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THE SURVEY OF LANDSCAPE DEVELOPMENT ACTIVITIES IN RELATION TO IMPLEMENTATION OF THE EUROPEAN LANDSCAPE CONVENTION IN THE CZECH REPUBLIC

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Abstract

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The extent of the European Landscape Convention (ELC) implementation in the Czech Republic was evaluated. The system of landscape vulnerability, development feasibility and public participation assessment was done through survey "passports" of 29 rigid categories and set of 34 flexible criteria. 17 development projects, 26 national-wide and 87 regional development concepts were compared with each other. The three-dimensional synthetic matrix, which integrates the ELC key principles, was designed and applied.

Key words: European Landscape Convention, landscape vulnerability, development feasibility and public participation, survey "passports", three-dimensional synthetic matrix

Introduction

The European Landscape Convention is a unique document with respect to its origin and mission. It is one of the few international environmental conventions which was created by bodies of international organizations primarily focused on regional development – which makes it specific. The Convention was prepared by the Council of Europe Congress of Local and Regional Authorities and adopted on the 20th October, 2000 in Florence, Italy. The convention has been so far accepted by 22 out of 46 member countries of the Council of Europe.

Quoting from the CoE web site "www.coe.int" the aims of the European Landscape Convention are to promote European landscape protection, management and planning, and to organise European co-operation on landscape issues and to achieve sustainable development based on a balanced and harmonious relationship between social needs, economic activity and the environment. The public is accordingly encouraged to take an active part in landscape management and planning, and to feel it has responsibility for what happens to the landscape. If people are given an active role in decision-making on landscape, they are more likely to identify with the areas and towns where they spend their working and leisure time. If they have more influence on their surroundings, they will be able to reinforce local and regional identity and distinctiveness and this will bring rewards in terms of individual, social and cultural fulfilment. This in turn may help to promote the sustainable development of the area concerned, as the quality of landscape has an important bearing on the success of economic and social initiatives, whether public or private. The general purpose of the European Landscape Convention is to encourage public authorities to adopt policies and measures at local, regional, national and international level for protecting, managing and planning landscapes throughout Europe so as to maintain and improve landscape quality and bring the public, institutions and local and regional authorities to recognise the value and importance of landscape and to take part in related public decisions. A key factor in individual and social well-being and people's quality of life, the landscape contributes to human development and serves to strengthen the European identity. It plays an important public interest role in the cultural, ecological, environmental and social fields and is a valuable resource conducive to economic activity, notably tourism. Developments in agriculture, forestry, industrial and mineral production techniques and in regional planning, town planning, transport, infrastructure, tourism and recreation and, at a more general level, changes in the world economy have in many cases led to the destruction of landscapes, or rendered them featureless.

Methodological approach

The system of classification of landscape ecological vulnerability and the feasibility of development activities, as defined by Martiš (2006), with emphasis on collaboration with regional and community bodies as well as professional and general public (e.g. non-governmental organizations, professional associations, citizens˘ associations, etc.) has proven to be a good system for the interpretation of professional procedures and conclusions for communication with the broad public. This is done with respect to the implementation of the European Convention on Landscape. All entities involved may then participate in planning, assessment and approval procedures, and subsequently may control individual steps of landscape management in accordance with the aims of the Convention.

This system is based on two basic structures

– a rigid matrix of relationships between individual categories of landscape characteristics and expected activities (directions of development) in the particular landscape, and
– a flexible set of criteria specifying particular situations.

Rigid categories: landscape characteristics and development activities

Landscape characteristics:

1. Nature – abiotics
2. Nature – biotics

3. Human – health
4. Human – culture
5. Human – civilization
6. Human – society and economy
7. Human – community

8. Landscape – holistics

Development activities:

A. Agriculture, forestry and pond management
B. Livestock breeding
C. Food industry
D. Mining of minerals
E. Processing of minerals
F. Fossil power industry
G. Nuclear plants and facilities
H. Alternative power industry
I. Metallurgy
J. Chemical industry
K. Textile, leather-processing, clothing, wood-processing, paper, printing and bookbinding industries
L. Light industry
M. Urban development
N. Line constructions
O. Traffic infrastructure (polygons)
P. Water management facilities
Q. Tourism
R. Warehouse management
S. Military areas and facilities
T. Telecommunications
U. Waste management

The categories of "Landscape characteristics" and "Development Activities" meet each other in the matrix, where their "Impact" is then classified. The assessment scale of relationships is the basis for the classification of impacts as well as for the implementation of the European Landscape Convention.

Passports

Expert guarantors characterize every category in detail through a standardized survey of the "pasport" (definition, legislation, data coverage, categories, etc.). The guarantors will continuously update the data on the development of legislation, changes in databases, new bibliographic references. All landscape characteristics and activities in landscape are characterized by their surveys – examples of types of surveys "pasport" for "Soil" (Table 1), "Agriculture – Breeding of Farm Animals – Poultry" (Table 2) and "Metallurgy – Metallurgy and Processing of Metals" (Table 3).

Flexible criteria

The set of flexible criteria complements the rigid matrix of the categories. The set is designed in a manner that will reflect the variety of the specifics of particular situations in all categories (characteristics, activities and impacts) used in the relationship matrix. A suggested catalogue of these criteria enables the assessors to assess the actual influence in the intersection point of selected categories, and make the assessment based on the rigid matrix of categories by moving the margin position. Every criterion consists of 3 positions:

1. one of the margin positions urges assessors to consider a possibility to make the evaluation arising from the rigid matrix better by 1/3 degree of the particular scale towards positive evaluation
2. on the contrary, the other margin position urges assessors to make the rigid evaluation worse by 1/3 degree of the particular scale towards negative evaluation

T a b l e 1. Example of type of survey "pasport" for "Soil[1]"

Limitation of contents	Agricultural soil, lands designed for the functions of forest and the so called other areas (soil classification from the point of view of the potential impact of development activities and directions).
Legal protection	Law No. 334/92 of the Coll., on Protection of the Agricultural Lands Fund Decree No. 13/1994 of the Coll., amending some details concerning the protection of the Agricultural Lands Fund Methodical Instruction of the Department of Protection of Forests and Lands of the Ministry of the Environment of 1st October 1996, file No. OOLP/1067/96, on Exclusion of Lands from the Agricultural Lands Fund Law No. 289/1995 of the Coll., on Forests (the so called "Forest Act") Decree No. 77/1996 of the Coll., on Prerequisites of the Application for Exclusion or Limitation and on Details concerning Protection of Lands Designed for the Functions of Forest
Initial data	Agricultural Lands Fund Maps of the complex survey of soils 1:10 000, 1:50 000 Maps of graded soil-ecological units (BPEJ) 1:5 000 Maps of synthetic soil units Maps of Czech Geological Service 1:50 000 (there is not covered the entire territory of the republic there) Maps of Research Institute of Ameliorations and Soil Conservation Prague 1:20 000 Maps of Czech Agricultural University in Prague 1:200 000, 1:100 000 Maps 1:500 000 (J. Němeček) Maps 1:1 000 000 (J. Němeček) Forest Lands Fund (FLF) Maps of forest soil on various scales Forest site maps 1:10 000 Forest management plans Forest management schedules Reports to soil maps of the complex survey of soils Database of contaminated soils of Central Institute for Supervising and Testing in Agriculture Descriptive and analytical data in research reports of the individual research workplaces *Note: a part of the map materials is already digitalized.*
Data sources	Centrally: Research Institute of Ameliorations and Soil Conservation Prague, Prague 5 – Zbraslav, Zabovreska Str. No. 250, phone: 257921947, www.vumop.cz Forest Management Institute, Brandys nad Labem, Nabrezni Str. No. 1326, 250 01Brandys nad Labem, phone: 326 904 481 – 4, http://www.uhul.cz Czech Agricultural University, Prague 6 – Suchdol, Faculty of Geology and Pedology, Kamycka Str. No. 129, phone:: 224381111, http://www.af.czu.cz/kpg/index.html Czech Geological Service Prague, Klarov 3, phone: 257 089 411, http://www.cgu.cz/ Geofond Prague, Kostelni Str. No. 26, phone: 233 371 190, http://www.geofond.cz/ Central Institute for Supervising and Testing in Agriculture, 656 06 Brno, Hroznova Str. No. 2, phone: 543 548 111, www.ukzuz.cz Regionally: Corresponding Land Registries
Data analysis	Interpretation of information contained e.g. in the code BPEJ: Basic information: Climate Main soil unit

	Soil depth Gravel-contents of soil Exposure Natural slope Price of soil Derived information: Resistance/Inclination to consolidation Resistance/Inclination to erosion Resistance/Inclination to drying-out or to wetting Suitability for the manner of cultivation Category of protection of the Agricultural Lands Fund
Data categories	In dependence on the character and extent of the development directions and activities, to be classified in 5 classes of impacts distinguishing the stages of preparation (construction), operation, as the case may be liquidation of the plan Determination of types of impacts, e.g. in case of roads: Construction: First of all the land acquisition Soil consolidation Soil erosion Soil contamination Retention capacity of soil Operation: First of all the contamination and change of quality of soil Liquidation: First of all the land acquisition Change of soil quality Soil contamination
Colour distinguishing of data	The classification of the agricultural soil in the degree of classes of protection of the agricultural soil in accordance with § 3, Par. 2 of the Decree of the Ministry of the Environment No. 13/1994 of the Coll., amending some details of protection of the Agricultural Lands Fund was carried out according to the provisions of the Methodical Instruction of the Department of Protection of Forest and Soil of the Ministry of The environment of the Czech Republic of 1st October 1996, file No. OOLP/1067/96, on Exclusion of Lands from the Agricultural lands Fund, in accordance with the provisions of the Law of the Czech National Council No. 334/1992 of the Coll., on Protection of the Agricultural Lands Fund, in the wording of the Law of the Czech National Council No. 10/1993 of the Coll. In accordance with the provisions of the Annex to the above-cited Methodical Instruction the individual classes of protection of the agricultural land are defined as mentioned below: I. In the first class of the agricultural land there are classified the most precious types of soils as for the signification of soil situated in the individual climatic regions, prevalently in plane or only slightly sloping positions, which can be excluded fromthe Agricultural Lands Fund only exceptionally, namely, in first place, for the purposes of plans in conjunction with the renewal of the ecological stability of the landscape, as the case may be for the purposes of line constructions of an essential importance. II. In the second class of protection there are classified the types of the agricultural land having, in terms of the individual climatic regions, an above-average production capacity. In relation to the protection of the Agricultural Land Fund those are types of soil being highly protected, which can be only exceptionally excluded and, taking into consideration the land planning, only conditionally pledged.

	III. In the third class of the protection there are classified types of soils in the individual climatic regions having an average production capacity and the mean degree of protection, which can be used, on the basis of the territorial planning, for the purposes of a possible construction. IV. In the fourth class of the protection there are classified types of soils with, prevalently, a below-average production capacity in terms of the corresponding climatic regions, with only a limited protection, which can be used also for the construction. V. In the fifth class of the protection there are classified the remaining (BPEJ), representing first of all types of soil having a very low production capacity, including shallow soil, very sloping soil, hydromprphous, gravelly as far as stony and most endangered as for erosion types of soil. Mostly those are types of soil redundant from the point of view of the agricultural use. With these types of soil there can be supposed a more effective non-agricultural use. Those are, mostly, types of soil of a lower degree of protection, except for the limited protective zones and protected areas and other interests in relation to the protection of the living environment. The colour distinguishing of the data corresponds to the above-mentioned classification, i.e.: Red – I. Protection class Purple – II. Protection class Blue – III. Protection class Green – IV. Protection class Yellow – V. Protection class The change of quality and quantity of soil (distinguished according to the type of activity, criteria and the concrete property of the soil in question).
Tables	The Agricultural Lands Fund – Tables of the complex survey of soil – Tables of graded soil-ecological units (BPEJ) Forest Lands Fund – Text and table commentaries
Commentary	The limiting conditions conditioning the elaborated classification of unclearness and uncertainty.

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T a b l e 2. Example of type of survey "passport" for "Agriculture – Breeding of Farm Animals – Poultry"

Limitation of contents	On the basis of the sector classification of the economic activities the poultry-farming is classified in the following category: 01.24 Poultry-Farming. The above-cited class includes the below-mentioned branches: – Poultry-farming (hens, turkey-hens, geese, ducks, guinea-fowl etc.), – Production of eggs. The above-cited class does not include the below-mentioned branches: – Breeding of pigeons, pheasants, quails (01.25 1) The basic legislative limitation of the activity: – Law No. 252/1997 of the Coll., on Agriculture, in the full wording. – Law No. 282/2003 of the Coll., amending the Law No. 154/2000 of the Coll., on Cultivation, Breeding and Registration of Farm Animals and on the Change of Some Laws in Conjunction (Breeding Act), in the wording of later regulations. – The Decree No. 136/2004 of the Coll., amending the marking and registration of auerochses, horses, donkeys and of their cross breeds, of pigs, sheep and goats, of coursers, the registration of poultry, bees, brood- and non-brood-fish and of animals in terms of the farm breeding. – The Law No. 286/2003 ofthe Coll., being the full wording of the Law No. 166/1999 of the Coll., on Veterinary Care and on the Change of some Laws in Conjunction (Veterinary Act), as results from changes implemented on the basis of the provisions of the Law No. 29/2000 of the Coll., of the Law No. 154/2000 of the Coll., of the Law No. 102/2001 of the Coll., of the Law No. 76/2002 of the Coll., of the Law No. 120/2002 of the Coll., of the Law No. 320/2002 of the Coll. and of the Law No. 131/2003 of the Coll. – Decree No. 295/2003 of the Coll., on Seizures of Animal Origin, on Their Innocuous Liquidation and Further Processing. – Full wording of the Law No. 246/1992 of the Coll., on Protection of Animals from Cruelty On Animals, as results from changes implemented on the basis of the provisions of the Law No. 162/1993 of the Coll., of the Law No. 193/194 of the Coll., of the Law No. 243/1997 of the Coll., on the basis of the Attest of the Constitutional Court No. 30/1998 of the Coll., and of the Law No. 77/2004 of the Coll. – Decree No. 382/2004 of the Coll., on Protection of Farm Animals in Terms of their Slaughtering, Destruction or another Type of Destroyal. – As from the day of the force of the Treaty of the Membership of the Czech Republic in the European Union there is in force and effect the Decree No. 193/2004 of the Coll., on Protection of Animals during Transportation. – Decree No. 208/2004 of the Coll., of 14th April 2004, on Minimal Standards for Protection of Farm Animals, which came in force and effect as from the day of the start of the membership of the Czech Republic in the European Union.
Data analysis	The basic information concerning the establishments designed for the breeding of farm animals are, inter alia: The name, operator/owner (name, contact person), locality, species and category of the poultry, technology of the breeding, number of pieces of the poultry, number and characteristics of the primary and secondary products as well as of wastes. Additional pieces of information are, e.g.: The number of inhabitants concerned, quantification of emissions, consumption of primary resources.
Data classification	The categories of establishments designed for the purposes of the poultry-farming are classified, namely in compliance with the character and extent of the existing or prepared establishments, in the below-mentioned way: – Poultry-farming with the capacity up to 50 livestock units, – Poultry-farming with the capacity from 50 to 180 livestock units, – Poultry-farming with the capacity above 180 livestock units.

T a b l e 3. Example of type of survey "passport" for "Metallurgy – Metallurgy and Processing of Metals"

Limitation of contents	On the basis of the sector classification of the economic activities the metallurgy and processing of metals is classified in the following category: 27.1 Production and Rolling of Iron and Steel. The above-cited class includes: – Production of iron, steel, ferro-alloys and flat products, hot forming of products. The basic legislative limitation of the activity, in general: – Commercial Code, No. 513/1991 of the Coll., in the wording of later regulations. – A metallurgical enterprise is composed of the following activities: production of metallurgical products, transport of metallurgical products, production of energy for metallurgical production. – We were concentrated on the branch of protection of the living environment, which, in general, includes the below-cited: – The legal basis is contained, first of all, in the provisions of the Law No. 185/2001 of the Coll., on Wastes and on the Change of Some Other Laws, in the Implementing Decrees to the Law (first of all the Decree of the Ministry of the Living Environment No. 383/2001 of the Coll., on details concerning Handling of Wastes) and in the laws in conjunction, which are, in first place: The Law No. 86/2002 of the Coll., on Protection of Air and on the Change of Some Other Laws, the Law No. 254/2001 of the Coll., on Water and on the Change of Some Other Laws, the Law No. 76/2002 of the Coll., on Integrated Prevention and on Limitation of Pollution, on Integrated Registry of Pollution and on the Change of Some Other Laws, the Law No. 477/2001 of the Coll., on Wrappings and on the Change of Some Laws, the Law No. 100/2001 of the Coll., on Evaluation of Impacts on the Living Environment and on the Change of Some Laws in Conjunction, the Law No. 44/1988 of the Coll., on Protection and Use of Raw materials, in the wording of later regulations, the Law No. 353/1999 of the Coll., on Prevention of Serious Accidents Caused by Selected Chemical Substances and on the Change of Some Other Laws. The European legislation: Directives of the Council No. 84/340/EEC, on Struggle against Air Pollution Coming from Industrial Plants, Directive of the Council No. 88/609/EEC, on Limitation of Emissions of Some Substances in the Air from Big Combustion Installations designed for Combustion of Fuels, General Directive for water policy of the European Union No. 2000/60/EU, Directive of the Council No. 91/689/EEC, on Dangerous Wastes, Decision of the Council No. 93/98/EEC, on the Union´s Signature of the Convention concerning the Moving of the Dangerous Waste across Frontiers and its Liquidation, Decision of the Committee No. 94/3/EC, introducing the List of Wastes in compliance with the Art. No. 1 of the Directive of the Council No. 75/442/EC, on Wastes. Moreover: STANDARDS CSN ISO CSN EN.

Data analysis	The basic pieces of information concerning the establishments designed for the purposes of metallurgy and processing of metals are, inter alia: The name, operator/owner (name, contact person), locality, type of activity, technology, number and characteristics of the primary and secondary products as well as of wastes. The additional pieces of information are, e.g.: The number of inhabitants concerned, quantification of emissions, consumption of primary resources, statistical data according to the demands of the individual laws.
Data classification	The categories of the establishments are limited in dependence on the number of employees, namely: – Small enterprises – Middle-sized enterprises – Big enterprises

3. the mean position of the relevant criterion indicates that there is no need to modify the evaluation arising from the matrix.

Besides basic colours for individual degrees, the colour scale also includes appropriate shades for making the evaluation "better or worse" (e.g. blue for basic degree "3", light blue for making the evaluation better by moving it by 1/3 towards degree "2" and dark blue for making the evaluation worse by moving it by 1/3 towards degree "4"). Marginal degrees of evaluation ("1" – insignificant vulnerability and unlimited feasibility; "5" – extreme vulnerability and impossible feasibility) are fixed without possible modifications. Contrary to the standard methodology of vulnerability and feasibility (Martiš, 1981, 1997, 2001, 2006; Martiš et al., 2001), the set of flexible criteria for the assessment of particular specifics of characteristics, activities and impacts have been newly designed for the implementation of the European Landscape Convention.

In order to specify the aims of landscape quality in compliance with the European Landscape Convention, a set of 34 classification criteria of landscape characteristics, development limits and reserves was proposed as follows: (Table 4)

T a b l e 4. classification criteria of landscape characteristics

I.	nature of landscape	7 criteria
II.	nature of activities	10 criteria
III.	nature of influences	5 criteria
IV.	time factor	4 criteria
V.	population	8 criteria

I. NATURE OF LANDSCAPE

I.1.
a/ landscape is characteristic by an extraordinary diverse structure, soft texture and significant diversity (–1/3)
b/ the structure, texture and diversity of the landscape is within Czech standards
c/ the landscape is characteristic by its extraordinary monotonous structure, rough texture and overall drabness (+1/3)

I.2.
a/ the relative frequency, quality and/or regeneration abilities of the landscape characteristic are significantly enhanced (–1/3)
b/ the relative frequency, quality and/or regeneration abilities of the landscape characteristic are irrelevant
c/ the relative frequency, quality and/or regeneration abilities of the landscape characteristic are significantly endangered (+1/3)

I.3.
a/ the landscape characteristic is typical for its extraordinary resistance (–1/3)
b/ standard sensitivity of the particular landscape characteristic
c/ the landscape characteristic is extremely sensitive (+1/3)

I.4.
a/ this unique landscape classifies to extra valued landscapes highly renowned both inlands and abroad (–1/3)
b/ the landscape is not particularly precious, it is a standard "everyday landscape"
c/ the landscape is highly neglected and is typical for its negative features both inlands and abroad (+1/3)

I.5.
a/ traditional (environmentally friendly) forms of land and natural resource management are still significantly practised in the landscape (–1/3)
b/ traditional (environmentally friendly) forms of land and natural resource management are still practised in the landscape, however, only occasionally and locally
c/ traditional (environmentally friendly) forms of land and natural resource management did not survive in the landscape (+1/3)

I.6.
a/ the principles of good practice prevail in land and natural resource management (–1/3)
b/ land and natural resource management corresponds to Czech standards
c/ the prevailing land and natural resource management procedures are in conflict with the principles of good practice (+1/3)

I.7.
a/ traditional crafts or other handwork technologies and traditional industrial technologies still significantly prevail in the landscape (–1/3)
b/ traditional crafts or other handwork technologies and traditional industrial technologies prevail in the landscape only as attractions for tourists (e.g. in open air museums, indoor museums, etc.)
c/ traditional crafts, other handwork technologies or traditional industrial technologies did not survive in the landscape (+1/3)

II. NATURE OF ACTIVITIES

II.1.
a/ the new activity will significantly and positively contribute to the existing landscape management (–1/3)
b/ the new activity will not be in conflict with the existing landscape management
c/ the new activity will significantly and negatively affect the existing landscape management (+1/3)

II.2.
a/ the new activity will not cause a crucial change compared to the existing comparable activities and does not require land acquisition (–1/3)
b/ the new activity differs from the existing comparable activities but does not require new acquisition of land
c/ a completely new activity requiring land acquisition ("Green Field" construction and technology) (+1/3)

II.3.
a/ insignificant scope of the new activity or low intensity of the new operation (–1/3)
b/ standard scope of the new activity or medium intensity of the new operation
c/ extraordinary scope of the new activity or high intensity of the new operation (+1/3)

II.4.
a/ the new activity is isolated and does not require other activities (–1/3)
b/ the new activity requires an acceptable scope of other activities
c/ the new activity requires a significant scope of other activities (+1/3)

II.5.
a/ the new activity has no demands on natural resources (such as water, power, etc.) (–1/3)
b/ the new activity has standard demands on natural resources (such as water, power, etc.)
c/ the new activity has extremely high demands on natural resources (such as water, power, etc.) (+1/3)

II.6.
a/ the new activity has no emissions of toxic substances, does not produce waste and does not have any harmful impacts (e.g. impacts on biotics, natural resources and environmental and social capacity) on landscape (-1/3)
b/ the new activity has an acceptable level of emissions of toxic substances (e.g. they "easily dilute" in the environment) and production of waste and does not have any other harmful impacts (e.g. impacts on biotics, natural resources and environmental and social capacity) on landscape
c/ the new activity has extremely high emissions of toxic substances and production of waste and has an extraordinary level of other harmful impacts (e.g. impacts on biotics, natural resources and environmental and social capacity) on landscape (+1/3)

II.7.
a/ the new activity will significantly contribute to employment in the region or its social revival (-1/3)
b/ the new activity does not affect employment in the region or its social revival
c/ the new activity significantly jeopardizes employment in the region or contributes to its social slump (+1/3)

II.8.
a/ the new activity significantly eliminates possible emergency situations (-1/3)
b/ the new activity has a standard level of elimination of emergency situations compared to similar activities
c/ the new activity imposes a significant risk of emergency situations (+1/3)

II.9.
a/ the new activity shows insignificant risks of damage to human health (-1/3)
b/ the new activity shows standard risks of damage to human health
c/ the new activity shows extremely high risks of damage to human health (+1/3)

II.10.
a/ the new activity is BAT ("Best Available Technology" – the best reasonable method of realization available in the world) (-1/3)
b/ the new activity represents the contemporary standard method of realization
c/ the new activity is carried out in an old-fashioned manner (technology, type of construction, management method, etc.) (+1/3)

III. NATURE OF IMPACTS

III.1.
a/ insignificant scope of the impact (geographical expanse; number of people affected) (-1/3)
b/ the scope of the impact is not important
c/ extraordinary scope of the impact (geographical expanse; number of people affected) (+1/3)

III.2.
a/ the size or comprehensiveness of the impact is of insignificant importance (-1/3)
b/ standard scope of the impact
c/ the size, scope and comprehensiveness of the impact are extraordinary (+1/3)

III.3.
a/ the impact on the health of the affected population is insignificant or positive (-1/3)
b/ the impact on the health of the affected population is irrelevant
c/ the impact on the health of the affected human population is extremely negative (+1/3)

III.4.
a/ highly positive cross-border nature of the impact (-1/3)
b/ unimportant cross-border nature of the impact
c/ highly negative cross-border nature of the impact (+1/3)

III.5.
a/ there is only a small probability that the impact will occur (-1/3)
b/ the probability that the impact will occur is within expectations
c/ high probability that the impact will occur (+1/3)

IV. TIME FACTOR

IV.1.
a/ the historical continuity of this landscape is highly continuous (-1/3)
b/ the historical continuity of this landscape is within general standards of the Czech Republic
c/ the historical continuity of this landscape was substantially disrupted (+1/3)

IV.2.
a/ the existing development of this landscape has been extraordinary harmonious (-1/3)
b/ the existing development of this landscape has been within general standards of the Czech Republic
c/ the existing development of this landscape has been extremely disharmonious (+1/3)

IV.3.
a/ the expected activity or development tendency highly complies with the existing positive development tendencies of this landscape and further develops them (-1/3)
b/ the expected activity or development tendency is not in conflict with the existing positive development tendencies of this landscape and does not significantly impact them
c/ the expected activity or development tendency is in sharp conflict with the existing positive development tendencies of this landscape and causes their substantial turn (+1/3)

IV.4.
a/ the duration of the impact, its frequency and/or its reversibility significantly emphasise its positive effects (-1/3)
b/ the duration of the impact, its frequency and/or its reversibility are irrelevant with respect to its effects
c/ the duration of the impact, its frequency and/or its reversibility significantly emphasise its negative effects (+1/3)

V. POPULATION

V.1.
a/ state of health of the human population in the territory in question is extraordinarily good (-1/3)
b/ state of health of the human population in the territory in question corresponds to the statewide average
c/ state of health of the human population in the territory in question is extraordinarily poor (+1/3)

V.2.
a/ the interest of the general public in the condition, trends and prospects concerning the territory is very lively (-1/3)
b/ the interest of the general public in the condition, trends and prospects concerning the territory is within the limits of the statewide average
c/ the interest of the general public in the condition, trends and prospects concerning the territory is very poor (+1/3)

V.3.
a/ the local inhabitants perceive the surrounding territory as theirs, they feel identified with it and are very sensitive in relation to the risks of its impairment (-1/3)
b/ the degree of identification of the local inhabitants with the surrounding territory is within the statewide average
c/ the local inhabitants are, in principle, indefferent to the territory they live in (+1/3)

V.4.
a/ it is, in first place, the local population to contribute to the development of the territory in question as well as to its cultural, social and economic revival (-1/3)
b/ it is, more or less evenly, both the local population and that from other places (commuting manpower, holidaymakers, spa guests and the like) to contribute to the development of the territory in question as well as to its cultural, social and economic revival
c/ it is the population coming from other places (commuting manpower, holidaymakers, spa guests and the like) to contribute to the development of the territory in question as well as to its cultural, social and economic revival, the role of the local population is not determining in this respect (+1/3)

V.5.
a/ folkloric traditions in the territory in question are extraordinarily live, the are highly appreciated both by the local inhabitants and by the visitors, they are widely and spontaneously maintained and developed by the local ihnabitants (-1/3)
b/ folkloric traditions in the territory in question are still live and they are developed thanks to the activities of local associations
c/ folkloric traditions in the territory in question are practically dead and they are recorded only in historical sources, museums, depositories and the like (+1/3)

V.6.
a/ the local and regional administration and self-administration are dominant factors in terms of the direction of the development of the territory in question (-1/3)
b/ the local and regional administration and self-administration evenly participate, along with significant economic subjects and groups of citizens, in the decision-making on the direction of the development of the territory in question
c/ the local and regional administration and self-administration are formal and unimportant factors in terms of the direction of the development of the territory in question, the significant economic subjects, as the case my be along with a certain role of groups of citizens, decide on the territory (+1/3)

V.7.
a/ there is a harmonious atmosphere of mutual trust and support between the state, regional and local state administration and self-administration in terms of the decision-making on the territory in question (-1/3)
b/ the relationship between the state, regional and local state administration and self-administration corresponds to the common standard of the Czech Republic
c/ there is a disharmonious atmosphere of mutual mistrust and constantly tense controversies between the state, regional and local state administration and self-administration in terms of the decision-making on the territory in question (+1/3)

V.8.
a/ the territory is spontaneously maintained in an ecologically favourable and aesthetically impressive condition by the local inhabitants (-1/3)
b/ from the ecological and aesthetic point of view the territory corresponds to the common standard of the Czech Republic
c/ the territory is mostly uncared-for (both from the ecological and aesthetic point ov view) and it is indefferent to the local inhabitants (+1/3)

Conclusion

In conjunction with the implementation of the European Landscape Convention, 26 national-wide development concepts have been evaluated so far. At the same time, the role of the public administration, professional associations and the general public was also taken

into consideration. Similarly the contents and objectives of 87 regional development concepts were compared.

The key principles of the European Landscape Convention are integrated into the three-dimensionall comprehensive matrix, that includes hundreds of files with several tens of thousands of pages, and is presented in the form of hypertext links, as shown in the attached data medium.

Translated by the authors

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Martiš M., Andělová B., Zdražil V.: **Pasporty a kritéria rozvoje krajiny ve vztahu k implementaci Evropské úmluvy o krajině v České republice.**

Rozsah dosavadní implementace Evropské úmluvy o krajině v České republice umožňil propracovat nové nástroje pro účinnější využií tohoto dokumentu v péči o krajinu a její rozvoj. Systém hodnocení zranitelnosti krajiny, proveditelnosti rozvojových trendů v ní a účasti veřejnosti byl rozvinut zpracováním pasportů 29 kategorií a souboru 34 flexibilních kritérií. Bylo vyhodnoceno a vzájemně porovnáno 17 rozvojových projektů, 26 národních koncepcí a 87 regionálních rozvojových dokumentů. Klíčové principy Evropské úmluvy o krajině byly na základě těchto zkušeností včleněny do trojrozměrné syntetické matice, která byla ověřena.