social asserting. The basic orientation of research and public administration to security, safety and sustainability, and on their management started after the big terrorist attacks in the USA 11/09/2001, 11/03/2004 in Madrid, 03/09/2004 in Beslan, 07/07/2005 in London etc. after which humans finally realized what security means for them and their development and what really has the biggest value for human.

Current knowledge and experience show that in order to reach the demanded state of a system, including the human system and its development, it is important to set targets and procedures for their achieving that are dependent on sources, forces and means, which are always a lack. Therefore, it is necessary to focus on priorities and manage sources, forces and means in space and time to a gradual target fulfilment.

Orientation to the human system allows on one side to use the apparatus of systematic analysis and systematic engineering, on the other side to understand security and sustainability in a wider sense than it is usual; military-political orientation has prevailed until now – e.g. in documents of Pan-European Conference in Haag, in 2004. Systematic concept also allows understanding of the inner interconnections that are caused by the flows of capital, information, things, energies, arms, drugs and human mobility. Apart from this, it is necessary to know the area and its protected assets, possible disasters threatening it, ways of threatening, accessible sources, sources of energy and food [1].

Research scenarios come out of the EU security concept. Concept is a common feature or characteristic. Concepts are necessary for the development of scientific knowledge and as an abstract expression they serve as key factors in development and testing of theories. In order to create a conception of no-matter-what system development, we must use data, leave the pseudo-philosophizing and lean on two pillars: that are knowledge and engineering approach at handling a risk, since the engineering approach unlike empty specifying must always find a site specific solution. First, we are going to give the EU concept of sustainable development as a scheme, in which there are both elements and data taken into account for the sustainable development of the EU. It contains both the vision about the sustainable development of the EU, and the vision of its ensuring.

On the basis of assessment of data and knowledge from professional publications, the list of which is in, the concept is made with help of a complex approach [4], targets and principles given in the conception of the UN “The safety of human system” [5] and in the conception of the EU “Safe community” [6]. The basis of conception is to control with qualification all the phases of disaster management of all kinds [7], i.e. to pointedly, with qualification and interconnection ensure the management focused on security and sustainable development, emergency management and crisis management [1].

4.2 Scenarios of the human system sustainable development

Scenario is generally a complex of both isolated and interconnected processes and phenomena in time and space that run in various spatial and time scales. Scenarios are used for various reasons. It is de facto about succession, chain of events in time, area, space or space-time that can be deterministically given or stochastically random, while in some cases it is possible to assess the rate of randomness by statistical methods, methods based on fuzzy sets or with help of experts [3].

Current level of knowledge requires supplying a theoretical concept of sustainable development by accessible political and normative measures. Applying of the precautionary principle is in accord with the very weakly sustainable development. For the assessment of the development plans of big area complexes, it is necessary to generate specific indicators of sustainable development that will allow us to assess the homeostasis on a regional level. Paradigm of the current assessment of region development and development concepts heads for the pseudo-sustainable development with various level of profit [8]. Therefore, the optimal result requires applying of more variants of solutions, i.e. set of various scenarios and applying the formalized multi-criteria analysis. Catalogue of the methodical scenarios for the strategic assessment of impacts of development intentions on the environment under the big area complexes (regions) and the requirement of sustainable development according to work contain 6 scenarios of sustainable development. Variants were created by the methodical elaboration of works of Turner from 1995, who applied the Solow’s theory, holder of the Nobel prize for economy from 1987 for the “neoclassical model of growth”.The comparison or the variants with principles and requirements for the strategic safety management targeted to security and sustainable development of protected assets show that the variants correspond to the current knowledge and experience. On the basis of knowledge on human system, its assets (lives and health of humans; property; public welfare; environment, critical infrastructures and technologies) and priorities (safe human system in a dynamically variable world), variants of sustainable development scenarios were created, by the method of analogy, Tab. 1.

A	<p><i>Name: Zero variant of the human system development</i> <i>Target:</i> Preserving of the current trend <i>Characteristics:</i> a variant without elaborating the strategic plan of the community development, i.e. interest area including human society; development of interest community on the basis of a current state prolongation; preserving the current trends of community development and that both the negative and positive ones.</p>
B	<p><i>Name: Variant of the very highly sustainable development of the environment</i> <i>Target:</i> Absolute preference of the environment protection.</p>

	<p>Stationary phenomenon of economy. <i>Characteristics:</i> industry reduction; all mining areas closure; minimization of using the non-renewable sources in energetic; no more new land acquisition; reduction of the quantitative development of transport infrastructure; no more new sources of air pollution; request for the construction of sewage and sewage water treatment plants in all villages; extending the number and area of all types of protected areas and the areas of ecological stability; decentralized and extensive agriculture with putting the stress on landscape maintenance; forests with original wood composition return; renovation of wetlands of small brooks and ponds; untouchables of outside-forest green and of small landscape elements; strict protection of cultural heritage; only dispersed recreational activities.</p>
C	<p><i>Name: Variant of the weekly sustainable development of the human system</i> <i>Target:</i> Preference of the environment protection and significantly limited economic development. <i>Characteristics:</i> Considerate exploiting of non-renewable sources; using the renewable sources under their regeneration capacity; strict selection of localities for new economic activities, the place change principle; the condition of applying the best accessible technologies for these activities; preference of the reconstruction of old industrial structures before a new land acquisition; support of the railway, at road transport only the quantitative changes, support of gas in villages, sewage water treatment plant construction; limitation of mass recreational activity; extending the area of protected places of all types; Areas with ecological stability system development; strict protection of water and wetlands ecosystems and outside-forest green; both economic and microeconomic compensation of residual impacts.</p>
D	<p><i>Name: Variant of the medium sustainable development of the human system</i> <i>Target:</i> Stress on the critical natural capital protection. Economic development with partial limitations. Debasement of the environment can be replaced by the artificial capital (apart from the critical natural capital). <i>Characteristics:</i> Development of the system of small area and big area protected territories; global limitation of the Areas with ecological stability system; protection of the environment focused only on the protected areas; on all the other areas the development of economic activities is preferred; acceptable wide acquisitions of land for transport infrastructure and industrial zones; new energetic infrastructure construction support; new water works, stream regulations, hydro-melioration; intensive agricultural mass production; concentration of housing and recreation functions; natural sources and the environment decrease is replace by help of economic or technical compensations.</p>
E	<p><i>Name: Variant of the highly sustainable development of the human system</i> <i>Target:</i> Preference of an economic development. Compensation of damages on the environment. <i>Characteristics:</i> Development of economic activities similar to the previous case – D; protected areas limited both in extension and degree of protection; development of economic activities also in protected areas (natural resources mining, agricultural production etc.); placement of recreational and sport activities into the naturally most valuable areas; economic compensation of ecological loss for both the individuals and society; technical compensations (precious ecosystem transfer, artificial creation of the environment, reclamation).</p>
F	<p><i>Name: Variant of the maximum economic development</i> <i>Target:</i> Economic development at the expense of the environment, without limitations or compensations. <i>Characteristics:</i> Maximization of economic profit; unlimited exploiting of all the natural sources; placement of new infrastructure and economic activities with no regard to the natural conditions and impacts on the environment; qualitative limitation in favour of economic aims is acceptable also for the housing and recreational function ; for the development of technical, energetic and water infrastructure, economic targets are preferred instead of the social, hygienic and environmental ones; preference of the new saving and economical technologies only at the basis of the CBA analysis results; economic value of the environment and natural resources is seen as zero, therefore, no compensations of the caused impacts are considered.</p>

Tab. 1.Scenarios of the human system sustainable development

Analysis of Table 1 shows that from viewpoint of human needs and from the perspective of development:

- variants B, F, A are unacceptable,
- variant E is unreal, since the prove from viewpoint of precaution that there are no hidden risks is missing,
- with intended targeted effort, it is necessary to realize variant C or D. At variant D, which allows bigger interventions into the environment than variant C, it is necessary to apply strictly the precautionary principle and at the negotiation with risks to also focus on the possible impact of decisions for the future.

Continuing dynamic development in the controlled treatment of human system allow us to see deep facts that not possible to ignore. On one side, it is about the gradual elaboration of supportive work tools in favour of sustainable development, mainly the indicators of sustainable development, development of legal norms and following methodology in area of impact on human system assessment, including the growing number of home strategic development concepts. On the other side, the fatal collapse is evident of the theoretical concept of sustainable development on global scale. As a replacement for the scientific concept failure, passing of political and normative measures is demanded. In contrary, for the socially-economic and technically-area development the strict application of precautionary principle is demanded currently. The phenomenon of increasing risk orders a need to admit the coexistence of the environmental, technological (economic) and social system and to seek consensus for their common development. Recent results of the project FOCUS [11] show that the main problems of the EU, i.e. the EU vulnerabilities that are obstacles to sustainable development are the following: all hazard approach [7] is not systematically applied; some disasters are underestimated; systematic, strategic and proactive management is not implemented in practice; there are gaps in the management of risks, engineering of risk and in negotiating (trade-off) with risks; research do not appoints priority orientations, its targets are influenced by politicians or lobbyists; methods of application and orientation of strategies are not regularly controlled; reasonable strategy for disaster management is missing; disaster management often does not respect the cycle of disaster occurrence; stress on the problem solution is missing, there are only many discussions about it; there is a lack of sources for the implementation of human needs; there is a lack of tools for the EU financial stability ensuring; there is a lack of management tools that support the protection of inhabitants and sustainable development.

4.3. Scenarios of research

Concept respecting the given knowledge and approaches is the basis on which the FOCUS project builds on. It executes both the revision of the current inner frame of the EU and proposes areas that are important for the EU sustainability enforcement.

According to principles of a good practice, only the systematic, persistent and well managed complex of measures and activities guarantees achieving the EU sustainability now and in the future. Supervisory measure of scenario opportunity at processing the model framework for logical model of EU research to 2035:

- Description of the process - the EU decision-making and management will be based on present findings and experiences

- The EU security concept that is described above [2] will be step by step realized.

The critical points of the process will be step by step removed - the EU vulnerabilities are the following: all hazard approach is not systemically applied; some disasters are underestimated; systemic, strategic and proactive management is not implemented into practice; gaps in risk management, risk engineering and in trade-off with risks; research does not determine priority orientations, its targets are influenced by politicians or lobbies; application procedures and orientation of strategies are not regularly verified; reasonable strategy for disaster management is missing; the disaster management does not often respect disaster life cycle; accent to problem solving is missing, still only a lot of discussions on problems; lack of resources; lack of instrument for ensuring the EU finance stability; lack of management supporting the public protection and sustainable development.

On the basis of the targeted method of scenario creation (see chapter Methods) and aims and facts described above, the scenarios of research are created, Table 2.

A	<p><i>Name: Zero variant of research</i> <i>Target:</i> Preserving the current trend. <i>Characteristics:</i> Variant without any elaboration of the strategic plan of disaster research and their management in the EU, i.e. projects of research will be assigned oriented to disaster research and management in the same way as today and no attention will be paid to interconnection of outcomes and to obtaining realizable solutions in favour of the compact concept of safe community with sustainable development progress.</p>
B	<p><i>Name: Variant underestimating research – market will deal with no matter what</i> <i>Target:</i> Absolute underestimation of research. <i>Characteristics:</i> Research will be conducted ad hoc since there is a faith that market is best for the safe community and its development ensuring (preference of market and faith in the omnipotence of economy). Every citizen must arrange for his own safety, i.e. he must procure knowledge, information and relevant tools to himself.</p>
C	<p><i>Name: Variant of research oriented only to applied research</i> <i>Target:</i> Preference of a research only in parts, where there are problems, currently. <i>Characteristics:</i> Only those parts are investigated in research that the administration needs for the current deciding, no systematic knowledge for dealing with future problems are gathered.</p>
D	<p><i>Name: Variant of research oriented to basic and applied research</i> <i>Target:</i> Stress at the choice of projects is put on the medium sustainable development of the EU communities. <i>Characteristics:</i> Development of a research is concentrated both on basic tasks and on the applied research that deals with both current urgent tasks and prepares the basis for dealing with the future tasks that outcome from the concept of a safe community with sustainable development. Meaningful projects are set, the results of which it is possible to interconnect and they outcome from verified data and right methods.</p>
E	<p><i>Name: Variant of research oriented to strategic division of support of basic and applied research with emphasis on the results succession</i> <i>Target:</i> Stress is put on such a choice of projects that will provide the preference of a safe community with sustainable development today and in the following 20 years along with a prospect to another 50 years. <i>Characteristics:</i> Development of a research is defined by the strategic plan that is elaborated on the basis of a safe community with sustainable development concept based on the systematic and proactive approach reacting to the dynamic development of a community, having clear priorities that are always supported by the EU. Meaningful projects are set in basic and applied research, the results of which are possible to mutually interconnect and they outcome of verified data and</p>

	right methods for their elaboration.
F	<i>Name: Variant of a maximum support to basic research</i> <i>Target:</i> Mainly, it is necessary to support basic research. <i>Characteristics:</i> Maximization of demands for basic research, transforming the results into practice is underestimated. It is proceeded from idea that research brings knowledge but it is not able to deal with current problems since the implementation of results lasts too long.

Tab. 2. Possible scenarios of disaster research and their management in the EU

Expert assessment of data in Table 2 (5 experts – university education, more than 30 years practice in research and in research management, more than 10 years with responsibility on research results) shows that from viewpoint of human needs [1] and from the perspective of human system development:

- variants A, B, C are unacceptable,
- variant F is unreal, since the research loses capability to support security needs in human live practice,
- with intended targeted effort, it is necessary to realize variant D or E. The variant E has higher priority for realisation with regard to targets given in the EU security concept [2].

From the viewpoint of management the following facts regarding to the type of research characterisation, hold:

1. The worse research scenario \Rightarrow the EU disaster management is ad-hoc \Rightarrow the EU is not capable systematically to solve critical problems \Rightarrow the EU decline.
2. The bad research scenario \Rightarrow the EU disaster management is only oriented to crises \Rightarrow the EU will only solve crises but with many difficulties \Rightarrow slow declination of the EU present trend of development.
3. The mean research scenario \Rightarrow the EU disaster management is progressive, i.e. it creates fundament for problem solving \Rightarrow the EU will be capable to solve problems based on knowledge management principles \Rightarrow conservation of present trend.
4. The good research scenario \Rightarrow the EU disaster management is strategically created \Rightarrow the EU creates strategic plan of development based on present knowledge and experiences \Rightarrow the EU will belong to global security actor because it will have strong fundament for problem solving.
5. For Europeans there is necessary minimally to realise variant three.

5. CRITICAL REVIEW OF PRESENT SITUATION IN THE EU

The critical assessments performed in the FOCUS project by the CVUT team [11] revealed the critical items that might be considered in the EU development strategy, research and legislation. These critical points must be getting over in order that the way to reaching the EU aim “EU is global actor” might be open. The research described in Annexes to [11]:

- deals with the EU governance level from the viewpoint of natural disaster management. It identifies deficits at natural disaster management from the viewpoint of safe community concept that has been promoted by the EU since 2004. For its realisation there is necessary sophisticatedly managing

the disasters that damaged the security of community and its assets, i.e. to apply measures and activities of prevention, preparedness, response and renovation. For practical purposes there are necessary good technical solutions based on recent findings and experiences and correctly aimed governance of public affairs supported by legislative with sufficient legal force, finances, qualified human personnel and material base,

- concentrates to disasters that are connected with processes by which environment and planet itself react to human activities and it judges the level of governance of public affairs in the EU from viewpoint of strategic management of these disasters that is aimed to constitution of safe community,
- concentrates to social domain in which there are a lot of phenomena that threaten security of humans, public assets and whole communities. Considering the number of victims of extremist Breivik at July 22, 2011, civil disturbances, traffic with children, socially segregated localities etc., so we see that there is necessary also to manage disasters that are represented by prejudicial phenomena at social domain that damaged the security of community and its protected assets,
- concentrates not only to basic system elements (assets), but also to links among assets (physical - matter-of-fact, territorial, cyber, logical) and flows which create more or less important couplings that in some case quite fundamentally determine the behaviour of human system. The disasters damage critical infrastructure and the supply chains. Therefore, the disaster management have been gained the upper significance with grow of human demands on life quality and with human vulnerability increase and with drop of natural sources,
- concentrates to problems in public administration (governance of public affairs) management, because the social crisis can origin always when it fails.

If the human system is understood as human’s live space, it is open system that is in interaction with its vicinity. On human activities there are reacted both, the planet system and the environment. The European Union has promoted the safe community concept since 2004. For concept realisation there is necessary sophisticatedly to manage disasters that disturb security of community and their assets, i.e. to apply measures of prevention, preparedness, response and renovation. For practical realisation there are necessary good technical solutions based on recent findings and experiences and correctly aimed good governance (public affair management) that is supported by legislative of sufficient legal force, finances, qualified human personnel and material base.

6. CONCLUSION

Because it is well known that each concept enables to solve only problems that it can differentiate, we choose for research the complex EU security concept based on system insight. The concept is based on all advanced get-at-able knowledge that is accessible in public sources and on experts’ experiences from problems’ solutions in strategic management, emergency management and crisis management on the different international, governmental and sector levels.

Research of both disasters and the ways of their management is important for ensuring the safe community with sustainable development. There are many problems necessary to solve in the monitored segment and they are on different levels, i.e. technical, operative, tactical, strategic and political. The basic requirement is so that:

1. The research was targeted, i.e. the already-known was not researched without a good reason.
2. The research sought and solved open problems, namely correctly with regard to current knowledge and experiences on ensuring the safe community and its sustainable development.
3. The research demanded objective results under given conditions, i.e. to systematically present the results in front of a relevant expert community and to make them be a subject to a public opponent control. With this, plagiarism can be avoided, the real protection of intellectual property will be ensured and the development of creative abilities of individuals that has a creative potential and that are willing to give it in favour of the EU and its inhabitants' development will be supported.
4. The research would not distort the results – the style “the fundamental is what an authority says” holds development back. Therefore, it is necessary not to dissimulate conflicts among outcomes of projects since their existence is normal. Under the effort of finding the right solution, it is necessary to make it a subject of a thorough investigation with aim to find the causes of problems and to define an optimal solution of them in a given conditions and within the given possibilities.

The main task of the future EU security research is to create systems for knowledge-based decisions and effective utilisation of land and nature. Therefore, the EU must remove prejudice in favour of lobbying groups the interest of which is different from public interest.

In the previous chapters, the base is given summarizing the current knowledge, on the basis of which the knowledge level research was conducted in the area of disasters and their management in the EU with regard to building the EU as a safe community with sustainable development. On the basis of verified data files made by qualified methods, many real gaps of higher or lower importance were discovered. The basic system's gaps were marked in chapter “What is necessary to improve”. According to the level of their handling, six possible scenarios of the EU research were compiled, from which it clearly follows that the research is important and that it must be clearly targeted according to a strategic plan put together with regard to current professional concept of the EU as a safe community with sustainable development and to the fact that the EU, as every other community, has only limited possibilities; therefore the solution of problems must be divided into suitable time intervals, must be flexible and all the participants, according to their possibilities, must take part in the problem solution. Results given above and in detail described in [13] show the need of qualified research based on system concept of the world (including the EU) performed without pre-arranged parti pris that is sometimes is source of preferential treatment of some groups, i.e. corruption that is always brake of long-term development.. With regard to above given results it is

clear that we build world (including the EU) for the humans, and therefore, it is necessary to do both, the support of new technologies and new infrastructures enabling the human sustainable development and the reduction or at least mitigation of their impacts on human health and security by strategic risk management, the caution against lobbying in research is very necessary. The lobbying at decision-making in the EU is much extended; it is observed also in the research. Because no strict boundary between lobbying and corruption, which brake development, it is necessary to apply management that will support good to public interests.

7. ACKNOWLEDGEMENTS

The research was supported by the Czech Technical University, Faculty of Transport Science (Institute for Security Technologies and Engineering), by the EU – project FOCUS, grant No 261633 and by the Ministry of Education of the Czech Republic, grant No 7E11072. Thank you for support.

8. REFERENCES

- [1] Prochazkova, D. (2011). Strategic Management of Safety of Territory and Organisation. In Czech. ISBN: 978-80-01-04844-3. ČVUT, Praha 2011, 483p
- [2] Prochazkova, D. (2012). Concept of the EU Security. In: Globálne existenciálne riziká / GES Proceedings of the International Conference. Edition ESE-8, ISBN 978-80-89281-79-4, Žilina 2012
- [3] Prochazkova, D., Riha, J. (2012). Scenarios of Selected Disasters. In Czech, In: Ochrana obyvatelstva – nebezpečné látky 2012. ISBN: 978-80-7385-109-5, ISSN: 1803-7372, SPBI, Ostrava 2012, 153-157
- [4] Maslow, A. H. (1954). Motivation and personality. Haper, New York 1954, 236p
- [5] UN (1994). Human development report. New York 1994, www.un.org
- [6] EU (2004). Safe Community. PASR projects, Brussels 2004.
- [7] FEMA (1996). Guide for All-Hazard Emergency Operations Planning. State and Local Guide (SLG) 101. FEMA, Washinton 1996
- [8] Riha, J. (2004). Scenarios for Judgement of Pseudosustainable Development of Regions. In Czech. Urbanismus a územní rozvoj 4 (2004), 12-15
- [9] Bubak, D. (2003). Application of Sustainability Indicators in Process of Assessment of Land-use Plans of Large Territories on Environment. In Czech. Doktorská disertační práce, Fakulta stavební ČVUT v Praze. (2003)
- [10] Riha, J. (2001). Assessment of Im pacts on Environment. Methods for Preliminary Arbitrament Analysis. In Czech. Vydavatelství ČVUT Praha (2001), 477 stran. ISBN: 80-01-02353-2
- [11] Prochazkova D. et al.: Foresight Security Scenarios – Mapping Research to a Comprehensive Approach to Exogenous EU Roles. FOCUS - Deliverable 4.3. CVUT, Praha, prepared for print, 210p
- [12] Kralikova, R. - Mihalikova, R.(2009) Product life cycle management applications. In: RIM 2009: Development and modernization of production: 7th International scientific conference: Cairo, Egypt, September 26th-October 3rd 2009. - Bihać : University of Bihać Fakulty of Technical engineering, 2009 P. 207-208. ISBN 978-9958-624-29-2
- [13] Wessely, E. et al.(2009) Using of computer intelligence for design of lightning systems in industry plants / - 2009. In: Annals of DAAAM for 2009 & Proceedings of the 20th international DAAAM symposium "Intelligent Manufacturing & Automation: focus on theory, practice and education" : 25-28th November 2009, Vienna, Austria. - Vienna : DAAAM International, 2009 P. 0087-0088. - ISBN 978-3-901509-70-4 - ISSN 1726-9679