

CULTURAL HERITAGE

**INFORMATION ON THE CULTURAL HERITAGE
OF ROȘIA MONTANĂ
AND RELATED MANAGEMENT ASPECTS**

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1. LEGISLATIVE FRAMEWORK

There is no single comprehensive legislative text in Romania that clearly defines and establishes responsibilities in relation to the protection of cultural heritage and cultural property as a whole. Most cultural heritage assets, including archaeological heritage and historic buildings, are regulated under specific laws. The main legislative documents applicable to the protection of cultural heritage in Romania include:

- The Government Ordinance 43/2000 (amended by Law No. 378/2001 on the protection of archaeological heritage and the designation of national interest sites, as revised and amended by Law 462/2003, published in November 2003, and by Law 258/2006, published in July 2006), is the main regulatory document in the field of archaeological heritage, and sets out the legal framework for the conduct of archaeological research on site and defines the actions related to the protection of archaeological heritage areas. The Law lists the institutions and entities in Romania that have been empowered to make decisions in regard to the protection of archaeological heritage, as well as the rights and obligations of owners or investors in relation to the funding of the necessary archaeological research in the process of obtaining an archaeological discharge certificate;
- Law 182/2000 on the protection of movable heritage assets, published in Official Gazette No. 530 of October 27, 2000, Part I, provides the legal framework for activities related to the movable heritage assets, i.e. evaluation, classification, export of this category of assets, as well as definitions of every category. The Law lists the Romanian institutions and entities that have been empowered to make decisions in relation to the protection of movable cultural heritage assets;
- Law 422/2001 on the protection of historical monuments, as revised and amended by Law 468/2003, and the Ministerial Order no. 2682/2003 of the Minister of Culture and Religious Affairs, the Ministerial Order no. 2684/2003 of the Minister of Culture and Religious Affairs and the Government Decision no. 1430/2003, and Law 259/2006 on the protection of historical monuments;
- Law No. 5/2000 (published on Official Gazette No. 152 of 2000) on the approval of the National Land-use Master Plan (PATN) and the list of natural areas and areas containing national interest heritage assets;
- Law No. 311/2003, on museums and collections; and
- General Urbanism Plan Regulations (PUG) No. 525/1996.
- The Government Decision No. 1430/2003 revising Law 422/2001 on historical monuments
- Ministerial Order of the Ministry of Culture and Religious Affairs no. 2682/2003 on the approval of Methodological Norms of classification and recording of historical monuments, the List of Historical Monuments, the Analytical Recording Form for historical monuments, the Minimal Form for historical monument recording, as further amended and revised by Order of the Minister of Culture and Religious Affairs 2807/2003 on the Methodological Norms of historical monument classification and recording
- Order of the Minister of Culture and Religious Affairs No. 2392/2004 on the archaeological standards and procedures.

Provisions of the national legislation regarding preventive archaeology

Based on Government Ordinance no. 43/2000 as further amended by Law 378/2001, Law 462/2003 and Law 258/2006, Article 7, point a), the investor has the obligation to finance the “establishment, based on the investment feasibility study and the technical project, of the measures to be detailed and the necessary funds for preventive research or archaeological monitoring as applicable, and the protection of the archaeological heritage or, as applicable, the archaeological discharge for the area affected by the works and the implementation of the said measures.”

Provisions of the national legislation regarding historical monuments and protected areas

- According to Law No. 5/2000 (art. 5, paragraphs. 2-3), the local government authorities, with assistance from the relevant central government authorities had the obligation to define, based on specialist studies, within 12 months of Law 5/2000 coming into force, all the protected areas for cultural heritage assets, as provided in Annex No. III of the regulatory

document. In defining the protected areas, the local government authorities must develop urbanism documentation and relevant regulations, and approve them under the law, including the necessary protection and national cultural asset conservation measures for their jurisdiction.

- in regard to *defining the protection areas for historical monuments*, according to Law 5/2000 art. 10.-(1), Law 422/2001 Art. 59, as amended by Law 259/2006, *before the establishment of the protection zone of each historical monument, based on expert studies*, the protection zone will be considered to be a limited area of 100 m radius in urban localities, 200 m in rural localities and 500m, outside localities, measured from the outer perimeter and around the historical monument. Therefore, until expert studies have established the historical monument protection zones the protection limit in this case will be 200 m.
- also related to the *definition of historical monument protection zones* under art. 8 (1) and (2) of Law 422/2001, as amended by Law 259/2006 “(1) an individual protection area shall be established for each historical monument, defined based on topographical, geographical or urbanism landmarks, based on the street system, the relief and the characteristics of the historical monument, as applicable, in order to ensure the integrated conservation and enhancement of the historical monument and of its built or natural environment. (2) Definition and establishment of the protection zone are to be done at the time of classifying the asset as a historical monument, under the law”.
- According to Law 422/2001 art. 35, as amended by *Law 259/2006, The National Commission for Historical Monuments of the Ministry of Culture and Religious Affairs* has powers in regard to:
 - approval of the national land-use master plan – section on protected built-on areas; approvals of the relevant sections of the land-use development plans that target historical monuments or protected built-on areas;
 - proposed approval of the National Land-use Development Plan – section on protected built-on areas;
 - proposed approval of the relevant sections of the land-use development plans that target historical monuments or protected built-on areas;
 - proposed approval of historical and scientific documentation studies in defining the protection zones for historical monuments classified under group A or for protected built-on areas that contain historical monuments classified in group A, of the relevant sections of the land-use development plans and urbanism plans, and of restoration projects targeting historical monuments classified in group A;
 - proposed approval for the background studies and relevant sections of the urban master plans of the administrative units and zoning plans, as well as for detailed urbanism plans that target historical monuments classified in group A, or protected built-on areas containing historical monuments classified in group A.
- According to Law 422/2001 art. 38 – as amended by Law 259/2006 – the obligations of the owners of historical monument assets, either natural or legal entities, include *inter alia*:
 - a) to maintain, use and operate the building only in compliance with this Law and the Obligation regarding the use of the historical monument, under art. 16;
 - b) to provide security of the historic monuments and take steps in order to protect them from fire;
 - c) to notify immediately, in writing, the Directorate for Culture, Religious Affairs and National Cultural Heritage of the County, or of Bucharest City, as applicable, as well as the mayor of the respective town or commune on any changes or degradation of the physical state of the historical monuments that they own within the territory of the administrative unit; [...]
 - [...] h) to ensure the completion of conservation, consolidation, restoration, and any other works, under the law, only by natural or legal persons that have obtained relevant certification and to provide execution deadlines and conditions in the contracts as specified in the expert approval;
 - i) to comply with all the conditions and deadlines included in the expert approval whenever they conduct current maintenance or any other intervention themselves, as provided by this Law [...]

European Conventions and international regulations

European Conventions In developing the specialist documentations and the plans of works related to the cultural heritage of Roșia Montană, consideration was given to the provisions of the most important European conventions on the protection of cultural heritage.

- *Convention for the Protection of the Architectural Heritage of Europe (1985)* (also known as the Granada Convention)

The main purpose of this Convention is to support and promote the conservation and enhancement of the European heritage. The document also states the need for European solidarity in heritage conservation and was developed with a view to supporting practical cooperation among countries. It sets out the principles of “European cooperation on conservation policies”, including consultation on streamlining the implementation of the necessary policies. The Convention was signed by Romania on 22.07.1996 and ratified by the Parliament of Romania on 20.11.1997, with entry into force on 01.03.1998. The provisions of this Convention were transposed to some extent into the relevant Romanian legislation, i.e. Law 422/2001, amended by Law 259/2006 on the protection of historical monuments.

- *European Convention on the Protection of the Archaeological Heritage(1992, revised)* (also known as the Valetta, or the Malta Convention)

This revised Convention updates the provisions of an earlier European Convention, dedicated to the same topic, i.e. the London Convention (1969). Under the new adopted text, the conservation and enhancement of archaeological heritage assets becomes one of the objectives of urban development, land-use planning and regulation policies, at the urban and regional level. It contains a number of particular references to a number of arrangements that need to be achieved in encouraging and promoting cooperation between archaeologists and urban developers at the local and regional levels so as to ensure optimum conservation of the archaeological heritage. The Convention establishes guidelines for the financing of excavations, research work and publication of discoveries resulting from research. The text makes a number of references to public access to the archaeological sites and educational activities that need to be undertaken in developing public awareness and understanding of the value of the archaeological heritage. The Convention is practically an institutional framework for pan-European cooperation in the area of archaeological heritage, and determines a systematic exchange of experience and experts in various states. A committee in charge of monitoring Convention implementation has been set up, which has taken upon itself the role of strengthening and coordinating archaeological heritage policies across Europe. The Convention was signed by Romania on 22.07.1996 and ratified by the Parliament of Romania on 20.11.1997, with entry into force on 21.05.1998. The provisions of this Convention were transposed to some extent into the relevant Romanian legislation, i.e. the Government Ordinance 43/2001, amended by Law 378/2006, Law 462/2003 and Law 258/2006 on the protection of the archaeological heritage.

- *European Landscape Convention (2000)* (also known as the Florence Convention).

The Convention aims to encourage public authorities to publish and adopt policies and measures at the local, regional, national, and international level to protect, manage and plan the landscapes of Europe. It covers all types of landscape, both exceptional and common in nature, that determine the quality of the human living environment. The document is a flexible framework for approaching landscapes that require a variety of actions due to their specific nature, ranging from strict conservation through protection, management and improvement to effective landscape creation. The Convention proposes legal and financial measures at the national and international level that aim to outline “landscape policies” and promotes the interaction between central and local authorities, as well as trans-boundary cooperation in landscape protection. It establishes a diverse set of solutions that the signatory parties may implement, based on their specific needs. The Inter-Governmental Committees of the Council of Europe will supervise Convention implementation. The Convention was signed by Romania on 22.10.2000 and ratified by the Parliament of Romania on 07.11.2002, with entry into force on 01.03.2004.

International Regulations In developing the specialist documentations and the plans of work related to the cultural heritage of Roșia Montană, consideration was given to the provisions of some international regulations in the area of cultural heritage protection, including:

- The UNESCO recommended international principles applicable to archaeological research (1956);
- The UN Convention on protecting the world international and cultural heritage (1972), under which the signatory parties assume the responsibility of establishing an active protection system for the protection of exceptionally valuable cultural and national heritage;
- Operational policy note 11.03 of the World Bank;
- ICOMOS Charter on the protection and management of the archaeological heritage (1990).

Considerations on the legal protection regime over the heritage assets in the Roșia Montană area

Before 2000, due to the complex social transformations occurring after 1989 in Romania, there had developed a significant gap in the legislation related to the protection of cultural heritage. From 2000 onwards, this major gap has been filled. It needs to be stressed that implementation of the mining project did take all these rather rapid legislative changes into consideration, although there were cases where a legal text might be subject to amendments and changes from one year to the next.

The cultural heritage assets of Roșia Montană are classified into two of the categories of historical monuments defined under the *Law on historical monument conservation* (Law 422/2001):

- *monument* (monument – a structure or part of a structure, together with the installations, artistic components, internal and external furnishings that are an integral part thereof, as well as any art commemorative, funerary, or public forum work, together with the topographically defined relevant land, that represent significant cultural and historical legacies in point of architecture, archaeology, history, art, ethnography, religion, social, scientific or technical characteristics) and

- *site* (topographically defined land including such human creations in the natural environment that are significant cultural-historical legacy from an architectural, urbanism, archaeological, historical, artistic, ethnographical, religious, social, scientific, technical or cultural landscape point of view).

These elements are also covered by the *National Land Development Plan (PATN) – Section III – Protected Areas* (approved by Law 5/2000) under the following categories of national interest heritage assets:

1. *protected natural areas of national interest and natural monuments* –e.g. Piatra Corbului and Piatra Despicață

2. *national interest cultural heritage assets*, i.e.

- *urban ensembles* – e.g. the Historic Center of Roșia Montană, village of Roșia Montană

- *industrial architecture*; development of communication roads – e.g. the Roman Galleries of the gold extraction operations, commune of Roșia Montană, Roșia Montană village

- *monuments of folk architecture, village households* – e.g. Houses – 18th and 19th centuries, commune of Roșia Montană, Roșia Montană village

- *administrative units of high density national interest built assets of cultural value* - e.g. the locality of Roșia Montană

The richest heritage category for the Historical Centre area, *the site*, includes on the one hand the *Alburnus Maior - Roșia Montană site* (HML 2004 code: AB-I-s-A-00065) which, although not specifically identified under the law, contains a number of Roman Age archaeological remains and implicitly covers the Historical Centre. On the other hand, the same category of *site* also includes the *Historical Center of the locality* proper AB-II-s-B-00270).

The most represented category is that of monuments, which includes:

- 41 buildings, of which two churches and 39 *houses* (HML 2004 code: AB-II-s-B-00269, and then from AB-II-m-B-00271 to AB-II-m-B-00311).

- the 6 components of the archaeological site of Roșia Montană, identified as historical monuments, i.e. the Roman settlement at Alburnus Maior, Orlea area, Roman mine at Alburnus Maior, Orlea Mountain, Roman remains at Alburnus Maior, Carpeni area, Roman funerary precincts of the “Hop-Găuri” area and the Gallery at „Cătălina-Monulești” in the protected area of the historical center of Roșia Montană (HML 2004 codes from AB-I-m-A-00065.01 to AB-I-m-A-00065.05) and the Roman Galleries in Cărnici Massif, Piatra Corbului location (HML 2004 code AB-I-s-A-20329).

The ranking derived from the legal classification, under which the entire archaeological site (as it was considered on the List of Historical Monuments 2004) and its components belong to group A - *historical monuments of national and universal value*, reflects the prevailing archaeological component. All the other heritage items are classified under group B – *historical monuments representative of the local cultural heritage*. As mentioned before, the same elements are designated under the National Territory Arrangement Plan – Section III as *exceptionally valuable national monuments*, and we need to stress that heritage rescue, protection and enhancement works in the protected areas are for public use, in the national interest (Law 5/2000, art. 3).

Thus, the definition of the protection area in the Historical Center has been established under the

Urbanism Master Plan of 2002, but not the entire territory so defined is included in the heritage assets concentration area, the details of which will be determined under the Zoning Plan for the Protected Area of Roșia Montană Historical Center.

Applying the archaeological discharge procedure

Under Law 422/2001, amended by Law 259/2006, it is possible to apply the legal declassification procedure if the archaeological sites have been discharged, as approved by the National Commission of Archaeology of the Ministry of Culture and Religious Affairs. Under the law, *the archaeological discharge* is the procedure that confirms that a site where archaeological heritage has been identified may be reclaimed for current human activities (Law 258/2006, art. 5, paragraph. (2)). Based on the Government Ordinance 43/2000 as further amended by Law 378/2001, Law 462/2003 and Law 258/2006, Article 7, point a), the investor has the obligation to finance the “establishment, based on the investment feasibility study and the technical project, the measures to be detailed and the necessary funds for preventive research or archaeological monitoring, as applicable, and the protection of the archaeological heritage or, as applicable, archaeological discharge for the area affected by the works and the implementation of the said measures.”

Prior to 2000, the level of scientific knowledge and understanding of the archaeological realities at Roșia Montană relied exclusively on the interpretation of chance finds of Roman epigraphic elements and funerary architecture items (see the Environmental Impact Assessment Study, Annexes F-G, p. p. 161-169), sometimes supplemented by often incomplete archive information. Therefore, RMGC has complied with the legal provisions and funded a preventive archaeological research program conducted by specialists of various institutions of the Ministry of Culture and Religious Affairs, the Romanian Academy, and the Ministry of Education and Research. Review of the results of this research has documented and, and may in the future, document decisions of the competent authorities on whether to apply the archaeological discharge procedure and implicitly the declassification procedure for listed historical monuments. Law 422/2001, as amended by Law 259/2006 clearly describes how to apply the declassification procedure - understood, under art. 18 (1) to be removal from the List of Historical Monuments of an immovable asset or part thereof, and mentioning the declassification order on the List. Art. 18 (3) point a) clearly states that declassification of historical monuments is triggered *ex officio* in the cases of the archaeological discharge of the sites, as approved by the National Commission of Archaeology, or, as applicable, of the decentralized structures of the Ministry of Culture and Religious Affairs under Law 258/2006.

For the Orlea area (the only one where ancient mining remains have been classified to date, i.e. under LMI 2004 Roman mining operations at Alburnus Maior, Orlea area LMI code AB-I-m-A-00065.02), research undertaken so far has been preliminary in nature. Detailed research of this area is planned for 2007-2012, and when this research is completed the necessary measures will have to be taken, as required by law, namely the preservation *in situ* of some sections, or the archaeological discharge of others. Detailed information on the chance archaeological finds and preliminary archaeological research (both above and underground) in the Orlea massif was published in the Environmental Impact Assessment Study for the Roșia Montană Project, vol. 6 – Cultural Heritage Baseline Report, Annex I pages 231-236.

Thus, in compliance with the legal provisions, any industrial (but not limited to industrial) development project in this area can be implemented only after preventive archaeological research has been completed (both on the surface and underground, as necessary) and has provided exhaustive data on the archaeological sites at Roșia Montană. To date, preventive archaeological research has covered most sites on which the proposed RMGC mining project will be implemented.

There are no legal provisions that might prohibit the conduct of preventive archaeological research in the case of identified and classified archaeological heritage areas, as is the case at Roșia Montană. Thus, the construction activities required by the Project implementation cannot be initiated on the various sites before the completion of the archaeological investigations carried out under the Romanian legal provisions and international recommendations and practices.

In conclusion, during 2001-2006, comprehensive preventive archaeological research was conducted at Roșia Montană, and the results thereof documented either the archaeological discharge, or supported the necessary measures to preserve and protect certain areas.

2. HERITAGE

Short history

Before 2000, it could be said of Roșia Montană that it was an area of archaeological potential, where no proper archaeological investigations had been conducted such as would be required for a detailed identification of various site components. In practice, the areas of Cetate, Cârnic, Jig, and Orlea, located in the upper Roșia and Corna Valleys, respectively, in the jurisdiction of Roșia Montană Commune, a number of chance archaeological finds had been recorded – such as epigraphic monuments, funerary architecture items - that provided enough evidence to suggest the presence of archaeological sites. This was the level of knowledge before the start of the extensive archaeological research undertaken under the *Alburnus Maior National Research Program*. In the absence of any indication of the ancient *Alburnus Maior*, the overall image of the site(s) had been exclusively based on epigraphic information and therefore the significance of the area was relatively distorted.

The fame of ancient Alburnus Maior site was provided by the fact that the locality was the place where epigraphic materials of particular interest had been uncovered. Remarkable documents in their rarity and rich information content, the 25 wax tablets preserved and published to date, provide detailed information on the economic realities, the habitation system, the religious life and legal relations that governed the local mining community. The number of initial finds must have been over 40, but those identified with certainty to date are 32 (3 having been lost over time, but after publication), the actual pieces being included today in the collections of the museums in Aiud (2 parts of a triptych), Bucharest (2 tablets), Cluj (11 tablets, of which 6 unpublished), Sebeș (one unpublished tablet), Budapest (13 tablets), and those of the Battyaneum Library in Alba Iulia (one tablet) and of the “Timotei Cipariu” Library in Blaj (2 tablets). The unanimously accepted opinion among specialists is that they were placed for safe keeping in inaccessible mine galleries, at a time of crisis, probably related to the Marcomanic incursions into Dacia during 167-170 AD. In the theoretical approach to research at *Alburnus Maior*, analysis of the information contained on the wax tablets was an important starting point in defining the research methodology.

Thus, the wax tablets found by chance in the mine galleries, i.e. not based on specialist archaeological research (the largest cache of 11 items was found in the Cătălina Monulești gallery) in the Roșia Montană area in late 18th and early 19th centuries are kept in a number of public museums and collections, as revealed by the inventory above. For the past 150 years or so, in spite of massive re-opening and operation of the old mine galleries and specialist archaeological research conducted in such underground structures since the year 2000, no further tablets have been discovered.

There is a theoretical possibility that galleries that have not yet been subjected to mining archaeology investigations might still contain such artifacts: Currently, the entire network of old galleries is being minutely researched by a team of French specialist mining archeologists from the University of Toulouse Le Mirail, in some areas such investigations having been concluded – as in the case of Cârnic, Cetate and Jig massifs, while in others they are still ongoing – as in the case of the Cătălina-Monulești, Păru Carpeni sectors and of the Orlea-Țarina massif. The professionalism of the Franco-Romanian team, and the care they demonstrate in handling ancient finds has been exemplified by the discovery of the ancient mine drainage system dated to the Roman period found in the Păru Carpeni mining sector in 2004, and by the way general underground research has been approached in the past 6 years. This type of approach will not allow heritage assets in Roșia Montană (and especially those found underground) to be lost or destroyed, but rather ensures they are studied and brought to the public eye in the most professional way possible. Moreover, note that in the heritage enhancement projects involving the mining assets at Roșia Montană, the gallery of Cătălina-Monulești holds center stage, for its galleries but also because in the past it occasioned the most significant find of wax tablets.

Mining archaeology research at Roșia Montană is a first in Romanian archaeology. Before 1999, no mining archaeology research had been conducted at Roșia Montană, in fact, investigation and scientific survey of these galleries only began then. Thus, before 2000, based on all the information provided by chance finds and starting from the text research of the wax tablets, a relatively scholarly image had already been created of the ancient *Alburnus Maior* that included, however, some attempts of archaeological topography. Summarizing this information, the *Archaeological Gazetteer of Alba County* (1995) mentioned the following points related to the Roman mining galleries:

- during the 18-20th century mining activities, a number of artifacts dated to the Roman Age, were brought to light (many of the mentions did not specify the actual location of the discovery, were unpublished or just listed items, and that others had actually disappeared).
- South, East and North of the modern mines, parts of mine workings also dated to the Roman Period were identified too, but did not benefit from adequate scientific research.
- Also, Roman Age gold mining operations, especially identifying the place where the wax tablets were discovered, were mentioned near the civil settlement on Cetate, Cârnic Hills, in

the Ecaterina Monulești (Cătălina-Monulești) gallery, in the massifs of Letea (Lety) and Rotunda.

- Mention is also made of the fact that iron seems to have been extracted during the Roman period on the “Cetatea Mică” hill, without providing any archaeological evidence in this respect.

As a result, before early 2000, it could be said of Roșia Montană, as an ancient mining site, that it was an area of significant archaeological potential, where no proper archaeological investigation had been conducted as would be required for a detailed identification of various components and characteristics, or to define the location and spatial distribution of the ancient mining remains within the site.

Despite such realities, between 1990 and 2006, the gold and silver deposit was operated by the Romanian State, without the necessary care for such remarkable archaeological remains, or the provision, before the year 2000, of a preventive archaeological research program. In practice, in 1975 the Romanian State initiated open cast mining in Cetate Massif, and in the mid 1980s the same procedure was applied for the north-western, western, and south-western sides of the Cărnic Massif. In 2000, under the Romanian legislation on national cultural heritage protection, it was known that Law 5/2000 of 6 March 2000 on the approval of the National Land-Use Master Plan (PATN) Section III – Protected Areas, published in Official Gazette of Romania No. 152 of April 12, 2000 lists among the cultural heritage items the Roman gold mining Galleries, in the commune of Roșia Montană, Roșia Montană village, Alba County (Annex 3, Section I - Industrial Architecture; communication road development, item I)1.), without further specification on their location, characteristics and distribution.

“ALBURNUS MAIOR” National Research Program

Archaeological research at Roșia Montană started in 2000, with the participation of archaeological teams from the National Museum of the Union in Alba Iulia and the Design Center for the National Cultural Heritage Bucharest (which became the National Institute of Historical Monuments in 2002) As of 2001, the “Alburnus Maior” National Research Program was established under Order of the Minister of Culture No. 2504 of 07.03.2001, and was implemented under Law 378/2001, (as further amended by Law 462/2003 and Law 258/2006, respectively).

Preventive archaeological research is conducted under the scientific coordination of the National History Museum of Romania. The research conducted during each archaeological campaign is permitted by the Ministry of Culture and Religious Affairs (MCR) based on the annual archaeological research plan approved by the National Commission of Archaeology, and proceeds based on archaeological excavation permits issued by the Ministry of Culture and Religious Affairs. The program has been run with the financial support S.C. Roșia Montană Gold Corporation S.A., i.e. of the mining Company that aims to extend and continue surface mining operations on the gold and silver deposits at Roșia Montană. Thus, comprehensive preventive archaeological research work has been undertaken, and is ongoing in the Roșia Montană Project impact area, with an objective of identifying the characteristics and distribution of archaeological heritage items. Based on the results of such research, the archaeological discharge process has been applied for some sites located in the investor’s intervention area, or it was decided to preserve *in situ* some representative structures and monuments, or to continue the research work, respectively, under the law.

The main objectives of the inter-disciplinary research program include:

- research of the archaeological heritage, full recording of the data obtained from excavations and archaeological surveys (archaeological and mapping databases, digital picture archives, etc.) as well as full publication of the research results in the *Alburnus Maior* series or in specialist studies;
- investigation of the Roman and medieval mine galleries in the area by specialists. Inventory and proposals for the conservation/restoration of representative sections;
- defining the archaeological and architectural reserve areas to include parts of the mining galleries and historical monument buildings;
- complete recording and research of the industrial heritage assets;
- development of an ethnographical study of the Roșia Montană - Abrud – Corna area;
- development of a local oral history study;
- implementation of the archaeological discharge process for the sites located in the mining Project impact area, in compliance with the law;
- development of a project for the implementation of the future Mining Museum of the Apuseni Mountains from its beginnings up to the present day.

Study of the surface archaeological remains at Roşia Montană (2000-2006)

All of the preventive archaeological research conducted at Roşia Montană starting, in 2001 and up to the present, has been developed under the “Alburnus Maior” National Research Program. Archaeological research is undertaken under the scientific coordination of the National History Museum of Romania, and involves 21 Romanian and 3 foreign specialist institutions. All research work has been conducted under the relevant legal provisions and included the development of: archive studies, site research, aerial photograph interpretation, mining archaeology, underground topography and 3D modeling studies, geophysical surveys and other inter-disciplinary studies (sedimentology, archaeo-zoology, palynology, archaeo-metallurgy, geology, mineralogy).

Archaeological research was conducted by a survey of accessible areas suitable for human habitation, based on bibliographical information and observations made during the archaeological field-survey campaigns, magnetometric analysis, electric resistivity studies and aerial photography fly-overs.

Systematic research development occurred wherever archaeological conditions required it. Where the specialists considered it necessary, the preservation *in situ* and restoration of the archaeological assets was preferred, as in the case of the Circular Funerary Monument at Hop-Găuri (*Alburnus Maior* II, Bucharest 2004), or the area was established as an archaeological reserve, as in the case of Carpeni Hill (classified under LMI 2004, AB-I-m-A-00065.03), and the protected area at Pietra Corbului, respectively. On the other hand, in the case of the other discoveries, archaeological research was exhaustive, and only then did the archaeological teams propose issuance of the archaeological discharge certificate.

Surface preventive archaeological research conducted so far includes:

- during the archaeological campaign of 2001 extensive archaeological site investigations were conducted in the areas of identified archaeological potential in Roşia Montană area, located on Carpeni Hill, Nanului Valley, the Hop-Găuri, Hăbad and Tău Țapului areas, Cetate Massif, as well as field-walking survey research along Corna Valley;
- during the archaeological campaign of 2002 extensive archaeological site investigations were conducted in the areas of identified important potential in Roşia Montană area, located on Carpeni Hill, Tău Găuri, the Hop-Găuri area, Cărnici Massif, Gura Roşiei area, the entire Corna Valley and Săliştei Valley;
- during the archaeological campaign of 2003 archaeological research was conducted in the areas of identified archaeological potential in Roşia Montană area, located on Carpeni Hill, the Tău Găuri area, the Jig-Văidoaia Massif, Țarina area and the Gura Minei-Balmoşesti area;
- during the archaeological campaign of 2004 extensive archaeological research was conducted in the areas of identified archaeological potential in Roşia Montană area, located in the Jig-Piciorag area, Țarina area – further research of the Roman cremation necropolis identified during the 2003 campaign, the Pârâul Porcului – Tăul Secuilor area and Tău Anghel area.
- during the archaeological campaign of 2005 archaeological research was conducted in the areas of identified archaeological potential in Roşia Montană area, located in the Țarina area – further research of the Roman cremation necropolis identified during the 2003 campaign, the Pârâul Porcului – Tăul Secuilor area, further research of the Roman cremation necropolis identified during the 2004 campaign.
- during the archaeological campaign of 2006, archaeological research continued in the Pârâul Porcului – Tăul Secuilor area further research of the Roman cremation necropolis identified during the previous campaigns.

The results of this research have been published annually since 2001 in the *Chronicle of Archaeological Researches in Romania*, in scientific reviews, and in the first three volumes of the *Alburnus Maior* monographic series. Also, the Environmental Impact Assessment Report presents a summary of the main results of this research (see vol. 6 – Cultural Heritage Baseline Study, Section 5, p. 69-110, and the record sheets for the archaeological sites identified by this research are in the same document, Annex I, p. 181-257).

Archaeological investigation – by excavation – of the entire Roşia Valley faced a number of practical problems, the most significant being its intensive habitation, compounded by the fact that in some parts it is covered by numerous landfills resulting from historic mining throughout the ages.

Thus, both field-survey research, archaeological surveys, and systematic archaeological research of the archaeological assets were conducted according to generally accepted and recognized archaeological sample-research standards. All research work has been conducted under the relevant legal provisions.

Study of the historical galleries at Roșia Montană (1999-2006) and preliminary findings regarding the conservation and enhancement of this category of remains

Only in the context of the proposed open cast mining operation did the necessary due diligence archaeological research processes start. These specialist investigations have been conducted – from 1999 to the present – by a multi-disciplinary specialist team from the University of Toulouse Le Mirail (France) coordinated by Dr. Beatrice Cauuet and have aimed to develop a detailed study of this type of archaeological remains, i.e. old mining galleries of Roman and later periods. Thus, since 1999, the team from Toulouse has provided the scientific study of the mining remains on the Roșia Montană site.

The following areas have been investigated to date:

- The Cetate Massif (2000-2002);
- Cârnic Massif (1999-2003) with detailed topographical surveys for a 1:1 3D model, between 2004 and 2006
- Jig Văidoaia Massif (2003-2004);
- exploration for archaeological research and public access development of the Cătălina Monulești Gallery (2002-2005);
- exploration and preliminary research for the Țarina and Orlea massifs (2004-2006)

During eight years of research at Roșia Montană (annual missions of 2 to 4 months between 1999 and 2006) more than 70 km of underground mining works of all periods have been surveyed, two thirds of which were located in the Cârnic and Cetate massifs. In crossing the recent galleries opened during the 20th century, the French team, which also included Romanian archaeologists and geologists from Deva, Cluj, and Bucharest specializing in the area of mining archaeology, could identify, out of the 70 km of underground mining works, approximately 53 km of recent work (19th and 20th centuries), 10 km of modern work, “dug” by blasting (17th and 18th centuries) and nearly 7 km of Roman mining works dug with iron tools (chisel and hammer) or by the fire setting technique. The modern and recent workings, identifiable based on a study of their walls (traces of drilling/piercing blasting, general shape of the works, comparison with archived mining plans) have been dated without further details as starting in the 17th and continuing up to the early 20th century, based on radio-carbon analysis of charcoal or preserved wood.

The main conclusions after 8 years of mining archaeology research include:

- on the Roșia Montană site, an approximate 7 km of ancient mining works have been revealed in total, but not as continuous structures, rather as sections and portions of mining works scattered throughout most of the mining sectors,
- in the currently outlined protection areas within the perimeter of the Roșia Montană Project, i.e. Cătălina Monulești, Lety-Coș, Piatra Corbului and Păru Carpeni, the French archeologists have stated that they have revealed most of the mining work types existing in the other mining sectors, that will, however, be impacted after their research, by the mining project, i.e. in the Cârnic Massif area,
- mining archaeology studies in the Cârnic and Cetate massifs have shown that the ancient mining works have already been impacted, and have been damaged in variable proportion by mining works conducted in later ages, especially during the period between the 18th centuries and 2006,
- human impact on the underground remains (re-mining) and natural impacts (collapse, flooding, mud slides, cave-ins) have caused the varying states of preservation of the ancient mining works,
- further mining archaeological investigation is required in the area of Orlea and Țarina massifs, and is scheduled for the period 2007-2012,
- further research and conservation work is needed in the areas of Păru Carpeni (where a Roman mine drainage system has been uncovered) and Cătălina Monulești.

The 7 km of galleries dated back to the Roman times were obtained by putting together all the mining works of this type identified and mapped in all the massifs investigated, as these galleries do not form of a continuous structure, but they are spread all over the mining perimeter. Thus, according to the findings of the team involved in the research, most of the old works have been revisited and partly re-mined for centuries since. Therefore, most of the works dated to the Roman Period are partly damaged by modern works involving explosives after the 17th century, the time when European mines witnessed the introduction of blasting technologies. As a result, most of the general layout of the ancient works may only be reconstructed based on the vestigial ancient walls, still preserved on the ceiling or on the floor of the

mining works.

Modern miners used the old mining works to the maximum as waste disposal areas for their own operations, so that the removal of such later back-fill in order to open access for current research, involves implementation of extensive, consistent and costly reinforcement and primary conservation work.

We should also stress that the mining digging activity that allows the galleries to be recovered, dated, and interpreted also contributes to their vulnerability. More specifically, the reopening of old works makes them accessible to all and, therefore, exposes them to degradation. To an equal extent, the conduct of exhaustive archaeological excavation will lead to the disappearance of the “archaeological deposit” as, once the digging is completed, only empty structures will be left (galleries and other works), while all the chronological information (archaeological material) will be recovered during the digging.

The historic waste or fill had contributed to the stability of mining works, but its removal also frequently leads to decompression, and may trigger fractures in the rock and even collapse of the mining works. Moreover, the mining systems exposed after waste removal will become drainage pathways for runoff during wet seasons, which contributes once more to the overall degradation of the assets. Add to this deterioration by frost during the winter season, which causes rock fractures, etc. Temporary wood propping structures implemented during digging may not provide proper long-term support in themselves. This suggests that, as soon as the digging is completed on a part of the site, conservation of the galleries and other mine-workings becomes a necessity. These issues are current for Cărnic, where studies have been finalized.

Considering the importance of the investigated networks, restoration works would be extremely extensive, very expensive, and add considerable long-term maintenance costs. In addition, even if the total mining network complex in the central-southern part of the Cărnic hill is a beautiful structure, note that such works exist in several other locations of the site, therefore there is a degree of repetition within the mining site. Many of these works may be found in the sectors that are to be protected from mining impacts, such as Coș, Păru-Carpeni and Piatra Corbului, all of which contain unique and representative elements supporting a scientific decision for their *in situ* preservation. In this context, it is no longer necessary to pursue an integral restoration of a complete mining complex, considering the very elevated costs of such an action, and the costs to be incurred for maintenance and use as a tourist and cultural asset.

In view of organizing a site museum, which will include mining remains preserved *in situ*, it would be better to select remarkable areas containing various mining works that are representative for the ancient mining in Roșia Montană as a whole. With the intention of enhancing the ancient mining works, a concentration of the existing technical and financial resources may be considered for the restoration of a more limited sector, *a priori* less impacted by recent mining (and therefore more authentic) located in an area of the site that is closer to the other historical monuments that will be enhanced, such as the historic center of Roșia Montană. In this perspective, the ancient mining network Cătălina Monulești, located in the Cărnic Massif, seems to be the most suitable for such purposes, compared to the known extensive networks that are much-crossed by modern mining works on the southern slope of the Cărnic. The network of Cătălina Monulești does not include all the types of mining works revealed in the Cărnic, Orlea and Țarina massifs, which would be impacted by the mining project. A reconstruction project may be envisaged, including the construction of underground replicas of such representative mining structures that have been researched and are currently precariously preserved, but which are not suitable for the development of a consistent and feasible public visiting program. These replicas may complement the authentic mining remains intended to be displayed in the sectors of Coș, Carpeni and Piatra Corbului.

Again, there are other, more limited areas of the site, located outside the Project impact area, such as the eastern slope of Cărnic Massif – the Piatra Corbului and Păru Carpeni sectors - that would be equally suited for a restoration program in order to ensure the public's access. In particular, the Piatra Corbului sector contains Roman extraction sites dug by fire, extraordinary remains of impressive size, located, however, so close to the planned pit as to require consideration of adequate protective measures to avoid degradation by pit blasting operations.

Research in the Historic Center area of Roșia Montană was not a priority for the archaeological program of 2001-2006, as this area will not be directly impacted by the future development of the mining project, as it has been designated a protected area.

During the construction phase of the Project (2007-2009) permanent archaeological monitoring will be provided by an independent archaeological team, thus aiming to prevent any irreversible loss of archaeological heritage (data that might complement the emerging outline of the history and significance of the archaeological finds at Roșia Montană), even though those areas were archaeologically discharged in 2001-2005.

During 2007-2012 archaeological site investigations are planned to continue in an area of identified archaeological potential, -the Orlea massif area - both in regard to surface and underground

archaeological potential. The Cultural Heritage Baseline Report, states that in regard to the Orlea area, on-site archaeological investigations are planned to continue in an area of assumed or identified archaeological potential. It is also specified that the research conducted in the area to date has been preliminary in nature. It is important to clarify that the Report makes the following statement: “As *Project development in Orlea area is planned for a later date, after 2007 surface archaeological investigations will focus on this site. Thus, the building activities involved in Project implementation can not be initiated before archaeological investigations carried out under the Romanian legal provisions and international recommendations and practice have been finalized.*”

Underground archaeological research in Orlea massif started in 2004, under the coordination of Dr. Beatrice Cauuet, a researcher with Le Mirail University, Toulouse. This occasioned the discovery of a hydraulic wheel chamber and a hydraulic system designed for mine drainage. This complex, identified in the Păru Carpeni sector, was dated to the Roman period and is the subject of extensive research and special measures for *in situ* preservation, and it will not be impacted by the future development of Orlea mine. Extensive surface archaeological research at Orlea, combined with underground research of the Orlea-Țarina sector, are provided under the EIA for the period of 2007 to probably 2012.

Orlea Massif will only be developed in the second half of the project implementation period. Work scheduling and phasing there does not involve destruction of any historical monument. The compliance with the current legislation comes to support the aforementioned aspects.

Under Law 422/2001, it is possible to apply the legal declassification procedure if the archaeological sites have been discharged, as approved by the National Commission of Archaeology. Thus, RMGC intends to mine the gold and silver deposits in the Orlea area in the second stage of the gold and silver mining project. But the intent can only happen after preventive archaeological research has been completed – both on the surface and underground – and has provided extensive data on the Roman site at Orlea so as to allow for the initiation of the archaeological discharge process. As already known (please refer to the Archaeological record cards in the Cultural Heritage Baseline Report included in the EIA Report, i.e. Annex I - Archaeological record cards for the sites identified at Roșia Montană, site record card No. 9 – Orlea) the site was never opened for archaeological research or specialist studies, to determine the detailed characteristics and spatial distribution of the archaeological heritage assets in the area. Therefore, RMGC has committed under the law to funding a preventive archaeological research program to be conducted by qualified archeologists during 2007-2012. Based on the results of such research, it will then be decided whether to start the procedures for archaeological discharge of the sites. There are no legal provisions that might prohibit the conduct of preventive archaeological research in the case of identified archaeological heritage areas, as is the case at Orlea.

Therefore, we need to stress again that we are faced with a paradox. In the absence of research, given the state of preservation and the nature of such remains, the physical existence of the Roman Galleries would be threatened. In its turn, any archaeological research will entail a more or less irretrievable destruction of context in order to recover information. Research of this type, however, is done everywhere in the world in relation to the economic development of areas. As for the costs of this research and the costs of maintaining the preserved areas, these have to be borne by the investors, based on a public-private partnership in the interest of cultural heritage protection.

Thus, after more than seven years of extensive preventive archaeological research conducted at Roșia Montană under the “Alburnus Maior” National Research Program - funded by RMGC as required by current legislation - the archaeological heritage of this area has become better defined and understood.. As a result, the List of Historical Monuments was updated in 2004 to include the classification of a further four separate areas as “historical monuments”, including:

- the Roman remains of Alburnus Maior, Carpeni area;
- the Roman funerary precinct in the “Hop-Găuri” area;
- the “Cătălina Monulești” Gallery in the protected area of the historic center of Roșia Montană;
- the Roman Galleries in Cârnic Massif, “Piatra Corblui” site.

Main results of the “Alburnus Maior” National Research Program (2001-2006)

ARCHAEOLOGY

- **Identification and research of Roman habitation areas** including public buildings located on Carpeni Hill and in the Tăul Țapului area.
- **Identification of settlements of Illyrian colonists** in the Găuri-Hop and Hăbad areas
- **Identification and research of several sacred areas** located in the Hăbad and Nanului valley areas, where more than 40 votive epigraphic altars have been found
- **Research of five Roman cremation necropolis** and two funerary-type areas in the locations Hop (255 graves), Nanului valley (4 graves), Carpeni (8 graves), Tăul Cornei (324 graves), Jig-Piciorag (34 graves), Țarina (495 graves) and Pârâul Porcului – Tăul Secuilor (310 graves researched to date), where a total of more than 1200 graves have been found – *one of the largest material and information stocks (1,430 funerary complexes) related to funerary practices in Dacia Province.*
- The discovery, in the Tăul Găuri area, of the circular funerary monument of the 2nd-3rd century A.D; the monument is preserved *in situ, with the implementation of primary conservation and permanent protection measures* (all the funds for the conservation and protection of this monument being provided by S.C. Roșia Montană Gold Corporation S.A.), as required by current legislation.
- Investigation of **gold ore primary processing areas** (Jig-Piciorag, Hăbad).
- **Exhaustive underground mining archaeology research** in the Cetate, Cârnic and Jig massif, with the mapping, identification and research of more than 70 km of underground mining works dated to: the Roman Age (about 7 km aggregated portions of ancient mining works); late medieval age (17th – 18th centuries. covering more than 10 km); and modern and contemporary works (19th – 20th centuries. totaling over 53 km) – *this mining archaeology research being a first in Romanian archaeology.*
- **Discovery of the Roman hydraulic system in the Păru Carpeni mining sector** and preliminary archaeology research – *an important find for Romanian archaeology as it is the first ancient installation found in situ in relatively good condition and studied by a specialist team of mining archeologists.*

ETHNOGRAPHY AND HISTORY

- Development of an oral history archive of the community – *more than 100 hours of recordings and interviews with the local people*
- Development of a vast comparative ethnographical study for the area of Roșia Montană – Corna – Bucium - *the first research of its kind in the area*
- Development of a comparative contemporary history study for the areas of Roșia Montană and Brad *the first research of its kind in the area*

ARCHITECTURE

- **Establishment and implementation of the historical center as a protected area**, including 35 historic monument buildings and 3 churches – *an ongoing program since 2002*
- Development of an exhaustive inventory of the historic monument buildings and of extensive studies of the local history and cultural heritage
- **Development of a Zonal Urbanism Plan for the Protected Area Historical Center** – *document preparation in progress.*
- **Maintenance works on a number of buildings (including historic monument buildings) included in the Protected Area Historical Center of Roșia Montană.**
- **Classification on the List of Historical Monuments (2004) of the Carpeni and Pietra Corbului areas and of the Cătălina Monulești gallery**
- **11 historic monument buildings have been proposed for restoration and are currently in the final stages of restoration project development**

ALBURNUS MAIOR MONOGRAPHIC SERIES

- **Publication of scientific volumes** (bilingual versions, in Romanian and English) **in the Alburnus Maior monographic series:**
 - Alburnus Maior I – Preventive Archaeological Research Results in 2000-2001- **published in 2003**
 - Alburnus Maior II – The Funerary Monument at Tău Găuri – **published in 2005**
 - Alburnus Maior III – The Roman Necropolis at Tău Corna – **published in 2006**
 - Alburnus Maior, Anthropos Series – Ethnographic Study of Roșia Montană 2001 – **published in 2004**

HERITAGE

- Conservation, restoration, inventory and recording in a database of all movable archaeological heritage assets recovered during preventive archaeological research work, an ongoing process initiated in 2001 and still in progress – **more than 7500 items conserved and inventoried for the collections of the future Roșia Montană Museum – kept in temporary storage at Roșia Montană or under study at the institutions that conducted the research.**
- Extensive works of mine re-opening for public access in the Cătălina-Monulești gallery (over 300m long) – **an ongoing program since 2002.**
- Primary restoration of the funerary precinct at Tău Găuri, and development of expert documentation for *in situ* preservation (as approved by the National Commission for Historical Monuments in 2004)
- Primary conservation of the Roman hydraulic system in the Păru Carpeni mining sector
- **Development and implementation of a Cultural Heritage Management Plan** with the objectives of identifying, researching, preserving, monitoring and enhancing the cultural heritage assets, as required by law. A SUMMARY OF THE THREE PARTS OF THE **Cultural Heritage Management Plan** (see EIA Report, vol. 32-33, Plan M – Cultural Heritage Management Plan, Part I – Management Plan for the Archaeological Heritage in Roșia Montană; Part II – Management Plan for the Historic Monuments and Protected Areas in Roșia Montană; Part III – Management Plan for the Cultural Heritage) **IS INCLUDED AT THE END OF THIS ANNEX.**
- Completion of two **flyovers for the development of the aerial photography archives** of the area (2000, 2004)
- Procurement of a **SPOT 5 satellite image** (resolution 2.5 m) of the Roșia Montană area (2004)
- Procurement of ortho-photo-plans (resolution 50 cm) of the Roșia Montană area (2006)
- Development of a digital map and of a GIS project to include all the archaeological research and finds in the area – **the first GIS archaeological project developed in Romania**
- **Application of modern research methods:** geophysical (magnetometric & resistivity) surveys, topography & digital mapping studies, aerial and satellite imaging, GIS project, 3D modeling, database for the inventory of movable heritage assets, dendrochronological and radio-carbon dating, etc.
- **Development of a 3D model to reconstruct the Roman galleries discovered at Roșia Montană**

Expert studies of the historical monuments and the protected area

Based on the legal requirements, RMGC initiated in 2001 – by contracting certified companies – the development of specific urbanism documentation, specifically the Urbanism Master Plan and Zoning Plan. They were developed by certified Romanian companies and subjected to the legal permitting procedure. The approval for the establishment of the Protected Area in the historical center of Roșia Montană was issued by the Ministry of Culture and Religious Affairs in 2002 (approvals No. 61/14.02.2002 and No. 178/20.06.2002) as part of the permitting procedure for urban development studies. Based on these approvals, the Ministry of Culture and Religious Affairs has requested the development of a Zonal Urban Plan for Roșia Montană Historical Center Protected Area. Thirty five (35) of the 41 historical monument buildings are located in the Protected Area of the Historic Center of Roșia Montană, which is currently planned to cover an area of 135 hectares and include a total of about 300 buildings. This Zoning Plan will therefore include most of the architectural assets of this locality (after restoration and enhancement), and a proposed Mining Museum with geological, archaeological, ethnographical (including an open space area), and industrial heritage displays; and an important underground component focused around the Cătălina

Monulești Gallery (classified as a historic monument). In this part of the locality, the Company will promote the development of traditional tourism facilities and activities such as B&B accommodation and small catering facilities.

The proposed industrial development area will however include within its perimeter 6 historic monument buildings and 4 archaeological sites including the Roman settlement of Alburnus Maior, Orlea massif (AB-I-m-A-00065.02), the Roman remains at Alburnus Maior, Carpeni area (AB-I-m-A-00065.03), the Roman funerary precinct in the „Hop-Găuri” area (AB-I-m-A-00065.04).

Special measures regarding historical monuments and archaeological sites within the industrial development area are described in the Environmental Impact Assessment Study (vol. 32-33, i.e. Plan M – Cultural Heritage Management Plan, Part I – Management Plan for the Archaeological Heritage from Roșia Montană Area, p. 79-81 and Part II – Management Plan for the Historical Monuments and Protected Zone from Roșia Montană, p. 76-95).

In conclusion, urbanism studies and the expert studies used in defining the protected areas within the Roșia Montană commune are currently under approval – in compliance with the law – by the institutions and commissions competent in this field. Note that none of the historic monument houses within the proposed RMGC Project area will be negatively affected, and all will be included in a comprehensive rehabilitation and restoration program (see Environmental Impact Assessment Study (vol. 32 and 33, i.e. Plan M - Management Plan for the Cultural Heritage, Part II – Management Plan for the Historical Monuments and Protected Areas in Roșia Montană, p. 76-95). This program is absolutely necessary if we want to prevent these houses from vanishing completely - whether the mining project is implemented or not - because of their current advanced state of degradation.

In this regard, RMGC is currently in the final stages of developing the necessary documentation for the initiation of restoration work for 11 historical monument houses located in the Piața area of Roșia Montană.

Another component of the cultural heritage research and conservation program for Roșia Montană is that of **ethnographic studies**. Over time, a number of local traditions have developed at Roșia Montană, as once practiced in this mining community. Two research objectives of the Alburnus Maior National Research Program aimed to develop an ethnographic study of the Roșia Montană-Abrud–Corna area and an oral history study for the area. Thus, during 2002-2004, under coordination of the specialists from “Dimitrie Gusti” Village Museum, a comprehensive ethnographical research of the Roșia Montană – Abrud – Corna area was conducted and further supported during 2001-2002 by the conduct of a number of oral history interviews by the Romanian Radio Broadcasting Company through the “Gheorghe Brătianu” Oral History Center in Bucharest (SRR – CIO).

Such local traditions – many orally transmitted from one generation to the next – form a significant part of the intangible cultural heritage of the locality. The oral history archive developed during 2002-2003 includes more than 100 hours of digital recordings of interviews and is, to date, the only archive of its kind that refers to industrial heritage and living traditions of a long-standing mining community in Transylvania. The ways in which the local population of Roșia Montană celebrate holidays and ceremonies is somewhat different from other rural settlements of Transylvania. This may be explained by the ethnic and religious diversity in Roșia Montană, with different populations being attracted here by the gold reserves.

The results of ethnographic research in the area of Roșia Montană - Abrud – Corna since 2001 have been published in the first volume of the monographic series *Alburnus Maior – Anthropos* in 2004, with two more volumes dedicated to these topics being planned for publication.

3. PERSPECTIVE ON THE PROTECTION AND ENHANCEMENT OF THE CULTURAL HERITAGE OF ROȘIA MONTANĂ

Archaeological mining remains and solutions for the conservation/restoration of representative sections and the organization of the underground section of the Mining Museum with funding provided by the investor

One of the main objectives of the cultural heritage asset management plan is that of drafting a project for the development of the future Mining Museum on the Apuseni Mountains from its earliest beginnings to the present day, with a significant component in the enhanced historical mine galleries.

Considering the importance of the investigated mine networks, this will involve remarkably extensive, very expensive restoration works, and additional considerable long-term maintenance costs. In this context, the French specialists considered that it is no longer necessary to pursue a comprehensive restoration of such a mining complex, considering the very elevated costs of such an action, and the costs to be incurred for maintenance and use as a tourist and cultural asset. In view of organizing a site museum, with preservation *in situ* of mining remains, the specialists considered it would be much better to select remarkable areas containing various mining works representative of the ancient mining works in Roșia Montană as a whole. With respect to enhancing the ancient mining works, a concentration of the available technical and financial resources may be considered for the restoration of a more limited sector, *a priori* less impacted by recent mining (and therefore more authentic) located in an area of the site that is closer to the other historical monuments that will be enhanced, such as the historic center of Roșia Montană. A reconstruction project is also considered, including the construction of underground replicas of such representative mining structures, as have been researched and are currently precariously preserved, in locations where the development of a consistent and sustainable public visiting program is not achievable.

The future archaeological museum to be established at Roșia Montană would include all the collections of archaeological furniture as well as the major historical, archaeological and ethnological artifacts and information of the site. This public building will include a department dedicated to the history of mining. The space will be large enough to host all the knowledge related to ancient, as well as modern and recent mining activities. For example, ancient objects discovered during excavations in various mining systems will be displayed, such as the lamps, wooden tools and equipment, including hydraulic wheels, wooden support structures, wooden stairs, drainage channels, as well as modern wooden tracks and points.

To supplement these exhibitions, replicas could be built in the museum presenting ancient wooden support structures and suspended bridges, as well as parts of the modern galleries with wooden props, and especially the ancient hydraulic wheel water drainage system. A part of the museum might be used for a 3D reconstruction of the ancient mining works at Cărnic. The display of old mining practices should be supplemented by a number of scale models reconstructing certain types of mining activities, such as mining by fire-setting technique, ore processing and enrichment, metallurgical operations, etc.

Under the legal provisions in force in Romania, the Company has provided the necessary financial resources for the evaluation and study of these types of archaeological remains. Based on the opinions and findings of the researchers who conducted these studies and on the decisions of the competent authorities – the Ministry of Culture and Religious Affairs and the National Commission of Archaeology, and the National Commission for Historical Monuments - the Company has also provided for some material expenses (facilities, work and health and safety equipment, labor expenses) creating a permanent workforce of miners to provide access and underground assistance to the mining archeologist team and maintain the underground works. Thus, as part of the EIA Study development, a dedicated budget was assigned for this type of works.

The funds that the Company will make available in future years – should the Project be implemented – for research, conservation, restoration, enhancement and maintenance work in the protected area of the Historical Center of Roșia Montană amount to US\$ 10,727,000.

The budget was structured into three essential components: research, conservation, and restoration, which is scheduled for 2007-2022. This budget may be consulted in the EIA Report, vol. 32, Management Plan for the Archaeological Heritage from Roșia Montană area, p. 84-85). Thus, the Company has accepted the conclusions of the mining archaeology studies and research conducted since 1999. For the remains located in Văidoaia (trace open cast mining) and Lety massifs (the famous Gallery at Cătălina-Monulești) it should be noted that they will not be affected by the implementation of the Roșia Montană Project, however, the Company will provide the financial resources for their investigation and conservation. As for the remains in the Orlea-Țarina area, the Company will finance the preliminary assessment and research during 2007 – 2012.

Thus, the commitments adopted by RMGC are clear and demonstrate the company's decision to provide and support the *in situ* preservation of the most important archaeological mining remains on the Roșia Montană site, and provide financial support for the development of replicas of the structures that cannot be preserved, based on the expert studies developed by the French specialists and on the decisions of the competent Romanian authorities. Some replicas of mining works will also recreate the underground conditions, but in compliance with national and European standards for security and safe access, so that they would be accessible to the public at large. As a result, mining installations of the type of hydraulic wheels found in the Păru Carpeni and Cătălina-Monulești areas will be preserved both in the form of restored originals and as 1:1 reconstructions of those installations.

As an alternative, a specialist study has been conducted in order to develop financial estimates for the full conservation and creation of a tourist circuit of the galleries in Cărnic Massif. The data contained in this study are provided in the attached information brochure, named *Cost Assessment of Historic Mining Networks in Cărnic Massif*, developed by the British company Gifford-Geo-Design.

Conservation and restoration actions on historical monument buildings and of the Protected Area Historical Center of Roșia Montană

RMGC currently owns 14 buildings that have been classified as historical monuments. They were acquired under the legal procedures provided by Law 422/2001, and were in different states of preservation when acquired, which were documented both in the sale - purchase agreements and in various pictures taken from the date of acquisition to the present day. It should be noted that during 2000-2002, the National Cultural Heritage Design Center (CPCN) now the National Institute for Historical Monuments developed, (and later S.C. OPUS – Atelier de arhitectură S.R.L. continued) an exhaustive inventory and study of all the elements of architectural heritage within the commune of Roșia Montană, which also helped update the analytical record cards of each historical monument building, by the inclusion of expert appraisal of their state of conservation.

In this regard, since the immediate obligations of the owners of historical monument buildings consist simply of maintenance, once the purchase of such properties was initiated – as of 2003 – a team of 10 people involved in construction-related crafts was established and is permanently charged with maintaining such assets. These people were provided on-the-job training in regard to the specific legislation and activities allowed in the context of interventions on historical monument structures. Thus, to date, this team has adopted all the legal measures to preserve the structural condition of the historical monument buildings owned by RMGC in Roșia Montană, at least in the same conservation state in which they were acquired. As a first measure in the case of historical monument houses owned by RMGC, repair of all the roofs was undertaken (to prevent building degradation as a result of weather conditions or rain seepage), as well as the installation of gutters and down pipes (to stop the seepage of rain water into the building walls and foundation), current repairs, repairs of fences and “moors (ancient walls traditional in Roșia Montană), and removal of domestic waste accumulated over time. The activity of this team is ongoing. Special activities include:

- design and development of the scaffolding at the gate of historical monument house no. 372 to stop it from tilting forward (Approval no. nr. 142/2004);
- the historical monument house no. 392 was turned into office space, (Approval no. 453/2004);
- obtain Construction Permit for House no. 325 under Law 422/2001: although this house is not a historical monument, it is located on the central alignment of the Historical Center of Roșia Montană (Approval). This building will be restored in accordance with the legal regulations of the Ministry of Culture and Religious Affairs and will be used as an Information Center and Exhibition facility (Approval 25/27.10.2007).
- for the historical monument house no. 342 a restoration project is currently being developed and will be submitted for approval to the Regional Commission for Historical Monuments. This building will be used as the offices of the Cultural Foundation, that will develop at Roșia Montană with RMGCs support.
- work is in progress on the completion of design documentation for the restoration of 11 other historical monument buildings.

The Protected Area - Historical Center of Roșia Montană must also be considered. This will cover more than 135 hectares and will include local architectural assets (after restoration and enhancement), organized as a Mining Museum with geological, archaeological, ethnographical (including an open space exhibition area), industrial heritage displays and an important underground component around the Cătălina Monulești gallery. In this part of the locality, the Company will promote the development of traditional tourism (B&B, small catering facilities). The historic lakes: Tăul Mare, Tăul Brazi and Tăul Anghel are located in the eastern and south-eastern part of the old center – an area suitable for modern recreational

tourism. All of the proposals made by the Company in this regard need, however, to be endorsed and by the local community and approved by the competent authorities.

A very important component of this protected area consists of the approximately 300 houses that exist on the site. According to the Zonal Urban Plan for the Protected Area - Historical Center, there will be different degrees of protection and management/use established for the built architectural heritage. Thus, a significant area will be clearly designated for habitation, with other areas for complementary activities, but any industrial or other negative impact activity will be banned to prevent adverse effects on this protected area. The project proposed by RMGC is a potential impact. Resumption of mining activities will require a detailed environmental impact assessment, including effects on components of the cultural heritage. The operational plan, which will be developed only after the completion of the environmental impact assessment, will be adopted by the Company based on the results of this assessment, so as to prevent negative and irreversible impacts on the cultural heritage represented by the historical monuments and the Protected Area Historical Center of Roșia Montană.

The Company wishes to protect and promote all these assets, Consequently, it will adopt special measures both within the protected area Historical Center of Roșia Montană (restoration-consolidation-conservation), and within the industrial area (use of special blasting technologies, creation buffer zones between the 2 sites, continuous monitoring of vibrations and adjusting the blasting based on wave propagation speed, etc.). Through this project, RMGC aims to provide high living standards for the inhabitants of Roșia Montană, while at the same time to maintain and enhance the local cultural heritage and traditional values.

It was publicly stated in the Environmental Impact Assessment Study that once the mining project for Roșia Montană has started, all of the historical monument buildings in Roșia Montană owned by RMGC would be included in a complex restoration and conservation program. Should there be other historical building structures owned by various institutions or natural persons, upon the owners' consent, RMGC will fully contribute, to the restoration of such structures, in accordance with the special regulations issued by the Ministry of Culture and Religious Affairs.

Should the Project be implemented, the Company will provide a budget of US\$ 3,385,000 for conservation, restoration and maintenance works to be conducted in future years in the protected area Historical Center of Roșia Montană and for the historical monument buildings outside it.

Perspectives on the development of the tourist potential based on the cultural heritage assets

The tourist potential of Roșia Montană may be developed in the future on the following bases:

1. movable and immovable archaeological heritage assets
2. historical monument buildings in the Historical Center Protected Area of Roșia Montană and landscape features in the lake area
3. industrial heritage assets in the former mining operation area and the future mining operation planned by RMGC
4. Intangible heritage assets – traditions, customs, etc.

1. Movable and immovable archaeological assets

Surface and underground archaeological research in recent years has identified the areas in which ancient remains are still present, and defined areas of archaeological potential that have been exhaustively researched. Four main categories of archaeological monuments have been investigated:

- habitation areas with associated infrastructure (Hop-Găuri, Hăbad, Tăul Țapului, the Carpeni hill)
- sacred areas with open air temples (Hăbad, Nanului valley and possibly Carpeni)
- funerary areas (cremation necropolises of Illyrian colonists – Hop, Tăul Corna, Jig-Piciorag, Țarina, Pârâul Porcului – Tăul Secuilor and groups of graves in the Nanului Valley and on Carpeni Hill)
- ancient underground mines (parts of the old exploration and mine galleries in Cârnic massif and the protected area of Pietra Corbului).

The most significant finds – in the opinion of the specialists involved in research – and which also meet the conditions for *in situ* preservation include:

- the funerary monument at Tău Găuri

- the Roman settlement (including a funerary area and a potential sacred area) on Carpeni Hill
- ancient Roman mining operations in the Piatra Corbului area (on the SE slope of Cărnic massif)
- the Roman hydraulic system found in the Păru Carpeni mining sector
- a number of archaeological remains in the area of the Historical Center of Roșia Montană, including the Cătălina Monulești gallery (where a wooden hydraulic system was discovered dated to the Roman Age and, in the 19th century, a significant set of wax tablets was found) and the ancient open cast mine in the Văidoaia area.

In addition to these immovable archaeological heritage assets, since the year 2000, more than 7500 artifacts have been found and conserved or are being restored. Also, some of them have been published as expert papers or are being published. All these movable heritage assets have high potential for museum displays, i.e. as exhibits in the proposed Mining Museum in Roșia Montană.

Considering the current situation of conservation of the archaeological remains, the results of the research conducted between 2000-2006, the following priority direction has been identified as part of a holistic approach to the use of the archaeological heritage for the development of tourism potential,:

- **implementation of a Mining Museum** to include:

- a documentary exhibition developed around three major topics: geology, archaeology and history-ethnography,
- an open-air exhibition including ethnographical and industrial heritage elements,
- the underground exhibition consisting of the Cătălina – Monulești gallery (which preserves traces of mining from all the historical periods, from ancient (Roman) times to the contemporary age) supplemented by 1:1 replicas of the most important ancient mining structures identified in the massifs of Roșia Montană,
- *in situ* preservation of some archaeological remains and their integration into a cultural tourism circuit.

Thus, all of these archaeological heritage assets may be added to the already existing ones of the current Mining Museum on the premises of the former RoșiaMin mine. RMGC will initiate consultation with RoșiaMin, who own the current museum, and with the Ministry of Culture and Religious to obtain the right to relocate the movable heritage assets from the museum to another location. The members of a cultural heritage committee will handle the transfer and storage of these objects, based on decisions regarding the best location for their reconstruction, conservation and public display. The funds for the implementation of a new Mining Museum and for the *in situ* preservation of archaeological remains for integration into a cultural tourist circuit will be made available by RMGC, in the context of Project implementation. For details of this see Environmental Impact Study – vol. 32, p. 79-81, 84-85.

2. Historical monument buildings, the Historical Center Protected Area of Roșia Montană and landscape features in the lakes area

According to the List of Historical Monuments published by the Ministry of Culture and Religious Affairs in the Official Gazette No. 646 bis, of 16.07.2004, 41 buildings in Roșia Montană have been classified as historical monuments to date, i.e. two churches and 39 *houses* (LMI 2004 code: AB-II-s-B-00269, and then from AB-II-m-B-00271 to AB-II-m-B-00311). These include traditional residential houses of the 19th-20th centuries that have been preserved – in their great majority, i.e. 35 buildings – in the ensemble of the Protected Area Historical Center of Roșia Montană, as well as the Unitarian and Reformed Churches. All of this quasi-urban ensemble preserves the historic appearance of the Roșia Montană settlement closely related to gold mining, throughout three significant periods in defining cultural landscape: Antiquity, characterized by the vast Roman mine system; the Middle Ages, represented by traditional mining; and the modern and contemporary age, characterized by increasing use of technology.

Note that in the general drafting of cultural heritage management plans for the Roșia Montană area, consideration was also given to the conclusions formulated by S.C. OPUS – Atelier de arhitectură S.R.L. that were submitted in the document „**Additional documentation for the Urban Master Plan Roșia Montană; Study in Restructuring the Historical Center of Roșia Montană**”, approved by Ministry of Culture and Religious Affairs in 2002. These conclusions are presented below in a special section on the issue of the cultural landscape at Roșia Montană.

Moreover, ownership transfers started in 2002 with the acquisition of buildings by the Company also involved the improvement of the state of preservation of some buildings, especially through maintenance work on the historical monument buildings and the use of some buildings as offices and company housing. Another “historic” cause of deterioration is the dissolution of the local community, initiated in the 1970s by

massive outward migration that caused many buildings to be abandoned: the churches in the historical center, the Casina, the open-air restaurant, and many of the shops in the Square. As a result, intervention work on the built assets has become a priority for the rescue of the Historical Center of Roșia Montană and for the potential future capitalization of its tourist potential.

The Company does not want to turn the area into a museum, rather, as its representatives repeatedly stated – the long-term plan is for this area to continue to be inhabited by the local people, or, where RMGC purchased the real estate – by company employees, who will work for the Project. New job opportunities and small tourist business would be developed in this area.

The Company wishes to protect and promote all of these assets, and this would require the implementation of special measures both within the protected area of the Historical Center of Roșia Montană (restoration-consolidation-conservation), and within the industrial sites (use of special blasting technologies, creation buffer zones between the 2 sites, continuous monitoring of vibrations and adjusting the blasting based on wave propagation speed, etc.). Through this project, RMGC aims to provide high living standards for the residents of Roșia Montană, while at the same time to maintain and capitalize on the local cultural heritage and traditional values.

It was publicly stated in the Environmental Impact Assessment Study that, once the mining project for Roșia Montană has started, all the historical monument buildings in Roșia Montană owned by RMGC will be included in a comprehensive restoration and conservation program. Should there be other historical building structures owned by various institutions or natural persons, upon the owners' consent, RMGS will fully contribute to the restoration of such structures, in accordance with the special regulations issued by the Ministry of Culture and Religious Affairs. For details see Environmental Impact Study –vol. 33, p. 76-104.

3. Industrial heritage assets in the former mining operation area and the future mining operation proposed by RMGC

The example set by other countries, e.g. the Kennecott copper mine, Salt Lake City, Utah, USA; the tin mine at Pemali, Indonesia; the slate mine at Honister, UK, the Martha Mine, New Zealand – proves that tourism can be developed in close connection with the actual mining works carried out as part of such a large scale mining project

Such attractions related to the proposed open cast mine may be enhanced by the addition of a number of industrial heritage items of the former state mine in Roșia Montană, including those currently preserved in the existing Mining Museum on the premises of the E.M. Roșia Montană. In recent years, in Europe, there have been many cases where former mining areas have become tourist attractions, after the closure of the respective mines. In this context, note that many local communities in former mining areas have focused their efforts – often by creating and managing foundations – to develop their tourist potential, such a process being supported by European initiatives at the highest level such as **The European Mining Heritage Initiative (MINTOUR)**, **European Route of Industrial Heritage (ERIH)**, European Network of Mining Regions (ENRM).

The most significant examples of former mining areas converted into tourist attractions include: **The Mining Park at Rio Tinto, Huelva, Spain (organized on the bases of a large-scale copper mining); Tourist Park Cap'Découverte, Midi-Pyrénées Region, France (organized on the bases of a large coal mine); Big Pit – National Coal Museum, Blaenafon, Torfaen, Wales, UK; the mining museums in the Czech Republic at Příbram, Hradec - Kutna Hora, Okd Landez, and Ostrava; the series of mining museums with underground trails in Slovenia at Predil, Velenje, Idrija, Mežica etc.; and the series of mining museums with underground circuits in Germany at Kupferberg, Goldkronach, Kali - Holungen/Schacht, Bad Ems, Frankenwald.** These are just a few of the many museums based on a mining theme and mining history in Europe. Of course, there are also other similar examples in the USA, Canada, and Australia.

4. Intangible heritage assets – traditions and customs

A number of traditions practiced in the past by the local mining community have been preserved throughout the years in Roșia Montană. Such local traditions – often orally passed on from generation to generation – are a significant part of the intangible cultural heritage of the village.. The oral history archive developed after 2000 include many hours of interviews on a variety of topics and is, to date, the only archive of the kind that refer to industrial heritage and living traditions of a long-standing mining community in Transylvania. At the same time, Roșia Montană has been a place of ethnical and cultural merging, a fact that may still be observed in the way certain ceremonial events are celebrated here, i.e. in a particular manner distinct to other rural settlements in Transylvania. All these elements are cultural resources, supported by an important stock of visual and photographic archives which constitute a significant potential that may be capitalized in the proposed Museum of Roșia Montană.

4. FULFILLMENT OF THE LEGAL OBLIGATIONS OF THE INVESTOR IN RELATION TO THE CULTURAL HERITAGE

All the *expert studies and preventive archaeological research* conducted at Roşia Montană starting in 2000 and continuing up to the present have been developed under the applicable legal provisions. In the year 2000, for the cultural heritage assessment study for the project impact area, the company called on the expertise of the following public institutions in the area of cultural heritage:

- CPPCN – Design Centre for National Cultural Heritage (after 2002 renamed the National Institute for Historical Monuments, a state supported institution directly subordinated to the Ministry of Culture and Religious Affairs) – professional expertise in archaeology and historical monuments
- National Museum of the Union in Alba Iulia (a budget-funded institution then directly subordinated to the Ministry of Culture and Religious Affairs) - professional expertise in archaeology
- University of Toulouse Le Mirail – professional expertise in mining archaeology, provided by a team of professionals specializing in this field led by Dr. Beatrice Cauuet, Romania does not have yet the expertise in this research field.

In 2001, the Ministry of Culture and Religious Affairs initiated the "Alburnus Maior" National Research Program under which the archaeological research was scientifically coordinated by the National History Museum of Romania, (a state-budgeted institution directly subordinated to the Ministry of Culture and Religious Affairs) and involved 21 Romanian and 3 foreign expert institutions, with the, essential, contribution of the mining archaeology team from the above-mentioned French University. These mining archaeology studies are a first in Romania, with Roşia Montană being the first mining village in the country that has been subject to such expert research.

All of the archaeological research was conducted according to the legislation in force, i.e. research undertaken in each archaeological campaign is permitted by the Ministry of Culture and Religious Affairs based on the annual archaeological research plan approved by National Commission of Archaeology.

The investor's obligations – of RMGC in this case – are to finance the „[...] a) establishment, based on the investment feasibility study and the technical project, of the measures to be detailed and of the necessary funds for preventive research or archaeological monitoring, as applicable, and the protection of the archaeological heritage or, as applicable, the archaeological discharge for the area affected by the works and the implementation of the said measures; b) archaeological monitoring activity, throughout the operations, aiming to protect the archaeological heritage and chance archaeological finds; c) any change in the project, necessary for the protection of archaeological finds [...]” , and „[...] the costs of archaeological research required for environmental licensing are to be borne by the investment titleholder [...]” (as per the Government Ordinance no. 43/2000 as further amended by Law 378/2001, Law 462/2003 and Law 258/2006, Article 2 – paragraph (11) and Article 7) These were fully complied with, as in the period 2000-2006, the mining company allocated a budget of about US\$ 9 million in this respect (including the costs of unskilled labor recruited among the residents of Roşia Montană)

As for **historical monuments** in the Roşia Montană area and the legal obligations of the investor, the following need to be noted:

- The purchase of 14 historical monument buildings by the Company was made in accordance with the legal provision on preemptive rights exercised by the Ministry of Culture and Religious Affairs (under Law 422/2001, as amended by Law No.259/2006, art. 4, paragraph 7 and 8);
- The maintenance work on these 14 buildings currently owned by RMGC is done according to the law, i.e. under Law 422/2001, as amended by Law No.259/2006, art. 38 referring to the obligations of the owners of historical monument assets, either natural persons or legal entities;
- All design studies and work on historical monument buildings (inventory studies and other types of architectural studies, restoration projects, etc.) and related urbanism documentation (Master Plan, Zoning Plan) were contracted by the Company with appropriately certified institutions and companies under the law (Law 422/2001, as amended by Law 259/2006, art. 22-29, 33) for this type of work, i.e. S.C. Proiect Alba S.A., the Design Centre for National Cultural Heritage (after 2002 the National Institute for Historical Monuments, a public institution directly subordinated to the Ministry of Culture and Religious Affairs) and S.C. OPUS – Atelier de arhitectură S.R.L.

The obligations assumed by this investor should the Romanian authorities approve the implementation of

the proposed mining project have been presented in detail in the Environmental Impact Assessment Study for the Roşia Montană Project, vol. 32 and 33, i.e. “Management Plan for the Archaeological Heritage from Roşia Montană Area”, “Management Plan for the Historical Monuments and Protected Zone from Roşia Montană”, and “Cultural Heritage Management Plan”.

Thus, to date, RMGC has fulfilled its legal obligations as owner of historical monument buildings. By committing to and assuming the data and conclusions included in the *Management Plan for Historical Monuments and Protected Zone* of the Environmental Impact Assessment Study, RMGC aims to continue this responsible approach and provide the necessary funds for the restoration and conservation of historical monument buildings and the historical center of Roşia Montană. Any intervention on such buildings is based on the applicable legal provisions, and on the findings described during 2005-2006 by the historical monument restoration/conservation experts and specialists of the Technical Civil Engineering University of Bucharest – National Center of Seismic Engineering and Vibrations for the heritage buildings in Roşia Montană.

5. OTHER SPECIFIC ISSUES

Specific blasting impact mitigation measures for the historical monument buildings

In March 2006, an expert study on the state of preservation of each historical monument building was commissioned. The study, entitled "*Geo-mechanical Study in Determining the Effects of Blasting Works on the buildings within the Protected Area*" was conducted by IPROMIN and the Technical Civil Engineering University of Bucharest, two institutions of long experience in the domain of construction safety. The study proposed emergency measures for the consolidation of all these structures. The same institutions also conducted an experimental study to measure vibrations propagated by blasting operations upon the protected area of the historical center and on the historical monument houses outside the protection area. The measurements were made based on a simulation of a major blasting involving 3000 kg of explosive, detonated under normal conditions, but without delay steps or the application of state of the art technologies currently in use in modern mining practice.

For details on such issues, please consult the information brochure developed by IPROMIN.

Considerations on the opinions expressed by the Romanian Academy in relation to the cultural heritage of the Roșia Montană area

The position expressed by the Romanian Academy in a series of statements made during 2003-2006 refers to a number of aspects related to archaeological research at Roșia Montană, i.e. to archaeological and cultural heritage assets in this area. These opinions refer to a number of issues that deserve further clarifications.

- **Statement of the Romanian Academy: serious endangering the archaeological area of Alburnus Maior, of high historic and cultural value, and of a unique character**

Clarifications in relation to this point of view:

- According to the legal provisions, and considering the state of research in the Alburnus Maior archaeological area by the year 2000, a vast preventive and heritage archaeological research program has been implemented and is currently ongoing. Its main results and conclusions after 6 years of investigations, as well as its future directions are presented in the Environmental Impact Assessment Study, vol. 6 – Cultural Heritage Baseline Study, *passim*, plus the strategic and operational objectives, and the site management options identified in the Environmental Impact Assessment Study, vol. 32, "Management Plan for the Archaeological Heritage from Roșia Montană Area", and vol. 33, Management Plan for the Historical Monument and Protected Zone from Roșia Montană".
- It is debatable whether a "unique" character should be attributed, the above documentation demonstrating that Roșia Montană is one of a number of ancient mining sites with similar characteristics in the Golden Quadrangle, including the areas of Zlatna – Almașul Mare - Haneș, Bucium – the Corabia and Vulcoi areas, the Ruda Brad – Stănița area.

Details on preventive archaeological research at Roșia Montană and the results obtained so far are also summarized in this brochure.

- **Statement of the Romanian Academy: threat to the Roman Galleries**

Clarifications in relation to this point of view:

- **the exhaustive investigation of historic mining structures – a first for Romania, also noting the fact that there are no Romanian specialists trained in this**

particular research field

- **research report developed by the French archeologist team coordinated by Dr. Beatrice Cauuet – a world renowned specialist in mining archaeology**
- **the assessment of the state of preservation and proposed enhancement based on the proposals made by Dr. Beatrice Cauuet.**
- **the Roman Galleries have been re-mined – and thereby damaged - by medieval and modern miners**
- **a number of sections of ancient galleries would be preserved *in situ*, while for others the development of 1:1 replicas has been proposed**

Details on the preventive mining archaeology research at Roşia Montană and their results to date, as well as the intended enhancement of these finds are summarized in this brochure, but presented in full in the Report on the Environmental Impact Assessment Study for Roşia Montană Project (Cultural Heritage Baseline Report in the EIA Report, i.e. **Section 5.5**. The old mining works at Roşia Montană (pp. 80-81, 85-92, 96-97) and Annex I – Archaeological record cards of the identified sites in Roşia Montană, site record cards No. 4 and No. 9. The site record cards have been developed according to the standard format and instructions developed by the Ministry of Culture and Religious Affairs).

- **Statement of the Romanian Academy: the project contravenes the World Cultural and Natural Heritage Convention – UNESCO, 16.11.1972**

Clarifications in relation to this point of view:

The Convention on cultural and natural heritage is a framework convention to provide specific definitions related to the concept of “cultural heritage”, the regulation of national principles and policies of heritage protection, and means of international cooperation in this field. Before 2000, given the complex social transformations occurring after 1989 in Romania, a significant gap had developed in the legislation related to the heritage protection. From 2000 onwards, this major gap has been filled by the adoption of the principles listed by the 1972 UNESCO Convention. Note that the design of the mining project did take into consideration all these legislative changes that have occurred rather rapidly in the past few years.

- **Statement of the Romanian Academy: the project contravenes Law 5 /2000**

Clarifications in relation to this point of view:

Before 2000, given the complex social transformations occurring after 1989 in Romania, a significant gap had developed in the legislation related to the heritage protection. From 2000 onwards, this major gap has been filled. Note that the design of the mining project did take into consideration all these legislative changes that occurred rather rapidly.

Details on the legislative framework regulating the immovable national cultural heritage, the application of the archaeological discharge procedure may be found in this brochure.

- **Statement of the Romanian Academy: the granting of archaeological discharge certificates – relationship between the researched and discharged area**

Clarifications in relation to this point of view:

It should be noted that the concept of archaeological research does not necessarily involve or is limited to

excavation as such. This type of research is conducted by specific means and methodologies adapted to the conditions and realities of each site, including:

- Studies of the archive
- Archaeological surveys and trial trenching
- Flyover and aerial photography interpretation; high resolution satellite imagery
- Mining archaeology, underground topography and 3D modeling studies
- Geophysical surveys
- Extensive archaeological research sample investigations in the areas of identified archaeological potential – archaeological digging *sensu strictu*
 - Inter-disciplinary studies – sedimentology, archaeo-zoology, comparative palynology, archaeo-metallurgy, geology, mineralogy
 - Radio-carbon and dendrochronological dating
 - Results of the archaeological research recorded in an integrated database
 - Traditional and digital format archaeological topography and GIS project development; traditional and digital video archive development
 - Artifact conservation and restoration
 - Artifact inventory and digital cataloging
 - Specialist studies for the enhancement of research results – publication of scientific volumes, exhibitions, website, etc.

All the preventive archaeological research conducted at Roșia Montană starting in 2001 and continuing to the present have been developed under the “Alburnus Maior” National Research Program, excavation permits being issued in accordance with the relevant laws. Archaeological research is conducted under the scientific coordination of the National History Museum of Romania, and involves 23 Romanian and 3 foreign specialist institutions. All research work has been conducted under the relevant legal provisions - the research conducted during each archaeological campaign is permitted by the Ministry of Culture and Religious Affairs based on the annual archaeological research plan approved by National Commission of Archaeology.

THEREFORE, ALL THE SITES WHICH HAVE BEEN ARCHAEOLOGICALLY DISCHARGED HAD ALREADY BEEN INVESTIGATED.

As such, this statement of the Romanian Academy has an obviously biased connotation, that ignores the specific norms and procedures followed in conducting preventive archaeological research as it is practiced in the other European countries.

In conclusion, in relation to the points of view formulated by the Romanian Academy, the following aspects should be pointed out:

- the organization and conduct of heritage research complied with the Romanian legislation on heritage protection
- the archaeological discharge certificates were obtained following the legal declassification procedure in force, as they were issued by the Ministry of Culture and Religions based on the results of archaeological research submitted to and approved by the National Commission of Archaeology
- from the perspective of gold mining history within the Roman Empire and the Dacia Province, Roșia Montană is an important site, but it continued to be mined and inhabited for hundreds of years, and moreover the Apuseni Mountains contain many ancient mining sites of significant potential, that have not been researched so far
- specialists from two archaeological institutes of the Romanian Academy have participated in the preventive archaeological research conducted at Roșia Montană to date, i.e. “Vasile Pârvan”

Considerations on the issues of “cultural landscape” in Roșia Montană area

- **Definition of cultural landscape under the international and national legislation**

Although announced since 1972 by the adoption of the World Heritage Convention and previously mentioned by the Venice Charter (1964, 1966) which refers to the context and surrounding environment of a monument or historic monument ensemble, the concept of cultural landscape has been granted special attention only since 1992, with the adoption of the identification and conservation instruments for areas that were to be invested with this title. Thus, the term brings together the various facets of the man-nature interaction, representative for a stage of development of the human society and other social, economic and cultural factors, in response to physical constraints, and opportunities provided by the natural habitat.

Cultural landscape is a very broad concept, referring to both the natural environment of a region, and to its interactions with socio-economic factors. In other words, cultural landscape will reflect the way a certain community interacts with its natural environment. The cultural landscape will often reflect specific techniques in the use of natural resources, considering the characteristics and limits on the environment (see UNESCO Convention - WHO, 1996). As mentioned above the cultural landscape concept was first used in 1972 in the World Heritage Convention, which amalgamated a number of concepts and considerations from the Venice Charter on Conservation and Restoration of Monuments and Sites (1964), both documents referring to the context and environment in which historic monuments and sites are integrated. However, the cultural landscape concept was not developed before 1992, when the World Heritage Committee (WHC - UNESCO) considered this concept and discussed a number of phrases related to the definition of the “exceptional value” criterion, which also led to a number of amendments to the 1972 UNESCO Convention. This new approach in the UNESCO recommendations gave the concept of cultural landscape a well-defined meaning, i.e. it needs to be independently and scientifically approached and analyzed in the light of landscape in general. Thus, after long discussion among international experts in the field, at the end of the last decade of the past century, the European Landscape Convention (Florence Convention, 2000) was adopted, aiming to protect, manage and develop the land of all landscapes, including living landscapes. This European Convention on landscape, adopted by the Council of Europe, has introduced a set of recommendations related to the protection, management and development of all European landscapes, with the central government institutions of European states being responsible for the effective implementation of these provisions. The Convention was ratified in Romania by Law 451/2002. Based on these provisions, cultural landscape of “outstanding universal value” may be included on the UNESCO World Heritage List, based on a set of criteria related to both cultural and natural elements, where nomination proposals may come from the central government institutions of the respective states, in the case of Romania, the Ministry of Culture and Religious Affairs.

- **Considerations on the cultural landscape of Roșia Montană in the light of cultural heritage**

In the development of the General Urban Plan for Roșia Montană, at the request of the National Commission for Historical Monuments in 2002 (Ministry of Culture and Religious Affairs – National Commission for Historical Monuments approval No. 61/14.02.2002), the urbanism documentation developed by S.C. Proiect Alba S.A., was supplemented by S.C. OPUS – Atelier de arhitectură S.R.L., who developed a special study on the cultural landscape elements at Roșia Montană. This study was approved by The National Commission for Historical Monuments of the Ministry of Culture and Religious Affairs by the Approvals No. 177/14.02.2002 and No. 178/20.06.2002 of the Ministry of Culture and Religious Affairs on the Master Plan for Roșia Montana and related urbanism documentation.

The cultural landscape of Roșia Montană results from almost 1900 years of mining history which has generated a particular example of a mining community of the Carpathians and of Romania in general. Mining has indeed influenced all the aspects of life in Roșia Montană, determining the emergence of a mining culture that laid its mark on all facets of the community evolution, including on its structure and quasi-urban character, its architecture, ethnography, economic and spiritual life and, not least, on the ‘natural’ environment of this mountain area.

The presence of a gold deposit determined the transition from a more rural way of life, with a lower population density, to a more centralized structure, that has persisted from the middle ages up until the 19th century, when the locality became a quasi-urban center.

The disappearance of traditional mining in the early 1950s, the banning of private property in mining industry in the later half of the 20th century, and the opening of the open cast mine in the 1970s, all substantially affected the cultural landscape of Roșia Montană.

In recent years, the population of Roșia Montană has decreased by about -0.7% during 1992-2002, which reflects the same trend originating in the early 20th century. The same trend has been registered in the towns of Abrud and Câmpeni, but not to the same extent. Birth rate is low, as in the rest of Romania, as a consequence of population ageing processes, with a prevailing female component in the older categories of population (widows). A number of other factors also explain this situation, at a general level: gradual depopulation of rural areas throughout the 20th century, a succession of economic crises that affected the gold mining industry, and economic decline registered in the years after the collapse of communism. A number of households in the area are now abandoned, used only during the summer, or leased for commercial purposes. Decrease in the population in Roșia Montană has led to changes in both the local economy and in its general appearance. Many buildings, either ordinary or historical monuments, are now in a precarious state of preservation or have even collapsed and vanished altogether. The existing environment has heavily polluted the rivers with historic mining wastes, and is becoming more and more isolated from the national economic and social environment due to the poor, underdeveloped and sometimes even inadequate infrastructure that connects the villages and the locality to the rest of the region. The gradual reduction of the number of jobs that has occurred year after year in the state owned mining company, because of its unprofitability, has contributed to a deterioration of economic conditions and to depopulation of the area.

Cultural landscape elements that were identified and approached in the study developed by OPUS in 2002 in the documentation for the Urbanism Master Plan of Roșia Montană included:

1. The settlement of Roșia Montană
2. The architectural and archaeological heritage
3. Natural monuments and landscape changes (use of farmland and livestock breeding, property boundary and administrative marking)
4. The mines (relief change by tailings deposits, mine galleries and their entrances, artificial lakes – “tau”s)

In the conclusion of this study, the following statements were made – as early as 2002: *“The disappearance of traditional mining industry in the 1950s and that of private property in gold mining, as well as the initiation of open cast mining in the 1970s have determined landscape changes, changes in the structure and occupations of the population, abandonment and degradation of some traditional industrial structures, demolition; degradation and even ruin of some buildings or complexes, some of real heritage value. Indiscriminate implementation of collective housing units (blocks) has further contributed to the alteration of valuable areas of the urban environment. According to the **Study of environmental conditions for the geological survey works in Roșia Montană** area developed by Agraro-Consult S.A. in cooperation with the Research Institute for Residual Water Purification S.C. Prospecțiuni S.A., ICECHIM and Romanian Waters, the environment is strongly impacted by historic mining activities affecting the Roșia and Arieș rivers and the soil. Moreover, all the actions that have been undertaken during this time have completely ignored the huge archaeological capital, that has been developing and was largely known only from documents, which also determined the destruction of many remains, especially of those related to gold mining history and continuity for about two millennia. The absence of road links between the component localities of the commune, sporadic public transport, precarious economic conditions, have all contributed to the isolation of Roșia Montană from the national economic and social environment. As the site value lies in the unique organic inter-conditioning of the relief with the specific functions and perfect adaptation of urbanism and architectural solutions, as characteristics that have been settled throughout a long period of time, preservation of the existing context in the 1950s might have determined the successful inclusion of Roșia Montană as a whole in the category of “cultural landscapes”. **However, the way things are now, such classification is no longer possible.** Moreover, as the inventories of national and local*

heritage assets and sociological and site research have shown, the degradation of the locality is an ongoing process and, should the current situation persist, we shall all helplessly witness the destruction of the entire locality, not only of its valuable assets. These conclusions formulated by S.C. OPUS – Atelier de arhitectură S.R.L. were submitted as part of the documentation „**Additional documentation for the Urban Master Plan in Roșia Montană; Study in Restructuring the Historical Center of Roșia Montană**”, approved by the Ministry of Culture and Religious Affairs in 2002.

However, the concepts of cultural and historic landscapes were recognized as being fundamental to an understanding of both the landscape around Roșia Montană and the relationship of that immediate landscape to the village itself.

A Conservation Study for the PUZ is being prepared by ASAR Group. As part of this, the respected British consultants Gifford-TerraFirma addressed this issue in a study Roșia Montană: Landscape Impacts Study For The Setting Of The Puz, Forming Part Of The Asar Group Puz Conservation Study.

This study is partly based upon an analysis of the patterns of historic landscape use (a characterization study) that have developed over the past two millennium of human (mining) use of the land. A fundamental conclusion is the overwhelming importance of that continuing land use, and the all-encompassing effects that mining has had: the landscape is unarguably not a 'natural' landscape, but a 'man-made' landscape formed by mining and related activities, and that this use is on-going.

Thus, from an approach based upon the landscape, this study corroborates section 5.5.2 of the Environmental Impact Study, that this is a landscape that would not qualify for inclusion on the World Heritage Site List because it lacks either the integrity as a cultural (archaeological) ensemble or the authenticity needed for a cultural landscape. In short, the landscape would not fulfill the required criteria with regard to cultural landscape (WHS Operational Guidelines Annex 3 Section 10). This landscape could not be defined as a 'fossil landscape' insofar as its evolution has not been stopped at one point in the past. To suggest that the current cessation of mining represents an end to the landscape's evolutionary trajectory is misleading. This is clearly an organically evolving landscape which is still undergoing changes as the mining tradition continues. However, the most recent phases of this evolution have significantly degraded the remains of earlier – and more important – phases.

The study also includes a detailed assessment of the visual impact that the mining proposals would have upon people (receptors) in the village or PUZ, conducted according to Euro and British standards. This visual impact assessment is based upon the use of photomontages taken from representative viewpoints throughout the PUZ showing the viewscape as it is now, and as it would appear during mining operations and again after post-mining restoration has been implemented. The potential views of mine-workings after restoration vary on the basis of the types of restoration that might be implemented, and one outcome of the study was to amend landscape restoration plans for the Cârnic pit in order to mitigate or minimize adverse views of the mine-slopes by proposing an innovative regime of planting on the 'benches' that will be left after mining. This conclusion is supported by a range of mining-restoration examples cited from around the world but especially from Europe.

The consideration of historic land-use patterns and landscape restoration, and other factors - especially bio-diversity and tourism development - led the study to propose an indicative landscape master-plan and land-use zoning plan for the restoration of the landscape that would be visible to residents of, or visitors to, Roșia Montană. These plans include guidance on landscaping measures that could be implemented to restore the historic links between the village and its immediate landscape.

The overall conclusion reached is that despite some high-medium adverse visual effects, including views from the Piața and other view-points in the centre of the village, the landscape restoration overall would be positive effect in terms of healing a heavily polluted landscape and improving landscape amenity and biodiversity.

As a complement to these expert conclusions regarding architecture and landscape, we should mention

those that were formulated by the archaeologists who conducted preventive archaeological research in Roşia Montană during 2000-2005. These conclusions are detailed in the Management Plan for the Archaeological Heritage from Roşia Montană Area.

Thus, surface archaeological remains have been significantly impacted by the historic mining related activities – galleries, landfills, ore processing installations/stamps, as well as the related industrial infrastructure (lakes, roads, water supply channels) and indeed by continuous habitation in Roşia Valley for over 700 years. Surface preventive archaeological research conducted in the past 6 years has identified the areas in which ancient remains are still present, and defined areas of archaeological potential that have been exhaustively researched. Three main categories of archaeological monuments could be studied, including inhabited areas and related infrastructure (Hop-Găuri, Hăbad, Tăul Țapului, the Carpeni hill), sacred areas with open air temples (Hăbad, the Nanului valley and possibly Carpeni) and not least, funerary areas (cremation necropolises of ancient Roman colonists at Hop, Tăul Corna, Jig-Piciorag, Țarina, Pârâul Porcului – Tăul Secuilor and groups of graves in the Nanului Valley and on Carpeni Hill). In conclusion, the archaeological remains discovered to date do not present spectacular construction attributes, but, in their *adaptation to the natural environment*, they suggest a number of elements that might serve in reconstructing an overall image of the ancient site: necropolises on the slopes or plateaus overlooking valleys, habitation and sacred areas located on heights and probably in close relation to the ore mining and primary processing areas. It should be mentioned that in this context, representative elements of the cultural landscape can still be derived from the components of the archaeological heritage:

- in the Tăul Găuri area a well preserved *funerary monument was uncovered*,
- in the Carpeni Hill area, where two *public edifices made of mortar bounded stones* and equipped with a *hypocaustum* installation as well as a funerary area and most probably a sacred area have been found, as a coherent archaeological complex to be preserved,
- the Historic Center area contains most of the galleries in which the famous wax tablets were found in the 18th and 18th centuries, the best known gallery being that of Cătălina Monuleşti, where the largest number of wax tablets were discovered, as well as an ancient mining system also equipped with a drainage system, probably including a system of hydraulic wheels. The same area includes Văidoaia Hill, with visible traces of ancient surface mining.

The five necropolises and funerary areas defined to date, located in the areas of Tăul Corna, Hop-Găuri, Carpeni, Nanului valley, Țarina, Jig-Piciorag and Pârâul Porcului (Tăul Secuilor), are important witnesses of the dynamics, diversity, and increasing of ancient population at *Alburnus Maior*. They are integrated in the much broader area of Roman funerary necropolises found in a number of provinces of the Roman Empire particularly the Danube and Balkans regions.

The underground mining archaeological heritage has been the focus of unprecedented expert research in Romania. The expertise provided by the mining archaeology team of the University of Toulouse has helped create an overall image of the nature of such particular remains, including their distribution, structural characteristics, and state of preservation. Based on the findings of this expert research, *in situ* preservation and enhancement proposals have been formulated for areas still preserving important evidence of gold mining organization and operation on this site during the Roman Period.

Details of this preventive mining archaeology research at Roşia Montană and the results obtained to date, as well as the intended enhancement of these finds are also summarized in this brochure, but presented in full in the Report on the Environmental Impact Assessment Study for the Roşia Montană Project (Cultural Heritage Baseline Report in the EIA Report, i.e. **Section 5.5**. The old mining works at Roşia Montană (pp. 80-81, 85-92, 96-97) and Annex I – Archaeological record cards of the identified sites in Roşia Montană, site record cards No. 4 and No. 9. The site record cards have been developed according to the standard format and instructions developed by the Ministry of Culture and Religious Affairs).

The Urbanism studies and other expert studies used in defining the protected areas in the Roşia Montană commune, and defining the area intended for the expansion of the existing mine under the project proposed by the Company, are still in the process of approval – under the law – by the competent institutions and commissions in this field. Note that none of the historical monument buildings in the footprint of the proposed RMGC Project will be negatively affected, i.e. all of the 41 historical monument buildings will be included in a comprehensive rehabilitation and restoration program (see the

Environmental Impact Assessment Study (vol. 33 and 33, i.e. Plan M - Cultural Heritage Management Plan, Part II – Management Plan for the Historical Monuments and Protected Zone from Roşia Montană, p. 76-95). This program is absolutely necessary, whether the mining project is implemented or not, if we do not want these buildings to vanish completely as a result of their current advanced state of degradation. As for the archaeological heritage, after more than seven years of extensive preventive archaeological research conducted at Roşia Montană under the “Alburnus Maior” National Research Program – funded by RMGC according to the law – this is now better known and understood, so that the List of Historical Monuments was updated by the additional classification – as group A (national importance) historical monuments – of four separate areas, including the Roman remains of Alburnus Maior, Carpeni area; the Roman funerary precinct in the “Hop-Găuri” Area; the “Cătălina Monuleşti” Gallery in the protected area Historical Centre of Roşia Montană and the Roman galleries in Cârnic, massif “Piatra Corbului” site.

With regard to the natural monuments of Piatra Corbului and Piatra Despicață several issues need emphasis. The Environmental Impact Assessment Study – vol. 6 – Cultural Heritage Baseline Study, states, on page 21 - that: “The appearance of these rock outcrops is relatively diminutive in the overall landscape and their setting on the degraded slopes of Cetate and Cârnic, which are characterized by the excavation and waste rock minimizes their aesthetic quality”. Thus, in assessing the current conditions, it is stressed that the aesthetic value of these natural monuments has already been reduced by historic mining.

Piatra Corbului and Piatra Despicață have been classified under Law 5/2000, of 6 March 2000 on the approval of the National Territory Development Plan – Section III – Protected Areas (published in the Official Gazette No. 152 of April 12, 2000) in the section including National Interest Protected Areas and Natural Monuments, as items 2.8 (Piatra Despicață) and 2.83 (Piatra Corbului).

At the same time, as a result of archaeological research conducted at Roşia Montană under the “Alburnus Maior” National Research Program, funded by RMGC in accordance with the law, Piatra Corbului area has been also classified as a historical monument, i.e. the Roman Galleries of Cârnic massif, “Piatra Corbului” area (LMI code AB-I-s-A-20329), (Official Gazette No. 646 bis, of 16.07.2004, Alba County, item 146).

In the context of the implementation of the mining project by RMGC, the following provisions have been made for the two monuments:

- **Piatra Despicață** – this is an andesite block weighing about two tons. In 2002, the Natural Monuments Protection Commission of the Romanian Academy, based on the documentation submitted by S.C. Agraro Consult S.R.L., approved its relocation to a different site, that would not be impacted by future mining activities. Therefore, with the help of strictly normal technical equipment for such large objects, and under expert guidance and surveillance, Piatra Despicață will be relocated to a site to be approved by the Romanian Academy and the Ministry of Culture and Religious Affairs.
- **Piatra Corbului** – Piatra Corbului will not be affected by the project proposed by RMGC, as it is located outside of the planned Cârnic pit. All impact mitigation technical measures throughout the operational stages of the project will be adopted in this area so that its integrity might not be affected, and this natural monument will be preserved in its current state.

Moreover, note that an expert study on the state of preservation of each historical monument building in Roşia Montană area was commissioned in March 2006. This study was performed by IPROMIN and the Technical University of Civil Engineering in Bucharest, both experienced institutions in the area of construction safety. The same institutions also conducted an experimental study to measure vibrations propagated by blasting operations in the protected area of the historical center and in the area of the historical monument houses outside the protected area. The measurements were made based on a simulation of a major blasting operation involving 3000 kg of explosive, detonated under normal conditions, without delay steps or the application of state of the art technologies currently in use in modern mining practice.

One of the defining characteristic of the Roşia Montană landscape, is the artificial lakes, but only one -

Tăul Cornei - will be affected by the implementation of the mining project. The other lakes will be preserved, including Tăul Mare, Tăul Anghel and Tăul Brazi, which will be included in the tourist development plans considered for the Protected Area Historical Center of Roșia Montană; Tăul Găuri has been included in the protected area of the Roman funerary precinct to be restored *in situ*; and Tăul Țarina, Tăul Secuilor and Tăul Țapului will not be affected at all.

The results and conclusions of the complex heritage research were accepted and adopted by RMGC at the time when the Report on the Environmental Impact Assessment Study for the Roșia Montană Mining Project was being developed in 2003-2006 and was submitted in May 2006 for the approval of the Ministry of Environment and Waters Management.

Cultural Heritage Management Plans for Roșia Montană area

According to the requirements of the Ministry of Environment and Waters Management, and of the Ministry of Culture and Religious Affairs as part of the documentation developed for the Report on the Environmental Impact Assessment Study for the Roșia Montană Project, specific management plans have been developed for the management and conservation of the heritage assets of the Roșia Montană area (and implicitly in regard to the historic mining galleries) in the context of Project implementation, (see EIA Report, vol. 32-33, Plan M – Cultural Heritage Management Plan, Part I – Management Plan for the Archaeological Heritage from Roșia Montană Area; Part II – Management Plan for the Historical Monuments and Protected Zone from Roșia Montană; Part III – Cultural Heritage Management Plan). These management plans contain a detailed description of the obligations and responsibilities that the Company will assume, according to the decisions of the central cultural administration, provided that the mining project is implemented - in regard to the protection and conservation of heritage assets in Roșia Montană area. These include surface and underground archaeological remains, historical monument buildings, protected areas, intangible heritage items, cultural landscape features, etc. It is worth stressing that, apart from the obligations RMGC has committed to in protecting and preserving archaeological remains and historic monuments, there are a number of obligations that relate to both the local government authorities in Roșia Montană and Alba County and to the central government authorities, i.e. the Romanian State. The Cultural Heritage Management Plans included in the EIA Report provides clarification of such aspects (see EIA Report, vol. 32, Management Plan for the Archaeological Heritage from Roșia Montană Area p. 22-24, 49, 55-56, 71-72 and EIA Report, vol. 33, Management Plan for the Historical Monuments and Protected Zone from Roșia Montană p. 28-29, 47-50, 51-53, 65-66, p. 103 – Annex 1).

In conclusion, it is important to note that all of the protection and enhancement measures summarized in the Cultural Heritage Management Plans for Roșia Montană have been included in the permitting process as established in the environmental agreement procedure for the mining project at Roșia Montană. Considering the importance of the cultural heritage at Roșia Montană and current legislation, the heritage research budget allocated for 2001-2007 by S.C. Roșia Montană Gold Corporation S.A. amounted to more than US\$ 10 million. Moreover, based on the research results, the specialist opinions and competent authority decisions, the budget estimated by the Company for the research, conservation and restoration of the cultural heritage at Roșia Montană in future years, provided the Project is implemented, will be US\$ 25 million, as disclosed in the Environmental Impact Assessment of May 2006 (see EIA Report vol. 32, Archaeological Heritage Management Plan for the Roșia Montană area, p. 84-85). Therefore, the intention is to continue research work in Orlea area, and especially to create a **modern Mining Museum** with **geological, archaeological, industrial and ethnographic heritage** displays, and the development of tourist access to the **Cătălina-Monulești** gallery and to the monument at **Tău Găuri**, as well as to **preserve and restore the 41 historic monument buildings and the protected area Historic Center of Roșia Montană, supported by** continued research, publication and enhancement of the cultural heritage in Roșia Montană, so that in the future the community might develop a sustainable modern tourism attraction and that Alburnus Maior may regain its old renown.

**REPORT ON THE MANAGEMENT PLAN PREPARED BY
S.C. OPUS - ATELIER DE ARCHITECTURA S.R.L.**

The following document presents a comparison between the version of the Management Plan posted by S.C. OPUS Atelier de Arhitectură S.R.L. on the web-site www.simpatia.ro and the version published in the Report on Environmental Impact Assessment Study, specifically in volume 33 – Plan M, Part II - Management Plan for the Protected Areas and Historic Monuments of Rosia Montana Area. This comparative assessment identifies 26 inconsistencies between the Management Plan posted by S.C. OPUS Atelier de Arhitectură S.R.L. on the site www.simpatia.ro and the Management Plan included in the final documentation submitted to the Ministry of Environment and Water Management in May 2006.

MODIFICATION 1: The title of the document has been changed

**OPUS DOCUMENT POSTED ON
www.simpara.ro**

**“The Historic Centre of Roşia Montană
Cultural Heritage Management Plan.
Draft 1.
Document for public disclosure”**

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“Part II
Management Plan for the Protected Areas and
Historic Monuments of Rosia Montana Area”

Explanatory notes:

- The study prepared by OPUS based on the subcontract signed with NHMR, a part of the NHMR – RMGC contract, was in reference to a specific part of the documentation (Management Plan), specifically – the contractor OPUS was to prepare the whole documentation [...] exclusively for the Study Area of the Roşia Montană Historic Centre, as it is indicated in Annex E – Maps and Plans, a part of the referred subcontract. But according to the terms of reference issued by MEWM (Ministry of Environment and Water Management) through the official letter no. 8070 of 24.05.2005 (“the Guidelines”), the legal requirements regarding the EIA report were very clear and specific. This document described the structure of the required content with respect to the Management Plan for Historic Monuments and Protected Areas of Rosia Montana, therefore requiring a much more comprehensive document, to which OPUS had a modest contribution. According to the contract conditions, OPUS was fully informed and aware of the format required by MEWM.
- During the final review of the Environmental Impact Assessment documentation the overall reviewer (Marilena Patrascu, expert certified to prepare EIA studies) and the solicitors contracted by RMGC insisted on the liability related to the fact that the report had to fully comply with the requirements stated by MEWM; including details such as the title of the document, its table of contents (as all these were clearly indicated by the terms of reference). This fact had been verbally communicated during the working sessions held with OPUS. Thus, all of the changes that were made took into account the opinion of the EIA certified expert.
- One should also note that the document (the Management Plan) - considering the large number of stakeholders who, according to the law have a role within the Management (administration) of the Rosia Montana Cultural Heritage - is a proposal or a first draft, which has to be the subject of several further modifications and adjustments after the public consultation and permitting procedures. This fact is clearly written in the document submitted to MEWM in May 2006 (see the introductory note, p. 9, 64-65, 92, 98).

MODIFICATION 2: changes in the table of contents

**OPUS DOCUMENT POSTED ON
www.simpara.ro**

According to the document posted by OPUS on the abovementioned web-site there are several section titles/subchapters which appear to have been amended:

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The document was prepared in compliance with the Guidelines, based on the advice provided by the overall reviewer and by the solicitors, given that from the point of view of its contents and structure, the OPUS Document fails to comply with the

- “The Significance of the Roşia Montană Cultural Heritage p. 7
- Brief History p. 11
- Industrial Heritage (Technical and Mining) p. 18
- Cultural Landscape p. 19
- Natural Values p. 25
- Cultural Values p. 25
- Relaunch of Large Scale Mining p. 32
- Objective 13 Protection of the Visual Landscape and the Site’s History
- Objective 14 The Establishment and Implementation of Measures for the Conservation and Development of the Cultural Heritage
- Objective 16 Conservation of the site’s historical landscape character emphasizing and developing the elements of industrial heritage”

Guidelines.

All the aspects that are marked in red in the OPUS document are included in the EIA report submitted to MEWM. Please see below for specific details and comments.

Explanatory notes:

- See the explanatory notes from above for modification 1.

MODIFICATION 3: Subtitle: Significance of the Roşia Montană Cultural Heritage, aspect 1, footnote 3

OPUS DOCUMENT POSTED ON www.simpara.ro

According to the document posted by OPUS on the abovementioned web-site there are several sections/ /subchapters/texts which appear to have been amended as follows:

- Subtitle “The significance of the Roşia Montană Cultural Heritage p. 8”
- The second sentence of aspect 1 was: „For the Roman period the *underground landscape* is significant, as it represents a synchronized effort of the Roman government to mine the gold: *one of the most ample Roman mining sites has been developed here in about 50 years.*”
- Footnote 3 was saying „See *infra.* note 6. The archaeological mining site from Roşia Montană is compared by the author of researches, with exceptional Roman mining sites, registered in the World Heritage List (e.g. Las Medulas): [...] “a major mining centre of Roman civilization, comparable to other mining or metallurgic sites from Iberian Peninsula (Linares, Riotinto, Sao Domingos, Aljustrel, Tres Minas, etc. where several mining methods have been used, some methods that are similar to those used for Rosia Montana, or Las Medulas, known for a different ancient mining technique, namely the open-pit mining)”, [...], *Synthesis upon the mining*

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There have been made 3 amendments:

- The subtitle was deleted being integrated under a more general subtitle as required by the reference terms, namely: **“Necessity and Scope of the Management Plan (p. 9).”**
- The second sentence of aspect 1 has been adjusted as follows: “There are a series of archaeological surface and underground vestiges which are relevant for the Roman time, as they stand as testimony for a synchronized effort of the Roman government for gold mining: during the IInd and IIIrd centuries p. Chr. when *one of the most ample mining sites of the Roman world has been developed.* “
- Footnote 3 has been edited as follows: „See *infra.* n. 6. The archaeological mining site from Roşia Montană is compared by Beatrice Cauuet, the author of archaeological mining researches with other similar Roman sites [...] “a major mining centre of Roman civilization, comparable to other mining or metallurgic sites from Iberian Peninsula (Linares, Riotinto, Sao Domingos, Aljustrel, Tres Minas, etc. where several mining methods have been used, some methods that are similar to those used for Rosia Montana, or Las Medulas, known for a different ancient mining technique, namely the open-pit mining)”, [...], *Synthesis upon the mining*

archaeology researches from Roşia Montană (1999-2006), in Environmental Impact Assessment for Roşia Montană Project, 2006.”

- The first sentence of aspect 2: “This type of mining activity has *profoundly marked the natural landscape of the area*, and the artificial lakes (“tăuri”) have soon become landmarks of this industrial landscape of wood-stamps, adits, waste dumps and mountains impacted by human intervention.”

archaeology researches from Roşia Montană (1999-2006), in Environmental Impact Assessment for Roşia Montană Project, 2006.” It is worth mentioning the fact that the ancient site’s integrity has been severely impacted by the opening the pits in the Cetate Massif (1970) and Carnic Massif (the middle of the 90’s , the mining activities being currently stopped) by the Romanian State, without previous development of certain preventive archaeological researches.”

- In the final version the first sentence of aspect 2 has been edited as follows: “2. Underground traditional mining, developed during the aforementioned historic times, as well as associated processing activities have *profoundly impacted the natural landscape of the area*, and the artificial lakes (“tăuri”) which have been built during the second half of the XVIIIth century have become landmarks of this industrial landscape of wood-stamps, adits, waste dumps and mountains impacted by human intervention, a common fact during the 50’s of the last century.”

Explanatory notes:

- The subtitle was deleted in order to be consistent with the terms of reference.
- The second sentence was amended based on the fact that there is no historic or written evidence to testify to the fact that Romans developed mining activities for a period of only 50 years. The experts still discuss the subject and, consequently, a more accurate definition was preferred based on the expert opinion of several archaeologists who were directly involved in the research and study of archaeological heritage of Rosia Montana, since 2001 including Lucia Marinescu, PhD, Paul Damian, PhD, and Mihaela Simion, and of course, for the sector of archaeological mining in particular, Beatrice Cauuet, PhD. It is emphasised that this matter should be considered by experts in history, and OPUS has no competency in matters of historic or archaeological relevance because they are all architects, and it is important to add the fact that the Rosia Montana site is still under archaeological and historical research.
- One of the major key aspects concerning the site during the Roman period is not “the underground landscape” (OPUS view), but “a series of vestiges”. Moreover, this is an issue regarding the proficiency in certain fields of expertise, and in this case it was considered that the opinion of the archaeological team prevailed over the one expressed by two architects who – according to the information held by the surface and underground archaeological research team – had never visited the underground mining networks from Rosia Montana. The text written by Beatrice Cauuet had been provided to the OPUS team as a preliminary synthesis on the underground mining networks from Roşia Montană, in which the expert expressed her opinions about vestiges and traces of mining activities and not only about an underground landscape.
- The first sentence of aspect 2 was supplemented by inserting the remark on the fact that wood-stamps and other infrastructure elements associated with traditional mining survived existed only until the 50’s, when they were destroyed by the communist authorities.

MODIFICATION 4:

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According to the document posted by OPUS on the abovementioned web-site the following text appears to have been amended (p.11):

- „The general configuration of the terrain in

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The text has the same structure at p. 16; the only change is the insertion of the word “**hamlets**” (see below):

- „The general configuration of the terrain in this

this area appears like a natural formation having the shape of an amphitheatre, with the opening towards the valley of the Roşia Stream, along which the rest of the settlement evolves. The specific morphology of this location is accentuated by the rock massifs that border it to the North and South, as well as by easy slopes to the East. The core of this landscape is occupied by the central Square of the locality, around which the urban settlement is arranged by secondary poles, located on the routes leading to the old mining areas and, further on, to neighbouring villages. The diverse aspects of the construction complexes, strictly conditioned by the area's rough topography, illustrate the image of several sub-zones with distinct features of the heritage values."

area appears like a natural formation having the shape of an amphitheatre, with the opening towards the valley of the Roşia Stream, along which the rest of the settlement evolves. The specific morphology of this location is accentuated by the rock massifs that border it to the North and South, as well as by easy slopes to the East. The core of this landscape is occupied by the central Square of the locality, around which the urban settlement is arranged by secondary poles, located on the routes leading to the old mining areas and, further on, to neighbouring villages **and hamlets**. The diverse aspects of the construction complexes, strictly conditioned by the area's rough topography, illustrate the image of several sub-zones with distinct features of the heritage values."

Explanatory note:

- One should easily notice that the text is the same. In the original OPUS document this text was used to describe the Historic Centre; this is why for the final editing it has been used to briefly describe the Rosia Montana Historic Centre, which is included as a historical monument in the List of Historical Monuments.

MODIFICATION 5: Brief History of Roşia Montană – The Roman Period

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- see the attached document – Brief history – OPUS v. MNHR

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- The text OPUS wrote was replaced by the Brief history subchapter prepared by MNHR.

Explanatory notes:

- This substitution was decided together with the MNHR team, due to several editorial revisions, taking into consideration the following:
 - Both the Management Plan for Historic Monuments and Protected Areas and the Archaeological Heritage Management Plan were parts of a much larger document and it would have been redundant if two different versions for the locality's history had existed within the same documentation.
 - By early March 2006 OPUS had received the subchapter on Brief History for the locality prepared by MNHR and ARHEOTERRA, but they decided to use only some of the parts related to medieval and modern history and not those related to ancient history and to some aspects of modern history.
 - In this case the opinion and the expertise of several historians prevailed over that expressed by architects.
 - A team of specialists, scientifically coordinated by MNHR (according to the decision of MCRA in 2001) continues research activities concerning the ancient history of Roşia Montană, thus it has been reckoned the MNHR had to have "the last word" on this matter; this fact implies that the point of view of historians should prevail over the opinion of architects when history was the topic of discussion.

MODIFICATION 6: Footnote no. 10

OPUS DOCUMENT POSTED ON
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According to the document posted by OPUS on the

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- The text is at p. 24; it hasn't been changed

abovementioned web-site the following text appears to have been amended (p. 14, footnote 10):

- “Except for some archaeological trial trenches performed in 2000, which have been developed in the context of the study conducted to assess the potential of the cultural heritage in Roşia Montană area, in the present day hearth of the commune, no field research (that could provide extra information on the development of the settlement during the medieval period) has been performed.”

at all: “Except for some archaeological trial trenches performed in 2000, which have been developed in the context of the study conducted to assess the potential of the cultural heritage in Roşia Montană area, in the present day hearth of the commune, no field research (that could provide extra information on the development of the settlement during the medieval period) has been performed.”

Explanatory notes:

- No further comments; the text has been left the same as proposed by OPUS

MODIFICATION 7: Sentence about artificial lakes built in the 18th c.

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According to the document posted by OPUS on the abovementioned web-site the following text appears to have been amended (p. 15):

- “We can say that the year 1733, which marks the construction initiation of the artificial lakes system, as well as of other water facilities, becomes relevant within the ample world-wide socio-economic transformations of the “Industrial Revolution.”

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- The text is at p. 24 having the following structure: “We can say that this moment in time is relevant within the framework of the ample world-wide socio-economic transformations conventionally defined by the concept of “Industrial Revolution”; for the area in question it is worth mentioning the year 1733 which marks the construction initiation for the artificial lakes system, as well as of other water facilities, based of funds from the Treasury of Transylvania.”

Explanatory note:

- No further comments; the text has been left the same as the proposed by OPUS

MODIFICATION 8: Brief history of Roşia Montană – the modern period

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According to the document posted by OPUS on the abovementioned web-site the following text appears to have been amended (p. 15-16):

- see the attached document – Brief history – OPUS v. MNHR

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- The text OPUS wrote has been replaced by the Brief history subchapter prepared by MNHR.

Explanatory notes:

- See the explanatory notes from above for modification 5.

MODIFICATION 9: Industrial Heritage – Technical and Mining Heritage

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According to the document posted by OPUS on the abovementioned web-site the following texts appear to have been amended (pp. 19-20):

- The subtitle: “Industrial Heritage – Technical and Mining Heritage p. 19”
- The sentence: “Elements of these installations together with the construction footprint may be discovered through archaeological researches”.
- The sentence: “The exploration, mining and ventilation systems represented by galleries, work faces or other Roman, medieval or modern works constitute a unit of the industrial heritage – *The Roşia Montană Underground Landscape*”.
- The subtitle: “The Cultural Landscape”
- The sentence: “The perspective of the assessment on the cultural landscape is established by the World Heritage Convention: *The cultural landscapes often reflect specific techniques of valorisation of natural resources, taking into account the characteristics and limits of the environment*” and the footnote no. 18: “WHC-96/CONF. 201/INF, Paris, October 22nd, 1996, paragraph 39”
- The sentence: “The cultural landscape of Roşia Montană is defined by the characteristics and the effects of a single occupation: traditional mining” and footnote no. 19: “The open-cast mining from Cetate Pit, by the ample and destructive impact on the environment and by the rapid depletion of the mineral, exceeds the framework of the definition for cultural landscape”
- The sentences: “Thus, according to the definitions and the assessment and classification methodology for cultural landscapes, stated in *Operational Guidelines for the Implementation of the World Heritage Convention*, the cultural landscape of Roşia Montană area is included in the category of *organically developed landscapes – subcategory fossil landscape* (point ii. a)” and the associated footnote no. 21: “*ii) Organically developed landscape; it is the result of an initial social, economic, administrative and/or religious requirement and has reached the present form by the association with and as an answer to the environment. Such landscapes reflect the evolution process in their included forms and attributes; ii a)*”
- The subtitle was changed in *„Technological information”* according to the requirements of the terms of reference
- The sentence was deleted – see further considerations below
- The sentence was modified as follows: The exploration, mining and ventilation systems represented by the galleries, work faces or other Roman, medieval or modern works constitute a unit of the industrial heritage – *The Roşia Montană Underground **universe** of the historic galleries*”. In the final editing in the word “landscape” was replaced by the word “universe”.
- The subtitle was deleted
- The sentence and the associated footnote were deleted – see further considerations below
- The sentence was edited as follows: „The landscape of Roşia Montană is defined by the characteristics and the effects of a single occupation: traditional mining **performed for about 1900 years**” and the related footnote which became no. 44 and it has been maintained as follows: „The open cast mining from Cetate Pit, through its the extensive destructive impact on natural environment and by the rapid depletion of the mineral resource, exceeds the framework of the definition for cultural landscape”.
- The sentence and the associated footnote were deleted – see further considerations below

fossil landscape, in which an evolution process was ended at a given moment in the past, either all of a sudden or over a period of time; the significant characteristics are still visible in their material form” and the sentence: this scope of work has no legal equivalent, due to the fact that Romanian legislation for the protection of cultural heritage does not include such category as “cultural landscape”, despite of the fact that Romania has ratified the World Heritage Convention .

- However, “The term “site” as it is defined by relevant legislation also includes the scope of work of “cultural landscape”, including it in its definition and the footnote no. 22: “the term stands for the most ample unit which has ever been defined by law as a historic monument, representing a “topographically outlined terrain including all those human creations within the natural environment which are significant cultural-historical testimonies from an architectural, urban, archaeological, historical, artistical, ethnographical, religious, social, scientific, and technical points of view or with regard to the *cultural landscape* (s.n.)” according to Law 422/2001 art. 3 c

Explanatory notes:

- The substitution of subtitles was a consequence of several editing revisions.
- The sentence has been deleted considering that:
 - o Such installations –wood-stamps – have been archaeologically investigated at several locations on the Hăbad plateau and on Corna Valley. No constructed elements have been discovered.
 - o There is a large historic archive depicting how the area looked in the past, with all these wood stamps scattered through the valleys.
 - o There are some reconstructions of such installations in the Roșia Montană museum and in several other ethnographical museums in Romania, as well as texts, minutely describing the methods used to build such installations.
- The replacement of the word landscape with universe (only in the Romanian version) was made considering that the latter is much more plastic and adequate to describe the real situation of the Roșia Montană underground network.
- The subtitle and the sentences regarding the cultural landscape were deleted based on the recommendations made by the overall reviewer of the documentation; considering the fact that it was necessary to make this text consistent with the content of the Landscape chapter of the EIA report, and also considering that the concept of “cultural landscape” is still a matter of discussion and consideration among specialists worldwide. The footnote was deleted by removing the sentence. Experts on Landscape – individuals certified to prepare EIA studies – did not agree with the interpretation and categorization proposed by OPUS regarding the fossil landscape. This fact was transmitted to OPUS representatives during work sessions where it was decided that the categorization wasn’t appropriate, but without the actual implementation of this modification. In this particular case it has been considered that the opinion of the experts on landscape issues should prevail.
- We have to emphasise the fact that in the overall version the conclusions prepared by OPUS – Atelier de Arhitectura S.R.L. have been taken into consideration and presented within the document: “Amendments of Rosia Montana P.U.G. documentation; Restructuring study for the Historic Centre of Rosia Montana”, which has been certified by the Ministry of Culture and

Religious Affairs in 2002, where the following statements were made: *“The disappearance of the traditional mining industry during the 50’s and the extinction of private properties in the field of gold mining, as well as the initiation of the open cast mining during the 70’s have led to landscape alterations, to the deformation of the population structure and occupations, to the abandon and degradation of several traditional and industrial constructions, to the demolition and decay or even to the ruin of certain constructions and sites, among which some having authentic heritage value. The irrational implant of several collective accommodation buildings (blocks of apartments) has contributed even more to alteration of certain important areas of the urban complex. According to the Environmental Study for geologic exploration developed at Rosia Montana, prepared by Agraro-Consult SA, together with the Research Institute for the Treatment of Domestic Waste Waters SC Prospecțiuni SA, ICECHIM and National Administration “Romanian Waters”, the environment is severely impacted by the mining activities developed along time, having implications on Rosia and Aries River and on the soil. Moreover, all the activities developed within this area during this period of time have completely ignored the major archaeological asset that has been currently discovered and documentary attested to a grate extent; this fact has led to the destruction of several vestiges especially those related to the history and continuity of the gold mining activities for a period of about 2000 years. Due to the lack of road connections between the commune’s localities, to sporadic public transportation, and to unstable economic conditions the commune of Rosia Montana is being isolated from the national economic-social context. Due to the fact that the value of the site consists in the organicity resulted from the unique interrelation of the relief with its specific functions and with the perfect adapting capacity of the urban-architectural resolutions, these are some characteristics that have been accumulated during a long period of time; if the situation of the 50’s had been maintained it could have led to the successful enlistment of Rosia Montana locality as a site classified in the category of “cultural landscapes”. **Given the current situation, such classification is not possible anymore.** Moreover, as it results from the inventories of the national and local heritage values, from the archaeological research and from the field research, the decay of the locality is a progressive process and, provided the current conditions are maintained, we are going to witness helplessly both to the extinction of the entire locality and of all important items.”*

MODIFICATION 10: Sentence from p. 25, Functions section.

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According to the document posted by OPUS on the abovementioned web-site the following text appears to have been amended (p. 25):

- “The major function changes haven’t generated major alterations of the urban structure of the town, yet.”

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- The sentence was deleted by mistake during the final editing process.

Explanatory notes:

- No further comments;

MODIFICATION 11: Assessment of the Roșia Montană Historic Centre pp. 26-27

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According to the document posted by OPUS on the abovementioned web-site the following text appears to have been amended (p. 26):

- [...] to ruining and severe degradation [...]

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- The text was replaced with [...] the gradual degradation of some of these [...]
- The subtitle was changed due to editorial reasons, see p. 45, section 2.2.2. “Cultural

- **“ The Assessment of the Roşia Montană Historic Area and its potential”**
- Values

- “Natural values – they are mostly associated with the cultural values, thus generating the cultural landscape;

- Cultural values – they are associated with the site (identity and technical value) – all the traces of traditional mining exploitation and the facilities for processing the gold ore, defining elements of the cultural landscape at Roşia Montană.”

- [...] the uniqueness of the local traditional culture [...]

values in connection with the historical monuments and the protected zone (uniqueness, local / county / regional / international significance, memorable, legendary, and artistic value etc)”, according to the terms of reference

- The paragraph related to natural values was edited as follows: “Natural values – they are mostly associated with the cultural ones. Here must be mentioned those two natural monuments Piatra Corbului and Piatra Despicață but also the natural landscape of the lakes from the eastern side of the Protected Area”
- The paragraph related to the cultural values was edited as follows: “*Cultural values* associated with the site (identity and technical value) – the **vestiges** of the traditional mining operations and the facilities for processing the gold ore, defining elements of the **site** Roşia Montană-Historic Centre”
- The text has been supplemented as follows: „the particularity of the traditional culture associated to the mining field”

Explanatory notes:

- No further comments

MODIFICATION 12: Strategic objectives section

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According to the document posted by OPUS on the abovementioned web-site the following text appears to have been amended (p. 28):

- [...] for the conservation of the natural and cultural heritage resources of the Roşia Montană / Central Historic Area site [...]
- [...] the protection of the site’s exceptional value [...]
- The text has been changed as follows: „the conservation of natural and cultural heritage resources and of historical monuments and the Protected Area - Roşia Montană Historic Centre”.
- The text has been changed as follows: “the protection of the site’s value”

Explanatory notes:

- The first change was made in order to be consistent with the terms of reference.
- The second change was made after the final review of the document, taking into account the fact that redundant and excessive use of the adjective exceptional doesn’t correspond to an obvious reality when comparing Rosia Montana with other major/important sites in Romania or worldwide. Also, in this case the opinion and the expertise of several historians/archaeologists prevailed over that expressed by architects.

MODIFICATION 13: General objectives section

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According to the document posted by OPUS on the abovementioned web-site the following text appears to have been amended (p. 28):

- “[...] must contribute to the **protection and conservation of the site** [...]”
 - “[...] supporting its **exceptional value** [...]”
 - [...] stakeholders interested in the management or usage of the **site** [...]
 - “[...] will have to be well familiarised with the value and significance of the **site** [...]”
- The text was changed as follows: „must contribute to the protection and conservation of the **historic monuments and the protected area**”.
 - The text has been changed as follows: “supporting their **special** value”
 - The text was changed as follows: “stakeholders interested in the management or usage of the **historic monuments and the protected area**”
 - The text has been changed as follows: “will have to be familiarised with the value and significance of the **historic monuments and the protected area**”

Explanatory notes:

- The first, third and fourth changes were made in order to be consistent with the terms of reference
- The second change was made after the final review of the document, taking into account the fact that redundant and excessive use of the adjective exceptional doesn't correspond to an obvious reality when comparing Rosia Montana with other major/important sites in Romania or worldwide. Also, in this case the opinion and the expertise of several historians/archaeologists prevailed over that expressed by architects.

MODIFICATION 14: Ideal objectives section

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According to the document posted by OPUS on the abovementioned web-site the following text appears to have been amended (p. 29):

- “[...] The protection, conservation and emphasizing of the **Rosia Montană site as a whole** and especially of the Historic Center as the most coherent nucleus [...]”
 - [...] will act as a **catalyst** for economic regeneration [...]
- The text has been changed as follows: „The protection, conservation and emphasizing of the **historic monuments and the protected area** as the most coherent and representative nucleus of the cultural value”.
 - The text has been changed as follows: “will act as a **possible catalyst** for economic regeneration ...”

Explanatory notes:

- The first change was made in order to be consistent with the terms of reference.
- The word “possible” was added during the final editing version since there is no guarantee that the site would really act as a catalyst.

MODIFICATION 15: Deletion of subtitles p. 29

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According to the document posted by OPUS on the abovementioned web-site the following text appears to have been amended (p. 29):

- [...] Opportunities [...]
- [...] Regeneration and development [...]

- The subtitles were deleted due to editing issues in order to comply with the table of contents indicated by the terms of reference prepared by MEWM.

Explanatory notes:

- The change was made in order to be consistent with the terms of reference.

MODIFICATION 16: Replacement of the “Partnership for Roşia Montană” with the Roşia Montană Heritage Superintendence

Explanatory notes:

- The change was made during the final editing version of the documentation considering that the name of Roşia Montană Heritage Superintendence better reflects the aims and objectives of such a structure, which has to manage at a broad level the heritage issues of Roşia Montană. It must be emphasised that both the “Partnership” and the “Superintendence” are only proposals and a series of further decisions would have to be taken by the relevant Romanian authorities following public consultation and the permitting process regarding the Roşia Montană Project.
- Moreover, the term of Partnership is too general, as RMGC is presently developing several types of partnerships for different areas of interest.

MODIFICATION 17:

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According to the document posted by OPUS on the abovementioned web-site the following text appears to have been amended (p. 30):

- “[...] The site, through its special profile (belongs to a distinctive category of sites and to a well individualised category of heritage issues), has an significant potential for initiating specialised relationships with other communities or mining sites in Romania or abroad. [...]”

- The text has been changed as follows: “The site, through its special profile (belongs to a distinctive category of sites and to a well individualised category of heritage issues – mining and industrial heritage site), has a significant potential for initiating specialised relationships with similar communities or sites in other areas in Romania or abroad.”

Explanatory notes:

- No further comments

MODIFICATION 18: Subtitle change – “The Partnership and the Management Plan” has become “The Superintendence and the Management Plan”

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According to the document posted by OPUS on the

abovementioned web-site the following text appears to have been amended (p. 30):

- [...] **The Partnership and the Management Plan** [...]
- The title has changed into: **“The Superintendence and the Management Plan”**

Explanatory notes:

- See the explanatory notes from above for modification 16.

MODIFICATION 19: The Subtitle has been changed – “The size and the heterogeneous consistency of the site”

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According to the document posted by OPUS on the abovementioned web-site the following text appears to have been amended (p. 30):

- “[...] **The size and the heterogeneous consistency of the site** [...]”
- The subtitle has been left unchanged: **“[...]The size and the heterogeneous consistency of the site [...]”**

Explanation:

- No further comments

MODIFICATION 20: Subtitle changes – “Dangers” and “Relaunching of large scale mining”

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According to the document posted by OPUS on the abovementioned web-site the following text appears to have been amended (p. 30):

- [...] **Hazards** [...]
- [...] **Re-launching of large scale mining** [...]
- [...] The mining operation projected by the RMGC, developed on a much larger scale than the current one, constitutes a significant potential hazard. [...]
- [...] The mining operation plan, which will be concluded only after the completion of the environmental impact assessment, will have to be adapted taking into account the results of the above-mentioned assessment, in such a manner that the cultural and natural heritage of the site wouldn't be adversely impacted. [...]
- In the final editing process the following changes have been made in order to comply with the table of contents indicated in the terms of reference, namely: *“Factors with potential negative impact”* and *“Potential impact of open pit mining operation”*
- The text has been changed as follows: *“The mining operation projected by the RMGC, which is to be developed on a larger scale than the present-day mining activities, constitutes a potential impact.”*
- The text has been changed as follows: *“The mining operation plan, which will be concluded only after the completion of the environmental impact assessment, will have to be adapted taking into account the results of the above-mentioned assessment in such a manner that the cultural heritage which is represented by historic monuments and the protected area Rosia Montana Historic Centre wouldn't be negatively and irreversibly impacted.”*

Explanatory notes:

- The change was made in order to be consistent with the terms of reference.

MODIFICATION 21: The Depopulation of the Area p. 33

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According to the document posted by OPUS on the abovementioned web-site the following text appears to have been amended (p. 33):

- [...] Once the RMGC Company initiated the properties acquisition campaign, this phenomenon has increased at Roşia Montană. Today, three years after the acquisition of the first properties, the company owns 34% of the territory within the Central Area of the locality, which can be translated, in demographic terms, by a severe depopulation. Contrasting growth tendencies, represented by a variable number of inhabitants, are irrelevant. The effects of this situation can be felt, of course, at social level, but also in the physical state of the built heritage, which worsened during the last years. [...]

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- The text has been changed as follows: “At Roşia Montană, this phenomenon has existed as an invariable process throughout the last centuries with constant fluctuations in the number of locals. The phenomenon increased following the initiation of the RMGC's properties acquisition campaign, together with population ageing and voluntary migration of young locals to urban areas. Today, three years after the acquisition of the first properties, the company owns 34% of the territory within the Central Area of the locality, which can be characterised in demographic terms, by a severe depopulation, but it must be underlined that certain properties were no longer inhabited when purchased by the company. After the change of ownership RMGC has been using these buildings as offices and accommodations for employees. Contrasting growth tendencies, represented by a variable number of inhabitants, are quite irrelevant, speaking in terms of demographic growth. Effects of this situation can be felt, of course, both at the social level, and also in the physical condition of the built heritage, which has gradually degraded starting with the 90's.”

Explanatory notes:

- No further comments

MODIFICATION 22:

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According to the document posted by OPUS on the abovementioned web-site the following text appears to have been amended (p. 30):

- [...] RMGC, the owner of the main part of the properties within the Historic Area, **selectively** performs maintenance works. However, a major part of the built area owned by the company, including valuable buildings, continues to deteriorate in a **accelerated** rhythm as a result of **the lack of maintenance works** (in the Central

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- The text has been changed as follows: “RMGC has become the owner of the largest part of the properties within the Central Area, and develops maintenance works on the owned buildings, in a first stage insisting on historic monuments. However, an important part of the built area owned both by the company, and by other categories of owners, comprising several valuable buildings, continues to deteriorate

Area 51% of all the buildings in a bad or very bad conservation status are owned by RMGC). The same negative general tendency can be observed in the constructions that are not owned by RMGC. [...]

in an constant rhythm as a consequence of the lack of a coherent maintenance program for the buildings (in the Central Area 51% of all the buildings in bad or very bad conservation status are owned by RMGC, this was the their physical condition when the company purchased them, namely a general degradation status). The same negative general tendency can be observed in the constructions that are not owned by the RMGC.”

Explanatory notes:

- No further comments

MODIFICATION 23: p. 40-41

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According to the document posted by OPUS on the abovementioned web-site the following text appears to have been amended (p. 40):

- “[...] **The landscape of Roşia Montană is ample and varied**, really relevant due to its role as a visual frame, an area in which all the elements of the settlement appear, but no less for its own natural and human influenced features [...]”
- “[...] All these strongly intertwined layers of **the Roşia Montană landscape** define it as an outcome of the interaction between the local community and the natural environment under the influence of social, economic and cultural forces, **labelling it as cultural landscape**. [...]”

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- The text has been changed as follows: **“The landscape of Roşia Montană in the framework of the Protected Area - Rosia Montana Historic Centre is broad and diverse**, really significant due to its role as a visual setting, an area where all the elements of the settlement appear, but no less for its own natural and human influenced features”.
- The text has been changed as follows: “[...] All these strongly intertwined layers of the **Roşia Montană Historic Centre landscape** define it as a result of the interaction between the local community and the natural environment under the influence of social, economic and cultural forces [...]”

Explanatory notes:

- The changes were made in order to emphasise the framing context, specifically that of the Protected Area – Historic Centre, as it was specified in the terms of reference, and not the entire Roşia Montană area.
- The modification concerning the classification of cultural landscape was made taking into account the opinions formulated by OPUS within the additional documentation for the P.U.G. Rosia Montana, in 2002 (see the explanatory notes from above for modification 9.)

MODIFICATION 24: Program 26 at p. 41

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According to the document posted by OPUS on the abovementioned web-site the following text

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appears to have been amended (p. 41):

- “[...] *program 26*. Discouraging any type of project, located outside the site, that tends to adversely impact the site [...]”
- This text was deleted.

Explanatory notes:

- The term “discouraging” is too vague and indefinite within this context.
- The Management Plan subcontracted to OPUS refers to certain programmes that are meant to be developed within this Protected Area.
- Certified experts have been subcontracted in order to develop activities and prepare Management Plans specific to the Industrial Area. They have mainly and specifically developed mitigation measures for the Management Plans.

MODIFICATION 25: Objective 14 at p. 41-42

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According to the document posted by OPUS on the abovementioned web-site the following text appears to have been amended (p. 41):

- “[...]Once most of the properties have been acquired by RMGC, as a consequence of its intensive acquisitions campaign, the area was depopulated and many buildings ceased to be used, while others have been used for different purposes. The natural consequence of this series of events was the fact that the preservation status worsened for a large part of the built area (out of which 23.8% are in bad and critical condition, 54.3% having an average condition of conservation, and only 21.9% are well preserved; according to the OPUS evaluation from 2004). Given this general situation of the site’s major resource, urgent interventions are necessary to be taken if the current negative trend is to be stopped and reversed. [...]”

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- The text has been changed as follows: “[...] Given this general situation of the site’s main resource, immediate actions need to be taken if the current negative trend is to be stopped and reversed. [...]”

Explanatory notes:

- The changes were made during the final editing process taking into account that in the assessment prepared by OPUS, they expressed their own subjective opinion, without taking into account the general depopulation aspect common to the Apuseni Mountains and other rural areas in Romania; they have also disregarded the fact that some buildings in Rosia Montana were abandoned or were not inhabited by their owners for long periods of time. These aspects were clearly explained in a series of chapters of the Report on Environmental Impact Assessment which had been prepared by experts in these specific fields.
- Thus, the opinion formulated by OPUS within the additional documentation of PUG Rosia Montana in 2002, was taken into account (see the explanatory notes from above for modification 9).

MODIFICATION 26: Program 31 at p. 42

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According to the document posted by OPUS on the abovementioned web-site the following text appears to have been amended (p. 41):

- “[...] *program 31*. The conservation and the development of Roman, medieval or modern galleries that have been discovered or will be discovered (for instance the segments of Cătălina-Monulești Gallery which are both modern and Roman [...])”
- The text has been changed as follows: [...] *program 30*. The conservation and the development – in safe conditions - of certain representative segments of the Roman, medieval or modern galleries discovered and which are going to be discovered (for instance the segments of Cătălina-Monulești Gallery which are both modern and Roman, the mining site Păru Crapei, Piatra Corbului area, Văidoaia area). [...]

Explanatory notes:

- The change was made during the final editing process considering that OPUS was not impartial by proposing such a programme, and considering that the proposals formulated by Beatrice Cauuet PhD in her synthesis on these aspects, were disregarded.
- However another important point of view which was included in the final editing process when the modification was made, was the one expressed in the O’Hara report – “[...] Research does not necessarily imply the need that any discovered item should be conserved; the idea of academicians regarding a total in situ conservation might not be the best choice for all cases considering the realities of preventive archaeological research and business environment. At least, this is how things stay as far as the in situ conservation of Rosia Montana’s Roman galleries is concerned. There are more than 5 km of such mining works, apparently having a limited range and few vestiges which have survived. As a matter of fact their great majority are unreachable, and thus dangerous for tourism activities. Alternative proposals such as it might be declaring an entire area a cultural landscape which must be developed for tourist reasons do not have a viable support. The only source that is available in order to obtain funds for this purpose is the company that intends to mine the mineral resources. Of course, it is necessary to settle and conserve a representative sample of galleries which are going to be accessible for tourists, at Catalina Monulesti and/or Orlea, and of course it is necessary to implement a continuous monitoring in order to guarantee the identification of special archaeological values that are being discovered during the development of archaeological or mining research excavations. This liability lies with the Ministry of Culture and Religious Affairs”