



Université catholique  
de Louvain

**UCL**

LIFE in Quarries

## Legal aspects of “dynamic biodiversity management” in quarries

### I. Synthesis of the results



Prof. Ch-H Born (SERES, UCL) and Dr. H Schoukens (Ugent) – Brussels, 12 december 2017



# Overview

## Introduction

### I. Key concepts

### II. Hypotheses treated

### III. Legal analysis: main results and solutions



## 1. Biodiversity and quarries

- General decline of biodiversity in western landscapes
- Quarries as substitution habitats
- Legal consequences of quarries attractiveness of biodiversity
- Possible reactions from the operator
  - Ignoring it
  - ‘Shoot, shovel and shut up’
  - Making it an economic and ecological opportunity



→ LIFE in Quarries – Legal study



# Introduction

## 2. Aim, content and methods of the legal study

- Aim: analysing to what extent more flexible and less static approaches to species conservation are reconcilable with the preventative approach underpinning the EU and internal nature conservation law
- Content: 4 sections + conclusions
- Methods
- Comparative study: national reports from :  
BE (FI); CH; DE; GB; SE; FR; NL; USA



# I. Key concepts

## 1.1. Temporary nature (TN)

### Definition

*“TN means that, in a given developable area, the **establishment of nature is temporarily allowed, pending development**, and that this nature **may later be removed to allow for development**, with (as far as possible) **legal certainty** for the landowner or project developer. In other words, TN is created where nature is allowed by a developer to establish on a site not primarily intended for nature conservation, secure in the knowledge that he may legally remove this nature when it comes to developing the site “ (Duke et al., 2012)*

# I. Key concepts

Specific traits:

- Temporary absence of industrial activity before 'removal'
- Temporary character of biodiversity gains in view of the economic destination of the site
- Additionality of temporary nature (beyond baseline condition of the site)
- Provision of legal guarantees to the landowners / project developers
- Mostly related to pioneer / early species and habitats

# I. Key concepts

## 1.2. Dynamic biodiversity management (DBM)

### Definition

Concept according to which « *habitats and population of species present in the quarry or in certain parts of the quarry can be destroyed and / or displaced provided that the conditions allowing their survival are ensured (integration of a network and / or recreation of the environment) »* (CSC, p. 3)

### Proposition de définition

“Collection of nature management and/or restoration measures taken in the context of quarry operation aimed at fostering the existing and/or new species on a site whilst at the same time offering the necessary legal guarantees to the developers concerned”

# I. Key concepts

## Specific traits:

- Aims at achieving recovery targets whilst providing legal certainty for operating the industrial activity on the site
- Wider scope than TN : includes
  - additional nature management / restoration measures (// TN)
  - measures aimed at the establishment of permanent nature, situated at the verges of ongoing quarry operations
  - compensatory measures for biodiversity loss offsetting
- Occurs in sites where the industrial activity is ongoing and takes a direct part to the creation of substitution habitats
- Removal may occur during or after operation but not specific (ecological rehabilitation of extraction sites after operation)

# I. Key concepts

## 1.3. Other concepts

- Temporary nature vs Permanent nature



- Pre-existing nature (baseline) vs Additional nature



# II. Hypotheses treated

## 2.1. Hypotheses treated in quarries

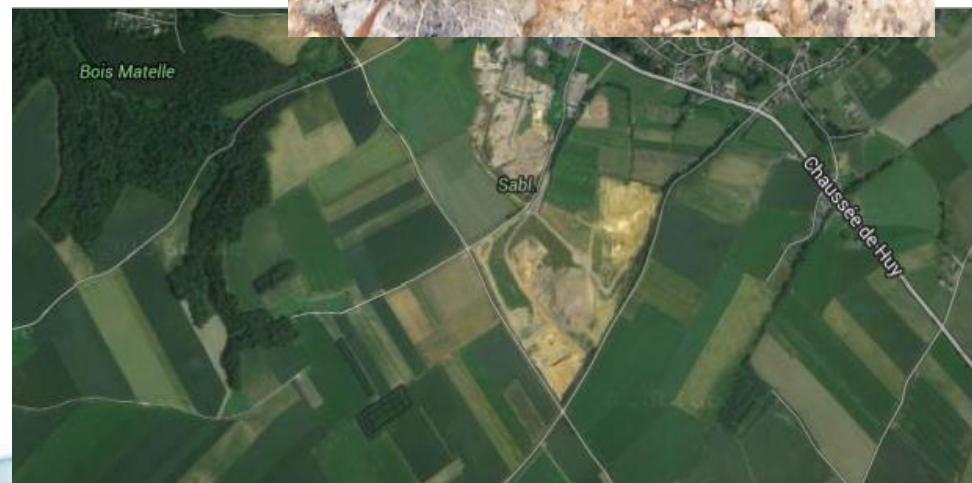
### 1) Pre-existing nature and quarries

- Ex PN (1a)
- Ex TN (1b)



### 2) Additional nature

- Add TN (2a)
- Add PN (2b)



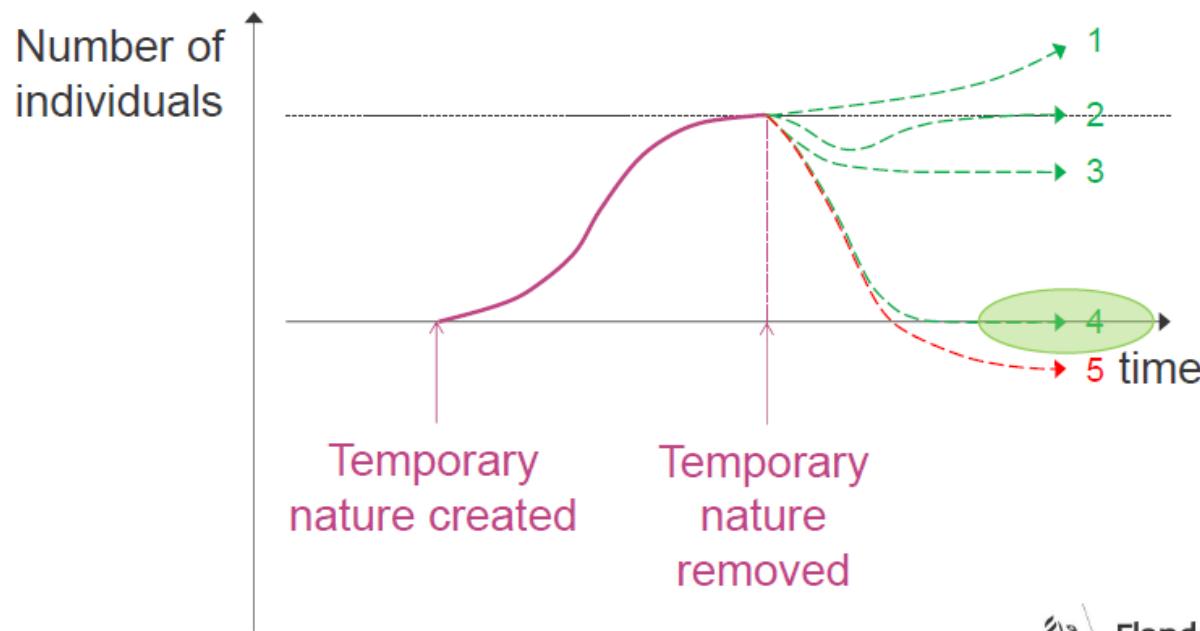
## II. Hypotheses treated

### 2.2. Quarry operations, impacts on nature and DBM

- Extractive process initial phase
  - Destruction of Ex PN
  - Beginning of colonisation by Add TN
- Operation phase
  - Management and recovery measures for Add TN
  - Progressive disappearance of Ex PN along with extractive front
  - Restoration Add PN (PN offsets )
- Rehabilitation phase or conversion after operation
  - Add PN development and/or restoration
  - Decline of Ex/Add TN if no specific dynamic management is carried out anymore

## II. Hypotheses treated

### Potential effects of temporary nature on a population (*Linnartz 2006*)



# II. Hypotheses treated

A quarry: from the operator perspective...



3. On-site transportation



2. Blasting



4. Crushing, screening



5. Rehabilitation



1. Topsoil removal



## II. Hypotheses treated

From the biologist point of view ...



3. Temporary ponds



2. Screes



4. Invasives?



5. Rehabilitation



1. Cliffs



# III. Legal analysis: main results

## 3.1. Legal context: the protection of species in EU Law

- Legal framework
  - Birds Directive: art. 5 and 9 (2009/147/EC)
  - Habitats Directive: art. 12, 13 and 16; 22 (92/43/EEC)
  - National species protection law (may have a wider scope)
- Other legal issues:
  - Natura 2000 (art. 6.3 HD) ?
  - Environmental Liability (Dir 2004/35/EC) ?
  - Invasive alien species (Reg 1143/2014) ?

# III. Legal analysis: main results

- Material scope
  - Animal species:
    - all birds : : eagle owl, sand martins, little ringed plover,...
    - other species : annex IVa HD + national lists): crested newts, natterjack toad, European smooth snake,...
  - Plants (annex IVb HD): (?)
  - All species protected at national/regional level(s): orchids, insects, amphibians, reptiles,...
- Spatial and temporal scope

### III. Legal analysis: main results

- Prohibitions likely to interact with quarry operations and DBM
  - Principle: prohibition of any kind of (significant) *harm* caused by deliberate activities
  - Covers any « deliberate » activity, including authorized ongoing activities; not natural processes (plant succession,...)
  - Specific prohibitions applicable in quarries
    - Destruction of specimens and their eggs
    - Deliberate disturbance of species (not specimens)
    - Deterioration or destruction of breeding sites and resting places
    - Introducing non native species and reintroducing native species
    - Any broader prohibition from national law

## Protection of species

### *Article 12*

1. Member States shall take the requisite measures to establish a system of strict protection for the animal species listed in Annex IV  
(a) in their natural range, prohibiting:
  - (a) all forms of deliberate capture or killing of specimens of these species in the wild;
  - (b) deliberate disturbance of these species, particularly during the period of breeding, rearing, hibernation and migration;
  - (c) deliberate destruction or taking of eggs from the wild;
  - (d) deterioration or destruction of breeding sites or resting places.

### III. Legal analysis: main results

- Leeway for economic activity in presence of protected species: the derogation clause (art. 9 BD; 16 HD)
  - Only for limited reasons
  - provided there is no satisfactory alternative
  - And there is no detrimental effect on the conservation status of the species

*Article 16*

1. Provided that there is no satisfactory alternative and the derogation is not detrimental to the maintenance of the populations of the species concerned at a favourable conservation status in their natural range, Member States may derogate from the provisions of Articles 12, 13, 14 and 15 (a) and (b):
  - (a) in the interest of protecting wild fauna and flora and conserving natural habitats;
  - (b) to prevent serious damage, in particular to crops, livestock, forests, fisheries and water and other types of property;
  - (c) in the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment;
  - (d) for the purpose of research and education, of repopulating and re-introducing these species and for the breedings operations necessary for these purposes, including the artificial propagation of plants;
  - (e) to allow, under strictly supervised conditions, on a selective basis and to a limited extent, the taking or keeping of certain specimens of the species listed in Annex IV in limited numbers specified by the competent national authorities.

# III. Legal analysis: main results

## 3.2. Margin within the context of protection duties

- Limited leeway within the art. 5 BD/12-13 HD prohibitions
  - Destruction of specimens/eggs inevitable in most hypotheses (Ex/Add P/TN)
  - More flexibility for excluding DBM measures from « disturbance » or « deterioration » concepts for pioneer species (Add TN);
  - Much less for quarry operations that will qualify inevitably as disturbance of species /destruction of breeding site / resting place (Ex PN)

### III. Legal analysis: main results

- Impossibility to take into account offsetting measures ?

CJEU *Briels ; Orleans; Centrale de Moorburg*

- « Deliberate » character of quarry operation demonstrated when the presence of species is known or should be known by the operator (e.g. through EIA)

→ A derogation is indispensable in some hypotheses

# III. Legal analysis: main results

## 3.2. Margin within the context of derogation clause

- Real leeway within the art. 9 BD/16 HD derogation clause
  - Scenario 1: impacting Add TN → anticipated single act derogation
    - Reason: protection of fauna/flora and conserving natural habitats; reintroduction /re-population (art. 5, a, 4th indent ; b, BD; art. 16.1, a, and d, HD)
    - Conditions:
      - no detrimental effect on baseline;
      - need to prevent avoidable damage (less detrimental alternatives)

# III. Legal analysis: main results

- Scenario 2: impacting Add PN (and, eventually, Add TN) → anticipated population-based management plan
  - Reason:
    - protection of fauna/flora and conserving natural habitats; reintroduction /re-population (art. 5, a, 4th indent ; b, BD; art. 16.1, a, and d, HD) (**if net gain**)
    - Taking of certain specimens in limited numbers, under strictly supervised conditions and on a selective basis (art. 5, c BD; art. 16.1, e, HD)(**if no net gain**)
  - Conditions:
    - no detrimental effect on baseline (Ex PN);
    - need to prevent avoidable damage (less detrimental alternatives)

### III. Legal analysis: main results

- Scenario 3: impacting Ex PN (and, eventually, Ex TN) → anticipated population-based management plan
  - Reason:
    - Imperative reasons of overriding public interest (NOT in BD; art. 16.1, c HD) (if no net gain): **quarries don't always qualify for this reason** (but see CJEU Alto Sil)
    - Taking of certain specimens in limited numbers, under strictly supervised conditions and on a selective basis (art. 5, c BD; art. 16.1, e, HD)(if no net gain)
    - **Scenario 2 if significant net gains ?**
  - Conditions:
    - Need to demonstrate no net detrimental effect on baseline (Ex PN) through biodiversity offsets (compensatory measures)
    - need to demonstrate the absence of alternatives at the permit application stage → more challenging

# III. Legal analysis: main results

## Synthesis table: EU Law

	Destruct° de spécimens nids, œufs d'espèces animales Destruction, déracinement/translocation de plantes	Perturbations d'espèces animales	Destruct° ou détérior° des sites de repr./aires de repos d'espèces animales	Réintroduct° / repeuplement <i>in situ</i>	Prise en compte des mesures de compensat° pour exclure la dérog° (sauf destruction de spécimens → tjs requise)	Motif(s) à invoquer en cas d'atteinte soumise à dérogation	Valorisation du « surplus » restauré/recréé pour l'octroi de la dérog°	Probabilité de refus de dérogation	Forme de la dérogation
NPEX (1a)	X	X	X	/	Non sauf si effectives (très peu probable sauf banking)	RIIPM si circonst. exceptionnelles et sauf oiseaux ; et/ou protection faune-flore (si gains >> pertes)	oui si NPAdd recréée/restaurée	Fort à faible (selon la compensabilité ; parfois in-compensable → refus)	Dérogation distincte ?
NTEx (1b)	X	(X)	(X)	/	Non sauf si totalement effectives (envisageable car rapide)	RIIPM si circonst. exceptionnelles et sauf oiseaux et/ou protection faune-flore si gains >> pertes ; et/ou petites quantités	Oui si NTAdd recréée/restaurée	Très faible à nul	Plan d'action valant dérogation
NPAdd (2a)	X	(X)	(X)	(X) (si capture de spéc. sauvages) + consult. public si ré-introduction	Non sauf si totalement effectives (très peu probable sauf banking)	Protection faune – flore ; et/ou petites quantités ; repeuplement si envisagé	Oui	Faible (selon la compensabilité ; valorisation du surplus créé ou restauré)	Plan d'action valant dérogation
NTAdd (2b)	X	(X)	(X)	(X) (si capture de spéc. sauvages) + consult. public si ré-introduction	Non sauf si totalement effectives (envisageable car rapide)	Protection faune – flore et/ou petites quantités ; repeuplement si envisagé	Oui	Très faible à nul (valorisation du surplus créé ou restauré)	Plan d'action valant dérogation

# III. Legal analysis: main results

## Synthesis table: Walloon Law

	Destruct° de spécimens nids, œufs d'espèces animales  Destruction, déracinement / translocation de plantes	Perturbations d'espèces animales	Destruct° ou détérior° des sites de repr./aires de repos d'espèces animales	Réintroduc° / repeuplement <i>in situ</i>	Prise en compte des mesures de compensat° pour exclure la dérog° (sauf destruction de spécimens → tjs requise)	Motif(s) à invoquer en cas d'atteinte soumise à dérogation	Impact d'une suppression déf. de la population du site sur l'EC de l'esp.	Valorisation du « surplus » restauré/ recréé pour l'octroi de la dérog°	Probabilité de refus de dérogation
NPEX (1a)	Esp. ann. II,b/VI,b : X	Esp. ann. II, b : X	Esp. ann. II, b : X	Réintroduction interdite dans l'attente d'un AGW d'exécution	? (pas de jurisprudence spécifique, mais influence Briels/Orleans probable)	RIIPM; protection faune-flore si gains >> pertes	-- → nécessité d'une compensation stricte ; pas tjs possible !	oui si NPAdd recréée/ restaurée	Fort à faible (selon la compensabilité ; parfois incompensable → refus)
	Esp. ann. III : X	Esp. ann. III : X	Esp. ann. III (sites de reprod° mammifères uniquement) : X	Renforcement de populations : X					
	Esp. ann. VII : X								
NTEx (1b)	Esp. ann. II,b/VI,b : X	Esp. ann. II, b : (X)	Esp. ann. II, b : (X)	Réintroduction interdite dans l'attente d'un AGW d'exécution	? (pas de jurisprudence spécifique, mais influence Briels/Orleans probable)	RIIPM; protection faune-flore si gains >> pertes ; repeuplement si envisagé	-/+ → nécessité d'une compensation	Oui si NTAdd recréée/restaurée	Très faible à nul
	Esp. ann. III : X	Esp. ann. III : (X)	Esp. ann. III (sites de reprod° mammifères uniquement) : (X)	Renforcement de populations : X					
	Esp. ann. VII : X								

# III. Legal analysis: main results

## Synthesis table: EU Law

<b>NPAdd (2a)</b>	Esp. ann. II,b/VI,b : X	Esp. ann. II, b : X	Esp. ann. II, b : X	Réintroduct° interdite dans l'attente d'un AGW d'exécution	? (pas de jurisprudence spécifique, mais influence Briels/Orleans probable)	Protection faune – flore si gains >> pertes ; repeuplement si envisagé	0 ou +	Oui	Faible (selon la compensabi- lité ; valorisation du surplus créé ou restauré)
	Esp. ann. III : X	Esp. ann. III : X	Esp. ann. III (sites de reprod° mammifères uniquement) : X	Renforcement de populations : X					
	Esp. ann. VII : X								
<b>NTAdd (2b)</b>	Esp. ann. II,b/VI,b : X	Esp. ann. II, b : (X)	Esp. ann. II, b : (X)	Réintroduction interdite dans l'attente d'un AGW d'exécution	? (pas de jurisprudence spécifique, mais influence Briels/Orleans probable)	Protection faune – flore si gains >> pertes ; repeuplement si envisagé	0 ou +	Oui	Très faible à nul (valorisation du surplus créé ou restauré)
	Esp. ann. III : X	Esp. ann. III : (X)	Esp. ann. III (sites de reprod° mammifères uniquement) : (X)	Renforcement de populations : X					
	Esp. ann. VII : X								

X : nécessité d'une dérogation dans tous les cas

(X) : nécessité d'une dérogation dans certains cas

# Conclusion

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- Possibility of conducting DBM projects under the current species protection legal framework, under strict conditions: low risk except for Ex PN
- Interference with the strict protection of species unavoidable
- Difficulty of taking into account compensatory measures to circumvent the derogation clause
- Securing legal certainty needs the granting of an individual derogation

- Conditions :

- Reasons:

- If net gain: protection of fauna and flora, conservation of natural habitats; reintroduction / repopulation (Add NT/NP)

- If no net gain: IROPI ; Taking of certain specimens in limited numbers, under strictly supervised conditions and on a selective basis (Ex NP/NT)

- Need to demonstrate the absence of less detrimental alternatives

- Need to offset any net loss

# Thank you for your attention

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