Integrated conservation of architectural cultural heritage, focused on sustainable territorial development
- good practices in the field of sustainable integrated conservation and improvement of the opportunities for employment and territorial management

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Abstract: The present article has been developed in accordance with the implementation of „Archilandia skills – supporting the future through restoration of the past” project, contract number BG051PO001-7.0.07-0013-C0001, implemented with the financial support of the Human Resources Development Operational Programme 2007-2013, co-financed by the European Social Fund of the European Union. The project aims at integrating a successful training approach, which would support two problematic spheres for Bulgaria – high unemployment in the provincial towns and national level necessity for specialists and approaches for adequate maintenance of architectural heritage. Bulgaria is rich in cultural heritage sites, but the latter are but they are poorly maintained and therefore fail to bring to the local community the incomes it would have otherwise enjoyed. On the other hand, the persisting stagnation in the construction sector creates problems for those engaged in it (many of them representatives of minorities) leaving many of them without jobs. The present project aims to respond to this through certain measures and additional qualifications.

The projects aims to support the application of a combined approach for studying and analyzing the resources of the territory and training local experts how to maintain and restore, hence take advantage in a sustainable manner from the local cultural and architectural sites. The Archilandia approach, which Zinev Art Technologies is making efforts to integrate in Bulgarian practices, has proven its effectiveness in pilot territories in Italy, Poland and Sweden, where it has been tested.

The innovativeness of Archilandia contributes to raising the awareness of the economic and cultural value, inherent to local identity, connected with traditional and historic architecture, craftsman activities and the related traditions also through the use of artistic and creative means and new information technologies.
Keywords: vocational training, sustainable development, integrated conservation, built heritage, restoration, maintenance, traditional techniques and materials, cultural regions

I. Studying the overall ARCHILANDIA approach – Integrated conservation of architectural cultural heritage, focused on sustainable territorial development

A part of the main activities under the above mentioned project include the elaboration of the overall ARCHILANDIA approach, which aims to understand in detail all its specifics and possibilities, for the purpose of transferring it to Bulgarian practice. As a result of the study was elaborated an analysis, presenting the methods of integrated conservation of architectural heritage, focused on sustainable territorial development. The analysis goes through:

A) The necessity for conservation of architectural cultural heritage.

A scientific team led by Prof. Carlo Aimerich specified and analysed the reasons for the trends in the sphere of engineering and construction in Sardinia, which outline the policy of more careful and direct relations with local history and culture in all kinds of transformation and restructuring activities of existing buildings, as well as the necessity for a new quality of the constructed environment, focused on the criteria, which are related to the limitations of resources and the energy balance. The two actions – adoption and valorization of traditional heritage on the one hand and the urge for energy saving and bio-eco-compatibility on the other hand, interact indepth and complement each other. Contemporary culture of quality should be associated with a greater defense and more aware valorization of architectural heritage, in which the conditions for compatibility with the environment are supported in an uninterrupted and adequate manner. In this line of thought the most charming and productive part of the architectural research, which is gradually turning into a main direction in the more avant-garde project researches, the legal system and events for the district and local institutions, is focused on the relation history – natural environment – materials. In this relation namely, the regional context of the settlements in Sardinia is outlined as an emblematic study case, since it is characterized specifically with explicit presence of the component of nature and environment, which entwine with the use of historic-traditional, local materials. In other words the knowledge, the care, the valorization of traditional architectural heritage of Sardinia go bey ond the boundaries of the interests of the community and the local and/or district administrations, for which these actions are compulsory anyway.
as well as economically wise, and gain fundamental importance at national and above national level.

B) Characteristics of the approach of integrated conservation of architectural cultural heritage

The term “integrated conservation”, initially adopted in resolutions ratified during the 60s in connection with the need for implementing a connection between the preservation of heritage and upgrading of the territories, was one of the most important steps in the development of European policy in the sphere of architectural heritage. This idea was strengthened by the European charter for architectural heritage, by the Amsterdam Declaration, a consequence from the Congress on European architectural heritage, as well as by Resolution 76 (28) of the Committee of Ministers. Article 10 of the Grenada Convention assigns five paragraphs on the principles of integrated conservation, which each country undertakes to implement.

In the European context the integrated conservation goes beyond the narrow understanding of heritage. It is important that everyone has access to knowledge, culture and cultural heritage and to be able to find there his/her personal realization. The European policy in this direction is quite systematic – from its establishment the Council of Europe works for the development of a united Europe. The cultural policy of the Council of Europe, which directly concerns cultural heritage, aims to develop the sense of European cultural identity, protecting at the same time the characteristic elements, forming its richness. In this relation by means of a number of legal initiatives, it was asked from the national, regional and local authorities to promote an “integrated conservation of cultural heritage”, which takes into account past and present contributions of the various communities, with their cultures and concepts, namely allowing them to participate in the processes of coordination and decision making. At the same time also the maintenance and encouragement of cultural diversity was required.

C) Restoration and maintenance of local historic centers – Archilandia approach put in practice.

The cultural sector has a considerable importance for the economic development of Europe: it is one of the largest and most dynamic sectors, among those, which generate high added value and employment. The Saridnian experience is quite demonstrative in this sense. There are quite a lot of legal regulations, which during the last ten years of the XX century contributed to the preservation and repeated use of the historical built heritage of Sardinia in attempt to overcome the abandonment of the old settlements on the island, which has been recognized as one of the main problems of the territory. The culture of repeated use of traditional housing
architecture starts to grow by means of the fundings, envisaged in the district law № 29 as of 13 October 1998 – Preservation and valorization of old city centers in Sardinia. The state policy had already taken care of the regional legal framework with the law № 449 as of 27 December 1997, which still allows, even if in different scales, planned and unplanned maintenance, restoration, conservational strengthening and reconstruction of existing buildings by means of cutting the income tax for physical persons up to 41%. These and other legal instruments favor the preservation of a considerable number of buildings form the Sardinian architectural heritage, still it appears that this is insufficient. The analyses show that a cognitive instrument for the buildings, which can provide guidance for maintenance and strengthening activities, preservation, repeated use and overall restoration of historic traditional architectural heritage, is missing. This necessity is partially responded to with the aid of Community initiative LEADER+, which financed the development of the Guide for improving the quality of old city centers and of city elements communal initiative. Still the presence, knowing and application of the Guide for restoration is necessary, but insufficient for guaranteeing that the processes of maintenance, conservational strengthening and repeated use of traditional housing architecture will be compatible with and will observe the typological and constructive characteristics of a certain built object. Necessary is also that the technical and expert team engaged in the activities is competent. This is how “workshops for restoration of historic centers” are established, which actually give life to a specialized community for assimilation of knowledge and skills, which could greatly be supported by the Guide and the training programs developed on its grounds.

The situation in Bulgaria
After 1989 the political and socio-economic climate in the country are completely changed. The lack of flexibility of the old system for preservation of built heritage and its main sectors (legislation, administration, financing and management) are not able to respond to the new economic conditions. The problems of architectural heritage remain aside from the main priorities. The new social difficulties, as well as the strong politicization of community life, alienate to a certain extent people from the issues of cultural heritage. At present the regulation is dispersed between different specialized laws (Law for cultural heritage, Spatial law, Regional development law, Law for protection and development of culture and a number of secondary legal acts for their enforcement). At present the territorial management protection of immovable cultural heritage is legally regulated mainly (but not only) in section V in the Law for cultural heritage, articles 78-85. The single and group immovable cultural
assets with their boundaries and protection zones form protected territories for preservation of immovable cultural heritage, which are presented on the cadastre maps in accordance with the Law on cadastre and property register as well as in the common and detailed structural plans in accordance with the Spatial law. Archeological sites situated within earthen layers, on their surface, on ground or under water are also protected territories, the temporary boundaries and defense zones of which are defined with the decision for terrain study (Simeonova-Korudzhieva, D., 2011).

The present analysis is enriched with information and photographic materials for the cultural-historic sites in the targeted territories under the “Archilandia skills” project.

II. Good practices in the sphere of sustainable integrated conservation and improvement of the possibilities for employment and territorial management

At this second step of work under the project was implemented a study, which encompasses the cultural, architectural resources of the territory, the restoratory skills and craftsmanship as a solution for improvement of the employment opportunities and territorial management at EU level, which aimed to analyse the importance of specific qualifications for the development of the territory and for creation of employment. It represents a methodology concerning the prerequisites for doing a study of the sites within the territory, which are the end products, what elements the study comprises of, as well as which kinds of studies of architectural heritage are applied.

The differences between urbanistic studies and studies of other types of territories, the time span of the study, the team, which is engaged in it, the manner of conducting it, the way in which it is being evaluated as well as inventory of the sites.

The study focuses on the restoration and repeated use of buildings in Sardinia (Italy) and in Bulgaria, but also glances beyond these territories, studying other good practices with the aim of enriching the Archilandia approach.

As far as the specifics and ways of built heritage restoration in Sardinia are concerned, the topics, which are discussed in the study encompass constructive systems of traditional building, the “masonry cell” construction, the house with a yard and its variations, the palazetto house type.
The study also considers the architectural traditions of the different peoples, who inhabited the lands of ancient Bulgaria (Kandulkova, Y. 2007), by going into details concerning the constructive specifics and elements, the materials used locally and the applied building techniques.

All this aims at organizing guidelines for overcoming a number of problems, accompanying the processes of restoration and conservation of cultural sites, which requires a preliminary research of the structure and contents of the sites, their objective state to be defined, the influencing factors to be identified, as well as the possibilities for restoration and conservation to be specified. Considered are also existing traditional methods for restoration of old buildings, including a check for rotten or misfunctioning constructive elements and their replacement with natural ones, as well as various contemporary methods, among which the use of insulation rehabilitation plaster, laser cleaning, cleaning with dry ice and the plasma technology, taking the form of using a plasma burner.

The material continues with the theme of creation of cultural regions within the territories (Santagata, U. 2004), which host sites of cultural and architectural heritage. The establishment of cultural regions represents a good way of protecting and preserving the cultural heritage and at the same time improving the economic status of the region. Twelve strategic dimensions, which can be observed as a considerable generalization of the specific framework of the theoretical approaches of Florida, Porter and Sen and which encompass together a complex selection of conditions, allowing a lively and sustainable development of the dynamics of a cultural region, have been identified. The study continues with a presentation of several suitable good practices, which represent the specific technology, applicable in a certain context:

Valencia (Spain)

In 1992, a conjoint project of the Generalitat Valenciana (the Regional administration) and of the Municipality of Valencia, within the more general framework of the city’s strategic plan (see below) launched a special agency – Oficina de Rehabilitazion Urbana – with the aim to define a new strategy for the renewal of the city centre – the Plan RIVA. The plan presents innovative characteristics, focusing attention not only on the physical infrastructures (i.e. buildings restoration, creation of new facilities, etcetera), but also studying innovative actions and approaches for the economical, cultural, and social fields (e.g. paying attention to social inclusion issues). The project directs its attention to three “regions” within the boundaries of the historic center, Velleuters, Carmen and Mercat: three areas presenting substantial social criticalities with the imaginable economic and environmental fallouts. The project results
from the period of 1992-2003 are impressive. Today the old town is integrally rehabilitated and is one of the most animated and intriguing parts of the zone of the metropolis. Starting from this early achievement, in 1988, the Generalitat and the Valencia City Hall launched a far-reaching strategic plan, the General Urban Organization Plan (GUOP), to redesign the whole layout of the city. The vision behind the GUOP was that of making of Valencia a green and European city, developing toward the sea and pursuing a high level of social integration and of cultural vitality, playing an ambitious leadership role in the Western Mediterranean quadrant. The three main strategic axes were cultural development, scientific-technological development, and environmental sustainability. It is, evidently, a strongly top-down oriented model. Nevertheless, and here its strength lies, it is also a model that heavily relies on the unleashing of private resources and energies and on a vastly inclusive and participative conception of the role of the local communities. The reaction of the local system has been overwhelming: the actual city’s quality of life is very high, and Valencia is becoming one of the preferred residential locations at the continental level, as well as an emerging cultural and scientific capital, while at the same time qualifying as a primary tourism venue hosting big events such as America’s Cup Finals and, from 2008, the second urban circuit for Formula 1 races after Montecarlo.

Newcastle upon Tyne - Gateshead (England - UK)

Newcastle and Gateshead form a conurbation of about three quarters of a million inhabitants on the river Tyne in North East England. The abundance of natural resources was what initially stimulated the growth of industry in the Tyneside region. Coal had been mined in the area since the 14th century, and had directly stimulated the development of the world's earliest railways in the North East during the 18th century. In the 1970s and 1980s the city and the region witnessed massive deindustrialization, which brought dramatic rates of unemployment and considerable emigration towards richer areas in the South of England. Throughout its history, the town of Gateshead has lived in the shadow of the commercially powerful and historically wealthier Newcastle, but despite this strong competition Gateshead has managed to rigidly hold onto its own identity and refuses to become a mere suburb of the Geordie capital. The regeneration of Gateshead started in the 1990s and it is symbolized in England and in Europe by a handful of major icons: the Baltic Flour Mills, the Millennium Bridge, the Sage Opera House, and the Angel of the North sculpture by Anthony Gormley. The new image of the city is a consequence of a project, which is groundly based on active community involvement, aiming to redefine mostly the elationships and the attituded of the
local people. Gateshead ventured its future on these huge symbols, which turned into characteristics of the entire region. Still, they represent only the first steps of a much larger initiative, focused on social and economic revitalization of the agglomeration through a strategy for artistic and cultural development, focused on the local community and developed mainly by public organizations and agencies.

**Linz (Austria)**

Linz is the third largest city in the country – with about 180,000 inhabitants – on the river Danube, Upper Austria. Today Linz is still an industrial city. The city approach to culture-led renovation finds its best example in Ars Electronica, which is a museum, a laboratory, a prize and a festival at the same time. The Museum of the Future on the north bank of the Danube, across from the Hauptplatz, which leads to the historical part of the city (Altstadt), is a six-storey space where visitors can learn about technology by getting their hands on and playing with the world of digital interaction. The Ars Electronica Center (AEC) is home to one of the few public 3D caves in Europe - the very first 3D cave in the world to be publicly accessible - and attracts a large gathering of technologically oriented artists every year for the Ars Electronica Festival. For the 2009 Cultural Capital program, a new wing will be completed and the whole floor space will be tripled with respect to the current status quo, whereas the current multimedia collection will move in a new space downtown; the FutureLab is a complex of studios and workshops where researchers carry out innovative projects on digital surfaces, virtual environments and interactive space; it will expand significantly in the AEC’s new configuration. The creative interaction between local cultural tradition and a resolute option for cutting-edge technology in the media industry has enhanced the cultural supply of the entire city, even in the traditional art forms. For the purpose of putting the remarkable network of activities in order, the city management of Linz introduced in 2000 a detailed document for cultural planning. The plan is innovative in terms of contents and modes of financing, and the strategy, which is aimed to address the metropolitan area’s key future development options, assumes culture as the main driver for the further development of the city.

At the end of the study are presented good practices in the sphere of restoration of architectural heritage, development of human resources and territorial management, which present specific initiatives in the area of vocational education and training, preservation of architectural heritage and territorial management, following the concept of the creation of cultural regions. Selected for presentation are practices, which have proven their effectiveness
and their development in time has led to real results both for the local authorities, as well as for the territory as a whole and mostly for the people, living there. The study of the practices took place through content analysis and contact with the people, who have been responsible for their implementation. Among the presented practice are „Archilandia project”, project “Ancient crafts”, project “Culture” and “Training materials for sustainable buildings”. The detailed analyses, as well as all project results, can be found at http://archilandia.wordpress.com/постигнати-результати.

NOTES

BIBLIOGRAPHY
Simeonova-Korudzhieva, D. Immovable cultural heritage – questions of territorial planning protection”, 2011
Kandulkova, J. History of conservation of architectural heritage in Bulgaria by the World War II. Sofia, 2007
Santagata, U. „Cultural regions and economic development” Walter, University of Torino, Italy, 2004.

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