Natura 2000: A Guide to the Guide

Industry Commentary to the European Commission Guidance on Non-energy mineral extraction and Natura 2000









European Association of Mining Industries
Metal Ores & Industrial Minerals

This "Guide to the Guide" constitutes part of a Biodiversity Toolkit promoted by Euromines. Particularly, it addresses four sections of the European Commission Guidance on Non-energy mineral extraction and Natura 2000, as explained below.

Potential impacts of non-energy extraction activities on nature and wildlife

This chapter covers the general public concern about potential impacts that the extractive industry could have on biodiversity. It clarifies that the European Commission Guidance describes worst case scenarios that would effectively be illegal in the legal framework of the EU and which, therefore, are most unlikely to occur in practice.

Particular points covered include definitions of "site integrity", "habitat loss" and "significant effect".

The importance of strategic planning

This section calls attention to the fact that the European governments need to have a well determined national framework or strategic land-use plan, based, amongst other things, on geological data. Individual mineral extracting companies should not be required to resolve issues of national policy on which they have no mandate or control.

Article 6.3: carrying out an appropriate assessment of plans and projects in accordance with the habitats directive

Appropriate assessment is one of the three major steps that need to be undertaken under article 6.3 and 6.4 of the EU Habitats Directive. The other two steps are initial screening and derogation. Together they are intended to reveal the overall risks to be managed from a mineral extraction project in view of the conservation objectives of Natura 2000 sites.

This section focuses on some misunderstandings that are commonly employed to unduly delay the development of mineral extraction projects; i.e., definitions of the scope and purpose of an appropriate assessment under Article 6§3 of the Habitats Directive.

In particular, a distinction is made between "impact assessment" and "appropriate assessment"; between the differing conservation objectives of Member States and extractive companies; and between the concept of ecological coherence and habitat connectivity.

Some extractive activities and their relations with the provisions of article 6.3 and 6.4

Finally, this chapter focuses on some practices that extractive companies use to mitigate their impacts on biodiversity; i.e., progressive rehabilitation, establishment of biodiversity offsets and site enhancement measures.

In particular, a distinction is made between rehabilitation of contemporary extraction sites and restoration of derelict sites; between mitigation and compensation; and between site enhancement measures (SEM) and biodiversity offsets.

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Introduction

The purpose of the European Commission Guidance on Non-energy mineral extraction and Natura 2000 is to address issues for which the European Commission is responsible. However, the extractive industry has its own guidelines on how to prevent the loss of biodiversity in all areas of operation, some of which go beyond, but do not specifically address, particular requirements of the EU Nature Directives.

This "Guide to the Guide" constitutes part of a Biodiversity Toolkit promoted by Euromines, which is otherwise made up of previously existing documents. It is intended to assist companies in their interpretation of the European Commission Guidance and in their discussion with permitting authorities. It should be read in conjunction with the European Commission Guidance. The Toolkit addresses a broader range of issues concerning extractive industry impacts on biodiversity as follows:

Issue to be addressed	Industry Tool	
environmental impact assessment	European Commssion Guidance This "Guide to the Guide"	
compliance		
conservation beyond legal requirements	ICMM Good Practice Guidance	
stakeholder consultation		
monitoring and assurance	E.g., Guideline to Promotion of Biodiversity at the	
	Mineral Extraction Sites of HeidelbergCement	
codes of conduct	GRI Mining and Metals Sector Supplement	
	ICMM Sustainable Development Framework	
Small and Medium Enterprise practices	Swedish Association of Mines, Mineral and Metal Producers' Guidelines for Exploration Work	

Since 2003 Euromines' Guidelines on Sustainable Development for the European Extractive Sector have included the commitment to "Promote the conservation of biodiversity and integrated approaches to land use planning". Euromines is also an associate member of the International Council on Mining & Metals (ICMM) and has contributed directly to the development of the ICMM Good Practice Guidance for Mining and Biodiversity (2006). In 2009, Euromines also produced a book of 101 examples of beneficial mine closure in partnership with the Post-Mining Alliance².

In return, Euromines is actively seeking greater clarity, transparency, consistency and rigour in the processes by which areas of land are managed as part of the Natura 2000 network. The Europe 2020 Strategy, the EU Raw Materials Initiative³ (RMI) and the European Commission Guidance should be used to underline the need to promote increased investment in the EU's existing natural assets.

In many Member States the process of designating Natura 2000 sites took place in a hurried way, in the absence of any consideration of other land-uses and with more focus on quantity than quality. Therefore, factual demonstration of the biodiversity value of Natura 2000 sites will often be missing and this causes problems related to land-access, mineral planning and environmental assessment in the extractive sector.

Unfortunately, European Commission guidance documents do not necessarily create the legal certainty that extractive companies need to justify expensive exploration projects, baseline studies and impact assessments. It may therefore prove necessary at a later date to integrate elements of the European Commission Guidance into national or provincial legislation.

Access the Sustainable Development Guidelines at http://www.euromines.org/who_is_euro_sdi.html

² http://www.edenproject.com/shop/101-Things-To-Do-With-A-Hole-In-The-Ground-8229.aspx

³ http://www.euromines.org/who_is_euro_raw_materials_initiative.html

Scope of this "Guide to the Guide"

The European Commission Guidance is divided into nine sections that cover everything from an overview of the extractive industry, to effects that it might have on the species and habitats of the conservation areas under the two directives and extraction activities in the context of the marine environment.

This Guide to the Guide focuses on four sections of the European Commission Guidance that, for industry, require further commentary:

- » The impacts of the industry on biodiversity within the EU.
- » The importance of strategic land-use planning for setting the framework.
- » Appropriate assessment of extractive industry projects under the Habitats Directive.
- » Appropriate assessment of current biodiversity management practices.



Potential impacts of non-energy extraction activities on nature and wildlife

Chapter 3 of the European Commission Guidance mostly describes the potential impacts of mineral extraction in the absence of any legal or management controls and therefore discusses (illegal) worst case scenarios. However, it clearly indicates the concerns of stakeholders and underlines the responsibility shared by extractive companies to ensure that good governance is in place.

The chapter summary refers to the possibility that extractive activities affect the physical structure and functioning of habitats in particular areas, "thereby causing a loss in overall ecosystem resilience". This should only be read in conjunction with the suggested definitions of "site integrity" presented on page 55 of the Guidance⁴. Court Rulings have confirmed that it is possible to have effects in particular areas of Natura 2000 sites without necessarily affecting the resilience of the ecosystem or the integrity of the Natura 2000 site as a whole.

Habitat degradation

Whilst extractive activities can certainly cause disturbances to habitats and to species and their populations locally, the scale of extractive operations is not such that it is likely to cause wholesale extinctions. The European Commission interprets the term "habitat" to mean any isolated occurrence of a certain habitat type. Thus, "loss" means that the overall prevalence of suitable living conditions has been reduced – implying that the species concerned would have to migrate to remaining areas of suitable habitat.



The majority of Chapter 3.4.1 refers to impacts from abandoned historic mine sites, which continue to have significant effects on downstream ecosystems. Extractive companies therefore need to explain that the same effects are not seen at modern operations in the EU today.

Invasive species colonisation

The European Commission Guidance refers to EU restrictions on the introduction of non-native species as per Article 22(b) of the Habitats Directive and Article 11 of the Birds Directive. Note, however, that the deliberate temporary introduction of non-native species for the purposes of topsoil conditioning in preparation for the establishment of native habitats as part of mine rehabilitation is not prohibited at EU level. Rather, it is considered best practice in certain cases. Such practices, their benefits and associated risks, should be carefully explained to stakeholders when seeking permit approvals.

Movement-related disturbances

Section 3.5.6 of the European Commission Guidance refers to the need to avoid "intentionally or recklessly" disturbing certain priority species during breeding, rearing, hibernation and migration. It is recommended that extractive companies undertake a review of the latest scientific literature when negotiating this aspect of permit applications – evidence is emerging that the movement of equipment and vehicles and the presence of people (especially if the mine/quarry does not operate continuously) may not disturb fauna as suggested in the Guidance.

Distinguishing between significant and non-significant effects

Sections 3.7 and 5.3 of the European Commission Guidance deal with a "screening" step, allowable under the Habitats Directive, to determine which projects require appropriate assessment of their effects on any Natura 2000 sites. As an Environmental Impact Assessment is required for the vast majority of extractive operations, this section of the Guidance can very often be disregarded as not important.

⁴ It is worthwhile to note that « site integrity » is not defined anywhere in the Habitats Directive.

The importance of strategic planning

Although the European Commission Guidance acknowledges the need for a stable planning framework for mineral extraction over the long term, it tends to focus on the case of aggregates extraction and maintains the assumption that extractive companies can elect to operate far away from Natura 2000 sites.

The objectives of management of land, water and living resources are a matter of societal choice. Processes for determining society's choices with respect to use of its land need to allow for full consultation and for the reconciliation of different perspectives in making land-use decisions.

Minerals therefore play an important role in sustaining economic growth,



development and aid. Conservation outcomes have to be balanced against other desired outcomes from the management of land.

Consideration of Mineral Planning in management of Natura 2000

As land-use planning is about choices between different options, the extractive industry tends to be disadvantaged in the absence of clearly defined mineral policies. Minerals policies are therefore particularly important for securing access to mineral deposits. Without a minerals policy feeding into strategic land-use planning, the geological constraints on location of extractive activities and the potential impacts on the coherence of the Natura 2000 network cannot be sufficiently assessed.

Although access to land is necessary for raw materials to support economic development, a complication is the uncertainty over where extractable deposits of these minerals are located. Technological advances are opening up opportunities in areas previously found to be technically unfeasible to mine.

Data/maps showing the distribution of mineral resources are available in most national Geological Surveys, although it is currently not possible to "stitch" them together to form an EU Geological Map and some maps have not been recently updated. The decline in European mineral extraction does not reflect a decline in available resources as many believe, but rather a failure to apply the best recently available mineral survey techniques to update geological maps.

Considering the occurrence of minerals in land-use planning decisions is considered good practice and essential for efficient minerals supply. Sourcing materials near to their customer base is also generally considered good practice.

Site-Selection and the difference between sectors

There is sometimes an expectation amongst Environmental Authorities that the industry's own planning practices will remove the potential overlap with Natura 2000. Extractive industry companies need to further raise awareness of normal planning practices within the extractive industry (exploration methods, feasibility assessment including study of alternatives, process-design including study of alternatives, EIA including study of alternatives, etc. etc.). Some suitable text is already available in Sections 2.2, 2.3 and 2.3.1 of the ICMM Good Practice Guidance for Mining and Biodiversity.

Biodiversity value and the presence of protected areas are just two considerations amongst a whole set of determining factors that lead to extractive industry companies investing in exploration or feasibility studies in a

particular area (other important factors include expected grades, commodity prices, shipping and infrastructure options, political stability, predictable legal procedures etc.). Mine-planning practices frequently point to an optimum profitable solution that still overlaps with a protected area such as a Natura 2000 site. In the absence of a national framework or strategic land-use plan, individual extractive companies are often asked by stakeholders to resolve issues of national policy for which they have no mandate or control and which point to the need for strategic land-use planning by an impartial body (ideally government) without a sector bias.



Cross-sectoral planning processes

The examples given by the European Commission on page 40 of its Guidance are from Austria and England, both of which adopt a hierarchical approach whereby mineral extraction is given access to land that is left-over after all other land-uses are considered. Such an approach is discriminatory if applied to industrial minerals and metals, because they can only be extracted from the very limited set of geological environments in which they exist in sufficient concentrations.

To avoid conflict and achieve 'win-win' outcomes, transparent and inclusive planning processes are essential. The need to find the optimum balance between the protection of important ecosystems and socio-economic development requires integrated and joint solutions. The role of governments in the resolution of mineral extraction and conservation issues is critical, but may be limited by government's capacity to make decisions that can lead to effective, equitable and sustainable land use management.

Euromines advocates the preparation of cross-sectoral strategic Land-Use Plans on national level, which set the framework for resolving the conflicting demands of different sectors on the same national land-base. This approach gives important land-uses such as transport corridors, resource extraction, agriculture, water-supply, electricity generation etc. an equal "seat at the table" when planning future land-use.

In many EU Member States a strategic planning context for minerals other than sand & gravel is still missing, and appropriate assessment processes for industrial and metallic mineral projects are therefore more likely to be subject to conflicting opinions concerning project impacts and acceptability.

"Go" or "No-Go"

Linked to this, decisions on "Go or No-Go" (i.e. to allow mineral extraction within certain categories of protected areas or not) must be based on a scientific consideration of irreversible impacts and should reflect the choices made in national mineral and land-use plans. "No-go" commitments can only be made if practical issues on definitions, process and management of protected areas are sufficiently scientific and transparent, and if issues around the use of protected area boundaries in informing land-use decisions are adequately resolved through an open, transparent, multi-stakeholder process. This has not always been the case for the Natura 2000 network.

Article 6.3: carrying out an appropriate assessment of plans and projects in accordance with the habitats directive

Chapter 5 of the European Commission Guidance largely repeats previous guidance, which remains theoretical and legalistic. It does not address, in detail, the practical specificities of the extractive industry.

Euromines members feel strongly that Article 6§3 assessment is the key tool for ensuring that impacts on the favourable conservation status of habitats and species listed in the Nature Directives are designed out of the project so that residual impacts do not adversely affect the integrity of Natura 2000 sites. If Article 6§3 assessment is undertaken correctly in this way, Article 6§4 should only need to be invoked in exceptional circumstances. Questions of alternative solutions to the project itself, overriding



public interest of the project and compensatory measures should therefore not routinely arise in the assessment of mineral extraction projects within the EU.

To ensure this is the case, all should be aware of the tremendous difference in the legal meaning of various terms, e.g.:

- » "impact assessment" versus "appropriate assessment",
- » "Natura 2000 site" versus "site",
- » "favourable conservation status" versus "integrity of the site(s) concerned",
- » "connectivity" versus "coherence".

The European Commission Guidance does not necessarily use these terms very carefully or consistently with their legal meaning within the Nature Directives.

Impact assessment and appropriate assessment

According to previous European Commission Guidance, "appropriate" only means that the assessment is to be recorded and sufficiently reasoned to allow the right decision to be taken in the light of particular information relating to the environment.

SEA and EIA are sufficiently complete tools to cover the demands of the Habitats Directive and are the first-choice tools applicable to the minerals industry according to EU law. In these cases there is no need to undergo an "extra" appropriate assessment, because it can already be included in the EIA.

Appropriate Assessment should be seen as particularly relevant for plans or projects that will not undergo SEA or EIA, and for these unusual cases, an assessment for the possible effects on Natura assets must "at least" be performed.

Definition of 'Site'

Various industry guidance documents refer to the "site" as the extraction site, or location of the mine. This does not necessarily overlap entirely with a Natura 2000 site.

Natura 2000 site: means a site designated to form the Natura 2000 network, which include Special Protection Areas (SPA) and Sites of Community Importance (SCI) approved by the European Commission and declared as Special Areas of Conservation (SAC) by the Member States.

Site means all land at a distinct geographic location under the management control of an operator (Directive 2006/21/EC).



Achievement of Favourable Status versus Maintaining It

"Favourable conservation status" (defined on p21 of the European Commission Guidance) is an objective set for the Member States and has only indirect relevance to the licensing procedure of private projects. Article 6§3 requires that the project have no significant effect on the integrity of a Natura 2000 site in view of its conservation objectives. Achieving "favourable conservation status" is the responsibility of the Member State. Member States are required to maintain favourable conservation status where it has already been achieved. For the moment, this is rarely the case.

Favourable conservation status does not necessarily always apply to the status of species and habitats in the individual site but to their status in the natural range (species) or distribution area (habitats) in the entire national part of a bio-geographical region. This means that a favourable conservation status can be achieved for particular species or habitat types of Community Interest at the national bio-geographical level with individual Natura 2000 sites showing different degrees of conservation status for such species and habitat types. This means that Natura 2000 related objectives may vary from site to site according to the specific conservation objectives to be established by the national competent authorities.

Currently, only a minority of listed habitats and species are at favourable conservation status. This makes sense, as the Natura 2000 sites were designated only recently in order to achieve favourable conservation. Article 6 does not require private plans and projects to result immediately in favourable conservation status. Nor does it require the achievement of favourable conservation status before any plan or project can be agreed to. The achievement of favourable conservation status is a long term obligation of the Member States for which Natura 2000 sites have been designated – the integrity of the site in view of this obligation must not be adversely affected. The ecological "restoration" processes taking place within the site must remain effective. Of course, any prevention, mitigation, or enhancement measure included in the plan or project that could accelerate restoration of the site would normally be viewed positively.

Coherence & Connectivity

Coherence of the Natura 2000 network is referred to in Article 6§4 of the Habitats Directive and relates to the overall objectives of the Directive – that is, to achieve and maintain favourable conservation status of a number of species and habitats. It is clear that the network is not a single threatened habitat in and of itself. All parts of the Natura 2000 network are not interchangeable or even mutually dependant. Coherence of the network is a policy concept rather than an ecological or biological parameter. Presumably the network remains "coherent" whilst ever it moves the targeted species and habitats towards favourable conservation status as a group.

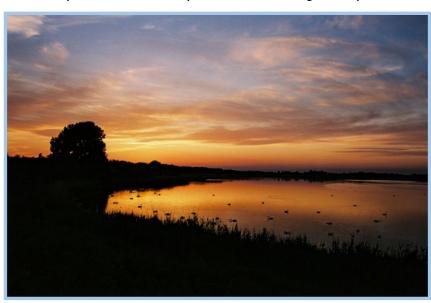
"Connectivity" is not referred to anywhere in the Directives. It has been introduced into European Commission Guidance, presumably as part of the ecological discussion of what might be required to achieve favourable conservation status of certain species. In this sense, connectivity should be considered under Article 6§3 of the Directive, but "Connectivity" is not required (either scientifically or legally) throughout the entire network, but only where this makes sense for the favourable conservation status of a particular species or assemblage of species (e.g., for genetic stability of populations, to provide minimum habitat-needs for solitary or migratory species etc.).

Design versus Assessment

Design of a mineral extraction project necessarily includes an assessment of impacts on biodiversity; comparison of alternative solutions to the design problem and comparison of different prevention and mitigation options.

This is covered under the competence and good practice of the industry before Appropriate Assessment takes place and is not the subject of the European Commission Guidance.

Appropriate Assessment is the legal process by which the design will be "assessed" by the Competent Authority. The Authority therefore needs to satisfy itself that the minimum requirements of the Directive have been met – it does not supervise, manage or direct the design of the project. The Assessment process includes opportunities for companies to refine their design, based on the feedback of the competent authorities and other stakeholders, but it should not replace the in-house design process for the project.



Data & Monitoring (how to measure/control mitigation)

Information on status of the Natura 2000 site should be available form Competent Authorities if the site has been designated in a scientifically and legally correct way. Otherwise, how has the site been identified for designation? The fact that in many cases, Competent Authorities have not been able to provide such information has led to claims that designation of Natura 2000 sites has not been sufficiently scientific or transparent.

Competent Authorities are expected to provide relevant information on established Natura 2000 sites (objectives, status, trends, particular needs of species etc.) and the status of any plans to establish new Natura 2000 sites. Meanwhile, applicants should provide relevant information concerning their project (likely significant impacts prevention, mitigation etc).

For those cases where Natura 2000 sites have been designated on the basis of insufficient information, the missing data should be generated for the appropriate assessment without penalising a project proponent (e.g., the mineral extracting company). As a matter of principle, investors should not have to pay for incorrect implementation of the Directives by the Member State concerned. To avoid the unfair imposition of expensive delays, collaborative data collection and cost-sharing arrangements should be negotiated.

Indicators

The ICMM Guidance, International Finance Corporation Environmental and Performance Standards, Cement Sustainability Initiative KPIs and GRI Mining & Metals Sector Supplement are direct responses to the International Convention on Biological Diversity with specific advice for biodiversity reporting in the extractive sector.

However, the only way to truly evaluate biodiversity of individual sites is through rigorous scientific assessment (such as counting numbers and types of species, habitats, etc). The HeidelbergCement Guide includes some suggestions for site-specific indicators.

Some mineral extractive activities and their relations with the provisions of article 6.3 and 6.4

Chapter 7.1 of the European Commission Guidance unfortunately mixes two similar, but different, issues when discussing mine site rehabilitation. It confuses:

- » the rehabilitation of contemporary mines as a result of integrated closure planning; with
- » the restoration of long-abandoned sites (e.g., the UK after-minerals programme).

On offsets, the European Commission Guidance quotes the BBOP definition of 2009, which appears on page 74 of the Guidance and describes offsets as actions that take place after mitigation measures have been taken, whereas the ICMM Good Practice Guidance for Mining and Biodiversity, published in 2006, describes both mitigation options and compensatory measures as including offsets. Neither of these definitions considers the legal use of the terms "mitigation" and "compensatory measure" in the EU Habitats Directive, which was originally published in 1992. The European Commission's own definition, which only appears in the glossary on page 92 of the Guidance, agrees more with the ICMM definition.



The confusion between rehabilitation of contemporary mines and restoration of derelict sites comes partly from problems of terminology in different sections of the community and regions of the EU.

It is therefore recommended to state the applicable context whenever using such terms (see below). In discussion with environmental authorities and other stakeholders, it is essential that terms and definitions be agreed bilaterally from the outset.

Particularly problematic in the context of the Natura 2000 network, are the terms "restoration" and "rehabilitation". The term "rehabilitation" does not appear in any of the legislation. The Habitats Directive uses the term "restoration", but in ways fundamentally different to the way it is used in the extractive industry. The tables on the following pages illustrate the range of possible misunderstandings.

Companies should not be required to achieve "restoration" as it is defined in the Habitats Directive. The definition given in the European Commission Guidance neither reflects the legal definition, nor the definition commonly used by the extractive industry. It is, therefore, particularly misleading. The







definition of rehabilitation speaks about "derelict land" and links directly to the definition of "restoration". It does not match the definition commonly used by the extractive industry and is, therefore, also misleading.

Most companies will use the term more-or-less interchangeably with "rehabilitation" to describe the integrated closure of contemporary mine sites for biodiversity conservation purposes, which is more readily achievable than the European Commission Guidance suggests.

Abandoned historic sites present additional difficulties because of the lack of clear ownership, the lack of closure planning, outdated practices and extremely limited funding opportunities. They represent the worst-case experience to date of trying to re-establish conservation values in former mine sites and are not representative of what can be achieved with a new project implementing best practices from day one.



Terms such as reclamation or remediation, which mostly refer to derelict, unusable, contaminated or abandoned land, should be avoided when describing integrated mine closure and rehabilitation planning.

Selected Definitions of "Restoration" **Definition** Source **Application** A series of measures required to All Natura 2000 sites (legal achieve favourable conservation status Directive 1992/43/EEC obligation of the EU Member of natural habitats and wild fauna and States). flora. Action taken at a site following anthropogenic degradation or deterioration, to restore or enhance its ecological value. In this **European Commission** Abandoned historic mine sites guidance document is often used **Guidance on Non-energy** for rehabilitation that is guided by (e.g., the UK after-minerals mineral extraction and ecological principles and promotes programme) Natura 2000 the recovery of ecological integrity; reinstatement of the original (premining) ecosystem in all its structural and functional aspects. Reclamation that is guided by **IUCN / ICMM Case studies** ecological principles and promotes from around the world: the recovery of ecological integrity; "Integrating Mining and Closure of historic mine sites reinstatement of the original (pre-**Biodiversity Conservation"** mining) ecosystem in all its structural (2004)and functional aspects. Re-establishing the original ecosystem, **Guideline to Promotion** the habitat or their functions in of Biodiversity at the Integrated closure of the undisturbed way in which they **Mineral Extraction Sites of** contemporary mine sites originally existed, including biological, **HeidelbergCement** chemical and physical elements. Seeks, in an ecological sense, to **Irish Mining & Exploration** artificially accelerate the processes of Integrated closure of Group, Irish Business and natural succession by putting back the contemporary mine sites **Employers Confederation** original ecosystem's function and form.

Selected De	finitions of	"Reha	bilitation"
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Definition	Source	Application
None given	Directive 1992/43/EEC	none
The process of converting derelict land to usable land and may include engineering as well as ecological solutions. The restoration of natural habitats is often included as part of the site closure and rehabilitation process. In this guidance document the term is used to imply a process guided by ecological principles that promotes the recovery of ecosystem integrity in all its structural and functional aspects.	European Commission Guidance on Non-energy mineral extraction and Natura 2000	Abandoned historic mine sites (e.g., the UK after-minerals programme)
Progression towards the reinstatement of the original ecosystem.	IUCN / ICMM Case studies from around the world: "Integrating Mining and Biodiversity Conservation" (2004)	Closure of historic mine sites
Restoration or improvement of certain aspects or functions of an ecosystem or habitat. It does not necessarily imply the complete restoration of an ecosystem or habitat.	Guideline to Promotion of Biodiversity at the Mineral Extraction Sites of HeidelbergCement	Integrated closure of contemporary mine sites
A partial return to a previous state.	Irish Mining & Exploration Group, Irish Business and Employers Confederation	Integrated closure of contemporary mine sites

Mitigation vs. Compensation

Mitigation measures are aimed at minimising or even cancelling the negative impact of a project on the integrity of a Natura 2000 site, during or after its completion. The definition is therefore strongly linked to that of "site integrity" given on page 55 of the European Commission Guidance.

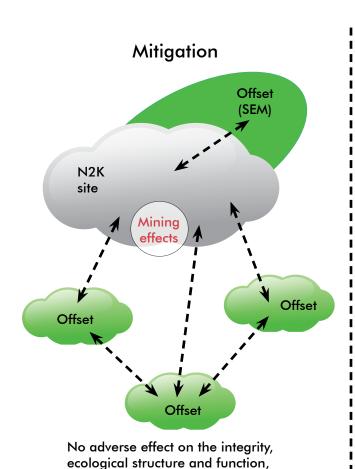
Article 6§3 of the Habitats Directive does not prohibit any particular activity (including any mitigation or

compensatory component to that activity) as long as it can be ascertained that the activity will not adversely affect the integrity of the site.

Compensatory measures are intended to compensate for the effects on sites whose integrity is adversely affected by the plan or project so that the overall coherence of the Natura 2000 network is maintained. The definition is therefore strongly inked to that of "coherence of the Natura 2000 network" (see p43 of the European Commission Guidance).

The two concepts are illustrated below. Mitigation measures are required by Article 6§3 of the Habitats Directive. Compensatory measures are only required, in exceptional circumstances, by the derogation procedure of Article 6§4.





habitats, population and capacity of

self-renewal of the site.

N2K site Mining effects Inappropriately large distance 'x' so as to make offset irrelevant to site integrity. Offset

Adverse effects on the integrity of the site remain, but the overall coherence of Natura 2000 is protected.

The Terminology of Offsets

The term "mitigation" does not appear in any of the legislation. The Habitats Directive uses the term "compensatory" in a very specific legal context, which is different to that in which the extractive industry typically uses the term.

Some European environmental authorities have clearly stated their view that biodiversity offsets cannot be considered mitigation measures – that they must be considered as compensatory measures and that they can only be used in the context of derogations as per Article 6§4 of the Habitats Directive. This indicates that they attach the 2009 BBOP definition of "offset" to the legal term "mitigation" in the Habitats Directive of 1992, rather than the definition of "offset" which is given on page 92 of the European Commission Guidance.

Such views contradict the industry's on-the-ground experience under the legislation in the years prior to 2009. Industry's challenge is to adapt to the evolving interpretation of the authorities and to communicate how certain offsets &/or rehabilitation activities, as described in the ICMM Good Practice Guidance on Mining and Biodiversity, can directly benefit the Natura 2000 site concerned and thus be properly considered as possible mitigation measures under Article 6§3 of the Habitats Directive.

Where the terms "mitigation" and "compensation" have been used outside the context of Natura 2000, this should be clearly acknowledged. Alternative descriptions, such as "site enhancement measures" may more directly and accurately convey what a mineral extracting company plans to do to prevent negative effects on the integrity of Natura 2000 sites.

Biodiversity offsets are conservation actions intended to compensate for the residual, unavoidable harm to biodiversity caused by development projects, so as to aspire to no net loss of biodiversity (p92 of the European Commission Guidance).

Site enhancement measures may be defined as conservation actions intended to offset the residual, unavoidable harm caused by development projects, so as to maintain the integrity of the Natura 2000 site

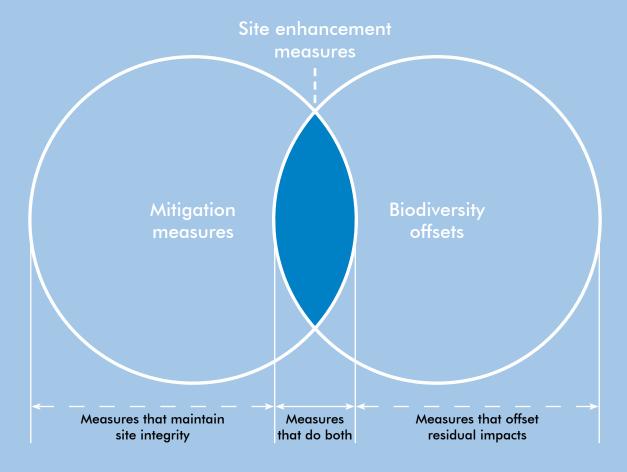
concerned in view of its conservation objectives. The goal is no net loss and preferably a net gain of biodiversity on the ground with respect to area, composition, structure, function and people's use and cultural values associated with the site's habitats and species of Community interest within the (expanded) Natura 2000 site.

Site enhancement measures, as defined above, can be incorporated into a mineral extraction proposal in full compliance with Article 6§3 of the Habitats Directive and fit the constraints set for "mitigation" by past European Court of Justice rulings, i.e. the "coherence", "ecological structure and function", "habitats", "populations" and "capacity of self-repair and self-renewal" of a particular site can all be maintained under dynamic conditions through the successful use of such SEMs.

The following diagram is intended to show how the different measures can be related.

Recommended Criteria for Site Enhancement Measures

- » SEMs should never be used to justify or compensate for poor environmental management practices or performance.
- » SEMs should result in a net gain for biodiversity over time, bearing in mind the timeframes of ecological processes and this should be credibly evaluated by peer-reviewed scientific studies.
- » SEMs should be quantifiable the impacts, limitations and benefits must be reliably estimated.
- » SEMs should be targeted they must offset the impacts on a 'like for like or better' basis.
- » SEMs should only be considered after all other attempts to mitigate adverse impacts have been exhausted.
- » SEMs must meet all statutory requirements.
- » SEMs must offset the impact such that the integrity of the concerned Natura 2000 site(s) is maintained at least for the period of time that the impact occurs.
- » SEMs must be beyond existing requirements for management of the Natura 2000 site by the competent authority and not already being funded under another scheme.
- » SEMs must be clearly defined, transparent and enforceable through development consent conditions, licence conditions, modification of the Natura 2000 site boundary, covenants or contracts.



Examples of Site Enhancement Measures

The following case-studies from mining and forestry fit the definition of mitigation measures and could equally be described as SEMs.

Eagle owls (Bubo bubo) in German quarries (p103 of the European Commission Guidance)

Mining site of Gambach (Hesse)

http://circa.europa.eu/Public/irc/env/wg_non_energy/library?l=/natinal_guidelines/input_from_members/ima/experience quarzwerke/ EN 1.0 &a=d

Preliminary management measure at the Sélestat quarry (Alsace, France)

http://www.pays-de-la-loire.developpement-durable.gouv.fr/article.php3?id_article=614 (p62) A quarry operator in Alsace decided to carry out an ecological management plan to encourage the butterflies' expansion to areas that would not be exploited. The first results seem very encouraging since the populations of two butterfly species out of the three significantly increased on recently restored areas. The operator hopes that after a few years of active management, the butterfly populations occurring on its future expansion area will represent a non significant part of the total populations in the Natura 2000 site.

Frasnes Quarry (Belgium) – Limestone for lime http://www.ima-eu.org/fileadmin/euba/guide.pdf (p38)

Rio Tinto Kennecott Utah (USA) – Copper mine http://www.wbcsd.org/web/publications/business biodiversity2002.pdf (p46)

Species protection in ongoing forestry management in France http://circa.europa.eu/Public/irc/env/species_protection/library?l=/commission_guidance/english/final-completepdf/ EN 1.0 &a=d (p33)

References

- 1. Brodkom, F. (2001), "Good Environmental Practice in the European Extractive Industry, A Reference Guide", p38. IMA-Europe, Tournai at (http://www.ima-eu.org/fileadmin/euba/guide.pdf)
- 2. Business and Biodiversity Offset Program (Washington, DC) 2009 (BBOP)
- 3. Council Directive (EC) 79/409/EEC of 2 April 1979 on the Conservation of Wild Birds (Birds Directive)
- 4. Council Directive (EC) 92/43/EEC of 21 May 1992 on the Conservation of Natural Habitats and of Wild Fauna and Flora (Habitats Directive)
- Earthwatch Institute, (2002), International Union for Conservation of Nature and Natural Resources, world Business Council for Sustainable Development (Business & Biodiversity "The Handbook for Corporate Action", p46. Switzerland
- 6. Euromines, (2010). "Sustainable Development Guidelines" at (http://www.euromines.org/who_is_euro_sdi.html)
- 7. European Commission (EC), Defining "Critical" Raw Materials (2010) at (http://ec.europa.eu/enterprise/policies/raw-materials/files/docs/report-b en.pdf)
- 8. European Commission (EC), Guidance on Undertaking Non-Energy Extractive Activities in Accordance with Natura 2000 Requirements at (http://ec.europa.eu/environment/nature/natura2000/management/docs/neei_n2000_guidance.pdf)
- 9. European Commission (EC), "Raw Materials Initiative" (RMI) Communication at (http://ec.europa.eu/enterprise/policies/raw-materials/documents/index_en.htm)
- 10. Guidance document on the strict protection of animal species of Community interest under the Habitats Directive 92/43/EEC (2007) p33. at (http://circa.europa.eu/Public/irc/env/species_protection/library?l=/commission guidance/english/final-completepdf/ EN 1.0 &a=d)
- 11. International Council on Mining & Metals (ICMM) Good Practice Guidance for Mining and Biodiversity (2006) at (http://www.icmm.com/biodiversity)
- 12. IUCN / ICMM Case studies from around the world: "Integrating Mining and Biodiversity Conservation" (2004)
- 13. Melki, F. (2007), "Guide méthodologique pour l'évaluation des incidences des projets de carrières sur les sites Natura 2000", Biotope at (http://www.pays-de-la-loire.developpement-durable.gouv.fr/article.php3?id_article=614)
- 14. Pearman, G. (2009). 101 Things To Do With A Hole In The Ground. Published by Post-Mining Alliance in association with the Eden Project
- 15. Pütter, T. (2008), "Experience of the Quarzwerke Group with Natura 2000", p4. Quarzwerke
- 16. Rademacher, M. (2010). "Quarries: A network to promote biodiversity". Guideline to Promotion of Biodiversity at the Mineral Extraction Sites of HeidelbergCement at (http://www.heidelbergcement.com/NR/rdonlyres/E437C510-3461-421E-AF9D-D4280D9C53C2/0/RademacherMichael_promotionofbiodiversity.pdf)

Case-studies	Source	Details
Eagle owls (Bubo bubo) in German quarries	European Commission Guidance	page 103
Mining site of Gambach (Hesse)	http://circa.europa.eu/Public/ irc/env/wg_non_energy/ library?l=/natinal_guidelines/ input_from_members/ima/ experience_quarzwerke/_ EN_1.0_&a=d	During the mining process, employees are careful not to disturb or destroy the birds' nests, or if this is unavoidable, to replace them elsewhere in the pit. In order to provide sufficient habitat for the population of bank swallows and ensure they continue breeding in the mining area, the mining operations plan approved in 1997 sets aside sufficient steep banks for each respective breeding season. No extraction takes place in these areas during the breeding period. Additional individual measures described in the mining operations plan also ensure that no birds settle in the areas designated for extraction of minerals.
Preliminary management measure at the Sélestat quarry (Alsace, France)	http://www.pays-de-la-loire. developpement-durable.gouv.fr/ article.php3?id_article=614	A quarry operator in Alsace decided to carry out an ecological management plan to encourage the butterflies' expansion to areas that would not be exploited. The first results seem very encouraging since the populations of two butterfly species out of the three significantly increased on recently restored areas. The operator hopes that after a few years of active management, the butterfly populations occurring on its future expansion area will represent a non significant part of the total populations in the Natura 2000 site. (on page 63)
Frasnes Quarry (Belgium) – Limestone for lime	http://www.ima-eu.org/ fileadmin/euba/guide.pdf	page 38
Rio Tinto Kennecott Utah (USA) – Copper mine	http://www.wbcsd.org/ web/publications/business_ biodiversity2002.pdf	page 46
Species protection in ongoing forestry management in France	http://circa.europa.eu/Public/ irc/env/species_protection/ library?l=/commission_ guidance/english/final- completepdf/_EN_1.0_&a=d	page 33



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