



**EUROPEAN COMMISSION**  
Directorate-General for Research and Innovation  
Industrial Technologies  
**Coal and Steel**

## **GRANT AGREEMENT**

### **NUMBER — 847205 — RECOVERY**

This **Agreement** ('the Agreement') is **between** the following parties:

**on the one part,**

the **European Union** ('the EU'), represented by the European Commission ('the Commission'),

represented for the purposes of signature of this Agreement by Acting Head of Unit, DIRECTORATE-GENERAL RESEARCH & INNOVATION, Industrial Technologies, Administration and finance, Jochen BRODERSEN,

**and**

**on the other part,**

1. 'the coordinator':

**GLOWNY INSTYTUT GORNICITWA (GIG)**, 0000090660/000023461, established in Plac Gwarkow 1, KATOWICE 40-166, Poland, PL6340126016 represented for the purposes of signing the Agreement by Stanislaw PRUSEK

and the following other beneficiaries, if they sign their 'Accession Form' (see Annex 3 and Article 56):

2. **UNIVERSIDAD DE OVIEDO (UNIOVI)**, established in CALLE SAN FRANCISCO 3, OVIEDO 33003, Spain, ESQ33180011

3. **HUMBOLDT-UNIVERSITAET ZU BERLIN (UBER)**, not applicable, established in UNTER DEN LINDEN 6, BERLIN 10099, Germany, DE137176824

4. **VYSOKA SKOLA BANSKA - TECHNICKA UNIVERZITA OSTRAVA (VSB)**, 61989100, established in 17 LISTOPADU 15/2172, OSTRAVA PORUBA 708 00, Czech Republic, CZ61989100

5. **HULLERAS DEL NORTE SA (HUNOSA ) SA**, AS4213, established in AVDA. DE GALICIA 44, OVIEDO 33005, Spain, ESA28185684

6. **TAURON WYDOBYCIE SPOLKA AKCYJNA (TWD) SA**, 0000228587/240033634, established in UL. GRUNWALDZKA 37, JAWORZNO 43 600, Poland, PL6321880539

7. **PALIVOVY KOMBINAT USTI STATNI PODNIK (PKU) SP**, 00007536, established in HRBOVICKA 2, CHLUMEC 40339, Czech Republic, CZ00007536

Unless otherwise specified, references to ‘beneficiary’ or ‘beneficiaries’ include the coordinator.

The parties referred to above have agreed to enter into the Agreement under the terms and conditions below.

By signing the Agreement or the Accession Form , the beneficiaries accept the grant and agree to implement it under their own responsibility and in accordance with the Agreement, with all the obligations and conditions it sets out.

The Agreement is composed of:

#### Terms and Conditions

|         |   |
|---------|---|
| Annex 1 | Description of the action                             |
| Annex 2 | Estimated budget for the action                       |
| Annex 3 | Accession Forms                                       |
| Annex 4 | Model for the financial statements                    |
| Annex 5 | Model for the certificate on the financial statements |
| Annex 6 | Not applicable  |

# TERMS AND CONDITIONS

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## **CHAPTER 1 GENERAL**

### **ARTICLE 1 — SUBJECT OF THE AGREEMENT**

This Agreement sets out the rights and obligations and the terms and conditions applicable to the grant awarded to the beneficiaries for implementing the action set out in Chapter 2.

## **CHAPTER 2 ACTION**

### **ARTICLE 2 — ACTION TO BE IMPLEMENTED**

The grant is awarded for the action entitled '**RECOVERY of degraded and transformed ecosystems in coal mining-affected areas — RECOVERY**' ('action'), as described in Annex 1.

### **ARTICLE 3 — DURATION AND STARTING DATE OF THE ACTION**

The duration of the action will be **48 months** as of 1 July 2019 ('starting date of the action').

### **ARTICLE 4 — ESTIMATED BUDGET AND BUDGET TRANSFERS**

#### **4.1 Estimated budget**

The '**estimated budget**' for the action is set out in Annex 2.

It contains the estimated eligible costs and the forms of costs, broken down by beneficiary and budget category (see Articles 5, 6).

#### **4.2 Budget transfers**

The estimated budget breakdown indicated in Annex 2 may be adjusted by transfers of amounts between beneficiaries or between budget categories (or both). This does not require an amendment according to Article 55, if the action is implemented as described in Annex 1.

However, the beneficiaries may not add costs relating to subcontracts not provided for in Annex 1, unless such additional subcontracts are approved by an amendment or in accordance with Article 13.

Moreover, the coordinator must notify the Commission — before the end of the last reporting period (see Article 20) — if a beneficiary's direct personnel costs are expected to exceed the amount set out in Annex 2 by 20% or more.

## **CHAPTER 3 GRANT**

### **ARTICLE 5 — GRANT AMOUNT, FORM OF GRANT, REIMBURSEMENT RATE AND FORMS OF COSTS**

#### **5.1 Maximum grant amount**

The '**maximum grant amount**' is **EUR 1,188,196.26** (one million one hundred and eighty eight thousand one hundred and ninety six EURO and twenty six eurocents).

## 5.2 Form of grant, reimbursement rates and forms of costs

The grant reimburses **60% of the action's eligible costs** (see Article 6) ('**reimbursement of eligible costs grant**') (see Annex 2).

The estimated eligible costs of the action are **EUR 1,980,327.10** (one million nine hundred and eighty thousand three hundred and twenty seven EURO and ten eurocents).

Eligible costs (see Article 6) must be declared under the following forms ('**forms of costs**')

- (a) for **direct personnel costs** ('staff costs') as actually incurred costs ('actual costs');

Personnel **costs for SME owners or beneficiaries that are natural persons** not receiving a salary (see Article 6.2, Points A.4 and A.5) must be declared on the basis of the amount per unit set out in Annex 2 (**unit costs**);

- (b) for **direct costs for subcontracting**: as actually incurred costs (**actual costs**);

- (c) for **direct costs of providing financial support to third parties**: not applicable;

- (d) for **other direct costs**: as actually incurred costs (**actual costs**);

- (e) for **indirect costs**: on the basis of a flat-rate applied as set out in Article 6.2, Point E ('**flat-rate costs**');

- (f) **specific cost category(ies)**: not applicable.

## 5.3 Final grant amount — Calculation

The '**final grant amount**' depends on the actual extent to which the action is implemented in accordance with the Agreement's terms and conditions.

This amount is calculated by the Commission — when the payment of the balance is made (see Article 21.4) — in the following steps:

Step 1 – Application of the reimbursement rate to the eligible costs

Step 2 – Limit to the maximum grant amount

Step 3 – Reduction due to the no-profit rule

Step 4 – Reduction due to improper implementation or breach of other obligations

### 5.3.1 Step 1 — Application of the reimbursement rate to the eligible costs

The reimbursement rate (see Article 5.2) are applied to the eligible costs (actual costs, unit costs and flat-rate costs; see Article 6) declared by the beneficiaries (see Article 20) and approved by the Commission (see Article 21).

### 5.3.2 Step 2 — Limit to the maximum grant amount

If the amount obtained following Step 1 is higher than the maximum grant amount set out in Article 5.1, it will be limited to the latter.

### 5.3.3 Step 3 — Reduction due to the no-profit rule

The grant must not produce a profit.

‘**Profit**’ means the surplus of the amount obtained following Steps 1 and 2 plus the action’s total receipts, over the action’s total eligible costs.

The ‘**action’s total eligible costs**’ are the consolidated total eligible costs approved by the Commission.

The ‘**action’s total receipts**’ are the consolidated total receipts generated during its duration (see Article 3).

The following are considered **receipts**:

- (a) income generated by the action;
- (b) financial contributions given by third parties to the beneficiary specifically to be used for costs that are eligible under the action.

The following are however **not** considered receipts:

- (a) income generated by exploiting the action’s results (see Article 28);
- (b) financial contributions by third parties, if they may be used to cover costs other than the eligible costs (see Article 6);
- (c) financial contributions by third parties with no obligation to repay any amount unused at the end of the period set out in Article 3.

If there is a profit, it will be deducted from the amount obtained following Steps 1 and 2.

### 5.3.4 Step 4 — Reduction due to improper implementation or breach of other obligations — Reduced grant amount — Calculation

If the grant is reduced (see Article 43), the Commission will calculate the reduced grant amount by deducting the amount of the reduction (calculated in proportion to the improper implementation of the action or to the seriousness of the breach of obligations in accordance with Article 43.2) from the maximum grant amount set out in Article 5.1.

The final grant amount will be the lower of the following two:

- the amount obtained following Steps 1 to 3 or
- the reduced grant amount following Step 4.

### 5.4 Revised final grant amount — Calculation

If — after the payment of the balance (in particular, after checks, reviews, audits or investigations; see Article 22) — the Commission rejects costs (see Article 42) or reduces the grant (see Article 43), it will calculate the ‘**revised final grant amount**’ for the beneficiary concerned by the findings.

This amount is calculated by the Commission on the basis of the findings, as follows:

- in case of **rejection of costs**: by applying the reimbursement rate to the revised eligible costs approved by the Commission for the beneficiary concerned;
- in case of **reduction of the grant**: by calculating the concerned beneficiary’s share in the grant amount reduced in proportion to its improper implementation of the action or to the seriousness of its breach of obligations (see Article 43.2).

In case of **rejection of costs and reduction of the grant**, the revised final grant amount for the beneficiary concerned will be the lower of the two amounts above.

## ARTICLE 6 — ELIGIBLE AND INELIGIBLE COSTS

### 6.1 General conditions for costs to be eligible

‘**Eligible costs**’ are costs that meet the following criteria:

(a) for **actual costs**:

- (i) they must be actually incurred by the beneficiary;
- (ii) they must be incurred in the period set out in Article 3, with the exception of costs relating to the submission of the periodic report for the last reporting period and the final report (see Article 20);
- (iii) they must be indicated in the estimated budget set out in Annex 2;
- (iv) they must be incurred in connection with the action as described in Annex 1 and necessary for its implementation;
- (v) they must be identifiable and verifiable, in particular recorded in the beneficiary’s accounts in accordance with the accounting standards applicable in the country where the beneficiary is established and with the beneficiary’s usual cost accounting practices;
- (vi) they must comply with the applicable national law on taxes, labour and social security, and
- (vii) they must be reasonable, justified and must comply with the principle of sound financial management, in particular regarding economy and efficiency;

(b) for **unit costs**:

- (i) they must be calculated as follows:

{ amounts per unit set out in Annex 2

multiplied by

the number of actual units };

(ii) the number of actual units must comply with the following conditions:

- the units must be actually used or produced in the period set out in Article 3;
- the units must be necessary for implementing the action or produced by it, and
- the number of units must be identifiable and verifiable, in particular supported by records and documentation (see Article 18);

(c) for **flat-rate costs**:

- (i) they must be calculated by applying the flat-rate set out in Annex 2, and
- (ii) the costs (actual costs or unit costs) to which the flat-rate is applied must comply with the conditions for eligibility set out in this Article.

(d) for **lump sum costs**: Not applicable

## 6.2 Specific conditions for costs to be eligible

Costs are eligible if they comply with the general conditions (see above) and the specific conditions set out below for each of the following budget categories:

- A. direct personnel costs (staff costs);
- B. direct costs of subcontracting;
- C. not applicable;
- D. other direct costs;
- E. indirect costs;
- F. not applicable.

‘Direct costs’ are costs that are directly linked to the action implementation and can therefore be attributed to it directly. They must not include any indirect costs (see Point E below).

‘Indirect costs’ are costs that are not directly linked to the action implementation and therefore cannot be attributed directly to it.

### A. Direct personnel costs (staff costs)

#### Types of eligible personnel costs

A.1 **Personnel costs** are eligible, if they are related to personnel working for the beneficiary under an employment contract (or equivalent appointing act) and assigned to the action (**‘costs for employees (or equivalent)’**). They must be limited to salaries (including during parental leave), social security contributions, taxes and other costs included in the **remuneration**, if they arise from national law or the employment contract (or equivalent appointing act).

They may also include **additional remuneration** for personnel assigned to the action (including payments on the basis of supplementary contracts regardless of their nature), if:

- (a) it is part of the beneficiary's usual remuneration practices and is paid in a consistent manner whenever the same kind of work or expertise is required;
- (b) the criteria used to calculate the supplementary payments are objective and generally applied by the beneficiary, regardless of the source of funding used.

A.2 The **costs for natural persons working under a direct contract** with the beneficiary other than an employment contract are eligible personnel costs, if:

- (a) the person works under the beneficiary's instructions and, unless otherwise agreed with the beneficiary, on the beneficiary's premises;
- (b) the result of the work carried out belongs to the beneficiary, and
- (c) the costs are not significantly different from those for personnel performing similar tasks under an employment contract with the beneficiary.

A.3 The **costs of personnel seconded by a third party against payment** are eligible personnel costs, if:

- (a) the person works under the beneficiary's instructions and, unless otherwise agreed with the beneficiary, on the beneficiary's premises;
- (b) the result of the work carried out belongs to the beneficiary, and
- (c) the costs are not significantly different from those for personnel performing similar tasks under an employment contract with the beneficiary.

A.4 **Costs of owners** of beneficiaries that are small and medium-sized enterprises ('**SME owners**') who are working on the action and who do not receive a salary are eligible personnel costs, if they correspond to the amount per unit set out in Annex 2 multiplied by the number of actual hours worked on the action.

A.5 **Costs of 'beneficiaries that are natural persons'** not receiving a salary are eligible personnel costs, if they correspond to the amount per unit set out in Annex 2 multiplied by the number of actual hours worked on the action.

### Calculation

Personnel costs must be calculated by the beneficiaries as follows:

{ hourly rate  
multiplied by  
the number of actual hours worked on the action }

The number of actual hours declared for a person must be identifiable and verifiable (see Article 18).

The total number of hours declared in EU or Euratom grants, for a person for a year, cannot be higher

than the annual productive hours used for the calculations of the hourly rate. Therefore, the maximum number of hours that can be declared for the grant is:

{ the number of annual productive hours for the year (see below)  
 minus  
 total number of hours declared by the beneficiary for that person in that year for other EU or Euratom grants }.

The '**hourly rate**' is one of the following:

- (a) for personnel costs declared as **actual costs**: the hourly rate is the amount calculated as follows:

{ actual annual personnel costs for the person  
 divided by  
 number of annual productive hours }.

The beneficiaries must use the annual personnel costs and the number of annual productive hours for each financial year covered by the reporting period. If a financial year is not closed at the end of the reporting period, the beneficiaries must use the hourly rate of the last closed financial year available.

For the 'number of annual productive hours', the beneficiaries may choose one of the following:

- (i) 'fixed number of hours': 1 720 hours for persons working full time (or corresponding pro-rata for persons not working full time);
- (ii) 'individual annual productive hours': the total number of hours worked by the person in the year for the beneficiary, calculated as follows:

{ annual workable hours of the person (according to the employment contract, applicable collective labour agreement or national law)  
 plus  
 overtime worked  
 minus  
 absences (such as sick leave and special leave) }.

'Annual workable hours' means the period during which the personnel must be working, at the employer's disposal and carrying out his/her activity or duties under the employment contract, applicable collective labour agreement or national working time legislation.

If the contract (or applicable collective labour agreement or national working time legislation) does not allow to determine the annual workable hours, this option cannot be used;

- (iii) 'standard annual productive hours': the 'standard number of annual hours' generally applied by the beneficiary for its personnel in accordance with its usual cost accounting practices. This number must be at least 90% of the 'standard annual workable hours'.



If there is no applicable reference for the standard annual workable hours, this option cannot be used.

For all options, the actual time spent on **parental leave** by a person assigned to the action may be deducted from the number of annual productive hours;

- (b) for personnel costs of SME owners or beneficiaries that are natural persons declared on the basis of **unit costs**, the hourly rate is the hourly rate set out in Annex 2 (see Points A.4 and A.5 above).

**B. Direct costs of subcontracting** (including related duties, taxes and charges such as non-deductible value added tax (VAT) paid by the beneficiary) are eligible if the conditions in Article 13.1.1 are met.

### C. Direct costs of providing financial support to third parties

Not applicable

### D. Other direct costs

#### D.1 Travel costs and related subsistence allowances

Not applicable

- D.2 The **depreciation costs of equipment, infrastructure or other assets** (new or second-hand) as recorded in the beneficiary's accounts are eligible, if they were purchased in accordance with Article 10.1.1 and written off in accordance with international accounting standards and the beneficiary's usual accounting practices.

The **costs of renting or leasing** equipment, infrastructure or other assets (including related duties, taxes and charges such as non-deductible value added tax (VAT) paid by the beneficiary) are also eligible, if they do not exceed the depreciation costs of similar equipment, infrastructure or assets and do not include any financing fees.

The only portion of the costs that will be taken into account is that which corresponds to the duration of the action and rate of actual use for the purposes of the action.

#### D.3 Operating costs

**Operating costs** (including related duties, taxes and charges such as non-deductible value added tax (VAT) paid by the beneficiary for:

- raw materials;
- consumables;
- energy;
- transportation of raw materials, consumables, equipment, products, feedstock or fuel;
- the maintenance, repair, alteration and transformation of existing equipment;

- IT and other specific services;
- the rental of equipment;
- analysis and tests;
- dedicated workshop organization;
- certificate on financial statements and bank guarantee;
- protection of knowledge;
- assistance from third parties,

are eligible if they are purchased specifically for the action and in accordance with Article 10.1.1.

#### **D4 Capitalised and operating costs of ‘large research infrastructure’**

Not applicable

#### **E. Indirect costs**

**Indirect costs** are eligible if they are declared on the basis of the flat-rate of 35% of the eligible direct personnel costs (see Article 6.2 Point A).

Beneficiaries receiving an operating grant<sup>1</sup> financed by the EU or Euratom budget cannot declare indirect costs for the period covered by the operating grant.

#### **F. Specific cost category(ies)**

Not applicable

#### **6.3 Conditions for costs of linked third parties to be eligible**

not applicable

#### **6.4 Conditions for in-kind contributions provided by third parties free of charge to be eligible**

Not applicable

#### **6.5 Ineligible costs**

**‘Ineligible costs’** are:

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<sup>1</sup> For the definition, see Article 121(1)(b) of Regulation (EU, Euratom) No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union and repealing Council Regulation (EC, Euratom) No 1605/2002 (OJ L 218, 26.10.2012, p.1) (**‘Financial Regulation No 966/2012’**): **‘operating grant’** means direct financial contribution, by way of donation, from the budget in order to finance the functioning of a body which pursues an aim of general EU interest or has an objective forming part of and supporting an EU policy.

- (a) costs that do not comply with the conditions set out above (Article 6.1 to 6.4), in particular:
- (i) costs related to return on capital;
  - (ii) debt and debt service charges;
  - (iii) provisions for future losses or debts;
  - (iv) interest owed;
  - (v) doubtful debts;
  - (vi) currency exchange losses;
  - (vii) bank costs charged by the beneficiary's bank for transfers from the Commission;
  - (viii) excessive or reckless expenditure;
  - (ix) deductible VAT;
  - (x) costs incurred during suspension of the implementation of the action (see Article 49);
  - (xi) in-kind contributions provided by third parties;
- (b) costs declared under another EU or Euratom grant (including grants awarded by a Member State and financed by the EU or Euratom budget and grants awarded by bodies other than the Commission for the purpose of implementing the EU or Euratom budget); in particular, indirect costs if the beneficiary is already receiving an operating grant financed by the EU or Euratom budget in the same period.

## **6.6 Consequences of declaration of ineligible costs**

Declared costs that are ineligible will be rejected (see Article 42).

This may also lead to any of the other measures described in Chapter 6.

## **CHAPTER 4 RIGHTS AND OBLIGATIONS OF THE PARTIES**

### **SECTION 1 RIGHTS AND OBLIGATIONS RELATED TO IMPLEMENTING THE ACTION**

#### **ARTICLE 7 — GENERAL OBLIGATION TO PROPERLY IMPLEMENT THE ACTION**

##### **7.1 General obligation to properly implement the action**

The beneficiaries must implement the action as described in Annex 1 and in compliance with the provisions of the Agreement and all legal obligations under applicable EU, international and national law.

## **7.2 Consequences of non-compliance**

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43).

Such breaches may also lead to any of the other measures described in Chapter 6.

### **ARTICLE 8 — RESOURCES TO IMPLEMENT THE ACTION — THIRD PARTIES INVOLVED IN THE ACTION**

The beneficiaries must have the appropriate resources to implement the action.

If it is necessary to implement the action, the beneficiaries may:

- purchase goods, works and services (see Article 10);
- call upon subcontractors to implement action tasks described in Annex 1 (see Article 13);
- call upon linked third parties to implement action tasks described in Annex 1 (see Article 14).

In these cases, the beneficiaries retain sole responsibility towards the Commission and the other beneficiaries for implementing the action.

### **ARTICLE 9 — IMPLEMENTATION OF ACTION TASKS BY BENEFICIARIES NOT RECEIVING EU FUNDING**

Not applicable

### **ARTICLE 10 — PURCHASE OF GOODS, WORKS OR SERVICES**

#### **10.1 Rules for purchasing goods, works or services**

10.1.1 If necessary to implement the action, the beneficiaries may purchase goods, works or services.

The beneficiaries must make such purchases ensuring the best value for money or, if appropriate, the lowest price. In doing so, they must avoid any conflict of interests (see Article 35).

The beneficiaries must ensure that the Commission, the European Court of Auditors (ECA) and the European Anti-Fraud Office (OLAF) can exercise their rights under Articles 22 and 23 also towards their contractors.

10.1.2 Beneficiaries that are ‘contracting authorities’ within the meaning of Directive 2004/18/EC<sup>2</sup> or ‘contracting entities’ within the meaning of Directive 2004/17/EC<sup>3</sup> must comply with the applicable national law on public procurement.

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<sup>2</sup> Directive 2004/18/EC of the European Parliament and of the Council of 31 March 2004 on the coordination of procedures for the award of public work contracts, public supply contracts and public service contracts (OJ L 134, 30.04.2004, p. 114).

<sup>3</sup> Directive 2004/17/EC of the European Parliament and of the Council of 31 March 2004 coordinating the procurement procedures of entities operating in the water, energy, transport and postal services sectors (OJ L 134, 30.04.2004, p. 1).

## **10.2 Consequences of non-compliance**

If a beneficiary breaches any of its obligations under Article 10.1.1, the costs related to the contract concerned will be ineligible (see Article 6) and will be rejected (see Article 42).

If a beneficiary breaches any of its obligations under Article 10.1.2, the grant may be reduced (see Article 43).

Such breaches may also lead to any of the other measures described in Chapter 6.

### **ARTICLE 11 — USE OF IN-KIND CONTRIBUTIONS PROVIDED BY THIRD PARTIES AGAINST PAYMENT**

Not applicable

### **ARTICLE 12 — USE OF IN-KIND CONTRIBUTIONS PROVIDED BY THIRD PARTIES FREE OF CHARGE**

Not applicable

### **ARTICLE 13 — IMPLEMENTATION OF ACTION TASKS BY SUBCONTRACTORS**

#### **13.1 Rules for subcontracting action tasks**

13.1.1 If necessary to implement the action, the beneficiaries may award subcontracts covering the implementation of certain action tasks described in Annex 1.

Subcontracting may cover only a limited part of the action.

The beneficiaries must award the subcontracts ensuring the best value for money or, if appropriate, the lowest price. In doing so, they must avoid any conflict of interests (see Article 35).

The tasks to be implemented and the estimated cost for each subcontract must be set out in Annex 1 and the total estimated costs of subcontracting per beneficiary must be set out in Annex 2. The Commission may however approve subcontracts not set out in Annex 1 and 2 without amendment (see Article 55), if:

- they are specifically justified in the periodic technical report and
- they do not entail changes to the Agreement which would call into question the decision awarding the grant or breach the principle of equal treatment of applicants.

The beneficiaries must ensure that the Commission, the European Court of Auditors (ECA) and the European Anti-Fraud Office (OLAF) can exercise their rights under Articles 22 and 23 also towards their subcontractors.

13.1.2 The beneficiaries must ensure that their obligations under Articles 35, 36, 38 and 46 also apply to the subcontractors.

Beneficiaries that are ‘contracting authorities’ within the meaning of Directive 2004/18/EC or

‘contracting entities’ within the meaning of Directive 2004/17/EC must comply with the applicable national law on public procurement.

### **13.2 Consequences of non-compliance**

If a beneficiary breaches any of its obligations under Article 13.1.1, the costs related to the subcontract concerned will be ineligible (see Article 6) and will be rejected (see Article 42).

If a beneficiary breaches any of its obligations under Article 13.1.2, the grant may be reduced (see Article 43).

Such breaches may also lead to any of the other measures described in Chapter 6.

## **ARTICLE 14 — IMPLEMENTATION OF ACTION TASKS BY LINKED THIRD PARTIES**

Not applicable

## **ARTICLE 15 — FINANCIAL SUPPORT TO THIRD PARTIES**

Not applicable

## **ARTICLE 16 — PROVISION OF TRANS-NATIONAL OR VIRTUAL ACCESS TO RESEARCH INFRASTRUCTURE**

Not applicable

## **SECTION 2 RIGHTS AND OBLIGATIONS RELATED TO THE GRANT ADMINISTRATION**

### **ARTICLE 17 — GENERAL OBLIGATION TO INFORM**

#### **17.1 General obligation to provide information upon request**

The beneficiaries must provide — during implementation of the action or afterwards and in accordance with Article 41.2 — any information requested in order to verify eligibility of the costs, proper implementation of the action and compliance with any other obligation under the Agreement.

#### **17.2 Obligation to keep information up to date and to inform about events and circumstances likely to affect the Agreement**

Each beneficiary must keep information stored in the 'Beneficiary Register' (via the electronic exchange system; see Article 52) up to date, in particular, its name, address, legal representatives, legal form and organisation type.

Each beneficiary must immediately inform the coordinator — which must immediately inform the Commission and the other beneficiaries — of any of the following:

- (a) **events** which are likely to affect significantly or delay the implementation of the action or the EU's financial interests, in particular:

- (i) changes in its legal, financial, technical, organisational or ownership situation
- (b) **circumstances** affecting:
  - (i) the decision to award the grant or
  - (ii) compliance with requirements under the Agreement.

### **17.3 Consequences of non-compliance**

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43).

Such breaches may also lead to any of the other measures described in Chapter 6.

## **ARTICLE 18 — KEEPING RECORDS — SUPPORTING DOCUMENTATION**

### **18.1 Obligation to keep records and other supporting documentation**

The beneficiaries must — for a period of five years after the payment of the balance — keep records and other supporting documentation in order to prove the proper implementation of the action and the costs they declare as eligible.

They must make them available upon request (see Article 17) or in the context of checks, reviews, audits or investigations (see Article 22).

If there are on-going checks, reviews, audits, investigations, litigation or other pursuits of claims under the Agreement (including the extension of findings; see Articles 22), the beneficiaries must keep the records and other supporting documentation until the end of these procedures.

The beneficiaries must keep the original documents. Digital and digitalised documents are considered originals if they are authorised by the applicable national law. The Commission may accept non-original documents if it considers that they offer a comparable level of assurance.

#### **18.1.1 Records and other supporting documentation on the scientific and technical implementation**

The beneficiaries must keep records and other supporting documentation on scientific and technical implementation of the action in line with the accepted standards in the respective field.

#### **18.1.2 Records and other documentation to support the costs declared**

The beneficiaries must keep the records and documentation supporting the costs declared, in particular the following:

- (a) for **actual costs**: adequate records and other supporting documentation to prove the costs declared, such as contracts, subcontracts, invoices and accounting records. In addition, the beneficiaries' usual cost accounting practices and internal control procedures must enable direct reconciliation between the amounts declared, the amounts recorded in their accounts and the amounts stated in the supporting documentation;

- (b) for **unit costs**: adequate records and other supporting documentation to prove the number of units declared. Beneficiaries do not need to identify the actual eligible costs covered or to keep or provide supporting documentation (such as accounting statements) to prove the amount per unit.
- (c) for **flat-rate costs**: adequate records and other supporting documentation to prove the eligibility of the costs to which the flat-rate is applied. The beneficiaries do not need to identify the costs covered or provide supporting documentation (such as accounting statements) to prove the amount declared at a flat-rate.

In addition, for **personnel costs** (declared as actual costs or on the basis of unit costs), the beneficiaries must keep **time records** for the number of hours declared. The time records must be in writing and approved by the persons working on the action and their supervisors, at least monthly. In the absence of reliable time records of the hours worked on the action, the Commission may accept alternative evidence supporting the number of hours declared, if it considers that it offers an adequate level of assurance.

As an exception, for **persons working exclusively on the action**, there is no need to keep time records, if the beneficiary signs a **declaration** confirming that the persons concerned have worked exclusively on the action.

## 18.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, costs insufficiently substantiated will be ineligible (see Article 6) and will be rejected (see Article 42), and the grant may be reduced (see Article 43).

Such breaches may also lead to any of the other measures described in Chapter 6.

## ARTICLE 19 — SUBMISSION OF DELIVERABLES

### 19.1 Obligation to submit deliverables

The coordinator must submit the ‘**deliverables**’ identified in Annex 1, in accordance with the timing and conditions set out in it.

### 19.2 Consequences of non-compliance

If the coordinator breaches any of its obligations under this Article, the Commission may apply any of the measures described in Chapter 6.

## ARTICLE 20 — REPORTING — PAYMENT REQUESTS

### 20.1 Obligation to submit reports

The coordinator must submit to the Commission (see Article 52) the technical and financial reports set out in this Article. These reports include requests for payment and must be drawn up using the forms and templates provided in the electronic exchange system (see Article 52).



## 20.2 Reporting periods

The action is divided into the following ‘**reporting periods**’:

- RP1: from month 1 to month 18
- RP2: from month 19 to month 48

## 20.3 Periodic reports — Requests for interim payments

The coordinator must submit a periodic report within 60 days following the end of each reporting period.

The **periodic report** must include the following:

(a) a ‘**periodic technical report**’ containing:

- (i) an **explanation of the work carried out** by the beneficiaries;
- (ii) an **overview of the progress** towards the objectives of the action, including milestones and deliverables identified in Annex 1.

This report must include explanations justifying the differences between work expected to be carried out in accordance with Annex 1 and that actually carried out.

The report must also detail the exploitation and dissemination of the results and — if required in Annex 1 — an updated ‘**plan for the exploitation and dissemination of the results**’;

- (iii) a **summary** for publication by the Commission;
- (iv) not applicable;

(b) a ‘**periodic financial report**’ containing:

- (i) an ‘**individual financial statement**’ (see Annex 4) from each beneficiary, for the reporting period concerned.

The individual financial statement must detail the eligible costs (actual costs, unit costs and flat-rate costs; see Article 6) for each budget category (see Annex 2).

The beneficiaries must declare all eligible costs, even if — for actual costs, unit costs and flat-rate costs — they exceed the amounts indicated in the estimated budget (see Annex 2). Amounts which are not declared in the individual financial statement will not be taken into account by the Commission.

If an individual financial statement is not submitted for a reporting period, it may be included in the periodic financial report for the next reporting period.

The individual financial statements of the last reporting period must also detail the **receipts of the action** (see Article 5.3.3).

Each beneficiary must **certify** that:

- the information provided is full, reliable and true;

- the costs declared are eligible (see Article 6);
  - the costs can be substantiated by adequate records and supporting documentation (see Article 18) that will be produced upon request (see Article 17) or in the context of checks, reviews, audits and investigations (see Article 22), and
  - for the last reporting period: that all the receipts have been declared (see Article 5.3.3);
- (ii) an **explanation of the use of resources** and the information on subcontracting (see Article 13) from each beneficiary, for the reporting period concerned;
- (iii) not applicable;
- (iv) a **'periodic summary financial statement'**, created automatically by the electronic exchange system, consolidating the individual financial statements for the reporting period concerned and including — except for the last reporting period — the **request for interim payment**.
- (v) a **'certificate on the financial statements'**, (drawn up in accordance with Annex 5) for each beneficiary, if:
- the (cumulative) amount of payments it requests as reimbursement of actual costs (and for which no certificate has yet been submitted) is EUR 200 000 or more and
  - the maximum grant amount indicated, for that beneficiary, in the estimated budget as reimbursement of actual costs is EUR 750 000 or more.

#### 20.4 Final report — Request for payment of the balance

In addition to the periodic report for the last reporting period, the coordinator must submit the final report within 60 days following the end of the last reporting period.

The **final report** must include the following:

- (a) a **'final technical report'** with a **summary** for publication containing:
- (i) an overview of the results and their exploitation and dissemination;
  - (ii) the conclusions on the action, and
  - (iii) the socio-economic impact of the action;
- (b) a **'final financial report'** containing:
- (i) a **'final summary financial statement'**, created automatically by the electronic exchange system, consolidating the individual financial statements for all reporting periods and including the **request for payment of the balance**

#### 20.5 Information on cumulative expenditure incurred

Not applicable

## 20.6 Currency for financial statements and conversion into euro

Financial statements must be drafted in euro.

Beneficiaries with accounting established in a currency other than the euro must convert the costs recorded in their accounts into euro, at the average of the daily exchange rates published in the C series of the *Official Journal of the European Union*, calculated over the corresponding reporting period.

If no daily euro exchange rate is published in the *Official Journal of the European Union* for the currency in question, they must be converted at the average of the monthly accounting rates published on the Commission's website, calculated over the corresponding reporting period.

Beneficiaries with accounting established in euro must convert costs incurred in another currency into euro according to their usual accounting practices.

## 20.7 Language of reports

All reports (technical and financial reports, including financial statements) must be submitted in the language of the Agreement.

## 20.8 Consequences of non-compliance — Suspension of the payment deadline — Termination

If the reports submitted do not comply with this Article, the Commission may suspend the payment deadline (see Article 47) and apply any of the other measures described in Chapter 6.

If the coordinator breaches its obligation to submit the reports and if it fails to comply with this obligation within 30 days following a written reminder sent by the Commission, the Agreement may be terminated (see Article 50).

# ARTICLE 21 — PAYMENTS AND PAYMENT ARRANGEMENTS

## 21.1 Payments to be made

The following payments will be made to the coordinator:

- one **pre-financing payment**;
- one or more **interim payments**, on the basis of the request(s) for interim payment (see Article 20), and
- one **payment of the balance**, on the basis of the request for payment of the balance (see Article 20).

## 21.2 Pre-financing payment — Amount — Pre-financing guarantees

The aim of the pre-financing is to provide the beneficiaries with a float.

It remains the property of the EU until the payment of the balance.

The amount of the pre-financing payment will be EUR **475,278.50** (four hundred and seventy five thousand two hundred and seventy eight EURO and fifty eurocents), divided between the beneficiaries as follows:

- GIG : EUR 115,281.98 (one hundred and fifteen thousand two hundred and eighty one EURO and ninety eight eurocents)
- UNIOVI : EUR 103,344.00 (one hundred and three thousand three hundred and forty four EURO)
- UBER : EUR 59,890.32 (fifty nine thousand eight hundred and ninety EURO and thirty two eurocents)
- VSB : EUR 85,344.00 (eighty five thousand three hundred and forty four EURO)
- HUNOSA : EUR 63,004.20 (sixty three thousand four EURO and twenty eurocents)
- TWD : EUR 26,058.00 (twenty six thousand fifty eight EURO)
- PKU : EUR 22,356.00 (twenty two thousand three hundred and fifty six EURO)

Financial guarantees must be provided by the following beneficiaries:

- HUNOSA : EUR 63,004.20 (sixty three thousand four EURO and twenty eurocents)
- TWD : EUR 26,058.00 (twenty six thousand fifty eight EURO)

They must be submitted to the Commission by the beneficiaries and fulfil the following conditions:

- (a) be provided by a bank or an approved financial institution or — if requested by the coordinator and accepted by the Commission — by a third party, and
- (b) the guarantor stands as first-call guarantor and does not require the Commission to first have recourse against the principal debtor (i.e. the beneficiary concerned), and
- (c) explicitly remain in force until the payment of the balance and, if payment of the balance takes the form of recovery, until three months after the debit note is notified to the beneficiary.

The guarantees will be released within 30 days following the payment of the balance.

If all pre-financing guarantees have been provided, the Commission will — except if Article 48 applies — make the pre-financing payment to the coordinator within 30 days either from the entry into force of the Agreement (see Article 58) or from 10 days before the starting date of the action (see Article 3), whichever is the latest. If some pre-financing guarantees are missing, the parts of the pre-financing related to those beneficiaries will be held back and paid to the coordinator once the pre-financing guarantees have been submitted.

### **21.3 Interim payments — Amount — Calculation**

Interim payments reimburse the eligible costs incurred for the implementation of the action during the corresponding reporting periods.

The Commission will pay to the coordinator the amount due as interim payment within 90 days from receiving the periodic report (see Article 20.3), except if Articles 47 or 48 apply.

Payment is subject to the approval of the periodic report. Its approval does not imply recognition of the compliance, authenticity, completeness or correctness of its content.

The **amount due as interim payment** is calculated by the Commission in the following steps:

Step 1 – Application of the reimbursement rates

Step 2 – Limit to 80% of the maximum grant amount

### **21.3.1 Step 1 — Application of the reimbursement rates**

The reimbursement rate(s) (see Article 5.2) are applied to the eligible costs (actual costs, unit costs and flat-rate costs ; see Article 6) declared by the beneficiaries (see Article 20) and approved by the Commission (see above) for the concerned reporting period.

### **21.3.2 Step 2 — Limit to 80% of the maximum grant amount**

The total amount of pre-financing and interim payments must not exceed 80% of the maximum grant amount set out in Article 5.1. The maximum amount for the interim payment will be calculated as follows:

{ 80% of the maximum grant amount (see Article 5.1)  
minus  
{pre-financing and previous interim payments}}.

## **21.4 Payment of the balance — Amount — Calculation**

The payment of the balance reimburses the remaining part of the eligible costs incurred by the beneficiaries for the implementation of the action.

If the total amount of earlier payments is greater than the final grant amount (see Article 5.3), the payment of the balance takes the form of a recovery (see Article 44).

If the total amount of earlier payments is lower than the final grant amount, the Commission will pay the balance within 90 days from receiving the final report (see Article 20.4), except if Articles 47 or 48 apply.

Payment is subject to the approval of the final report. Its approval does not imply recognition of the compliance, authenticity, completeness or correctness of its content.

The **amount due as the balance** is calculated by the Commission by deducting the total amount of pre-financing and interim payments (if any) already made, from the final grant amount determined in accordance with Article 5.3:

{final grant amount (see Article 5.3)  
minus  
{pre-financing and interim payments (if any) made}}.

At the payment of the balance:

- if the balance is positive: the amount due will be paid in full to the coordinator
- if the balance is negative (payment of the balance taking the form of recovery): it will be recovered.

The amount to be paid may however be offset — without the beneficiary's consent — against any other amount owed by the beneficiary to the Commission or an executive agency (under the EU or Euratom budget), up to the maximum EU contribution indicated, for that beneficiary, in the estimated budget (see Annex 2).

### **21.5 Notification of amounts due**

When making payments, the Commission will formally notify to the coordinator the amount due, specifying whether it concerns an interim payment or the payment of the balance.

For the payment of the balance, the notification will also specify the final grant amount.

In the case of reduction of the grant or recovery of undue amounts, the notification will be preceded by the contradictory procedure set out in Articles 43 and 44.

### **21.6 Currency for payments**

The Commission will make all payments in euro.

### **21.7 Payments to the coordinator — Distribution to the beneficiaries**

Payments will be made to the coordinator.

Payments to the coordinator will discharge the Commission from its payment obligation.

The coordinator must distribute the payments between the beneficiaries without unjustified delay.

Pre-financing may however be distributed only:

- (a) if the minimum number of beneficiaries set out in the call for proposals has acceded to the Agreement (see Article 56) and
- (b) to beneficiaries that have acceded to the Agreement (see Article 56).

### **21.8 Bank account for payments**

All payments will be made to the following bank account:

Name of bank: ING BANK SLASKI SA  
Address of branch: UL. SOKOLSKA 34 KATOWICE, Poland  
Full name of the account holder: GLOWNY INSTYTUT GORNICHTWA  
Full account number (including bank codes):  
IBAN code: PL27105012141000002452402122

## 21.9 Costs of payment transfers

The cost of the payment transfers is borne as follows:

- the Commission bears the cost of transfers charged by its bank;
- the beneficiary bears the cost of transfers charged by its bank;
- the party causing a repetition of a transfer bears all costs of the repeated transfer.

## 21.10 Date of payment

Payments by the Commission are considered to have been carried out on the date when they are debited to its account.

## 21.11 Consequences of non-compliance

21.11.1 If the Commission does not pay within the payment deadlines (see above), the beneficiaries are entitled to **late-payment interest** at the rate applied by the European Central Bank (ECB) for its main refinancing operations in euros ('reference rate'), plus three and a half points. The reference rate is the rate in force on the first day of the month in which the payment deadline expires, as published in the C series of the *Official Journal of the European Union*.

If the late-payment interest is lower than or equal to EUR 200, it will be paid to the coordinator only upon request submitted within two months of receiving the late payment.

Late-payment interest is not due if all beneficiaries are EU Member States (including regional and local government authorities or other public bodies acting on behalf of a Member State for the purpose of this Agreement).

Suspension of the payment deadline or payments (see Articles 47 and 48) will not be considered as late payment.

Late-payment interest covers the period running from the day following the due date for payment (see above), up to and including the date of payment.

Late-payment interest is not considered for the purposes of calculating the final grant amount.

21.11.2 If the coordinator breaches any of its obligations under this Article, the grant may be reduced (see Article 43) and the Agreement or the participation of the coordinator may be terminated (see Article 50).

Such breaches may also lead to any of the other measures described in Chapter 6.

## ARTICLE 22 — CHECKS, REVIEWS, AUDITS AND INVESTIGATIONS — EXTENSION OF FINDINGS

### 22.1 Checks, reviews and audits by the Commission

#### 22.1.1 Right to carry out checks

The Commission will — during the implementation of the action or afterwards — check the proper implementation of the action and compliance with the obligations under the Agreement, including assessing deliverables and reports.

For this purpose the Commission may be assisted by external persons or bodies.

The Commission may also request additional information in accordance with Article 17. The Commission may request beneficiaries to provide such information to it directly.

Information provided must be accurate, precise and complete and in the format requested, including electronic format.

#### 22.1.2 Right to carry out reviews

The Commission may — during the implementation of the action or afterwards — carry out reviews on the proper implementation of the action (including assessment of deliverables and reports), compliance with the obligations under the Agreement and continued scientific or technological relevance of the action.

Reviews may be started **up to five years after the payment of the balance**. They will be formally notified to the coordinator or beneficiary concerned and will be considered to have started on the date of the formal notification.

If the review is carried out on a third party (see Articles 10 to 16), the beneficiary concerned must inform the third party.

The Commission may carry out reviews directly (using its own staff) or indirectly (using external persons or bodies appointed to do so). It will inform the coordinator or beneficiary concerned of the identity of the external persons or bodies. They have the right to object to the appointment on grounds of commercial confidentiality.

The coordinator or beneficiary concerned must provide — within the deadline requested — any information and data in addition to deliverables and reports already submitted (including information on the use of resources). The Commission may request beneficiaries to provide such information to it directly.

The coordinator or beneficiary concerned may be requested to participate in meetings, including with external experts.

For **on-the-spot** reviews, the beneficiaries must allow access to their sites and premises, including to external persons or bodies, and must ensure that information requested is readily available.

Information provided must be accurate, precise and complete and in the format requested, including electronic format.



On the basis of the review findings, a **‘review report’** will be drawn up.

The Commission will formally notify the review report to the coordinator or beneficiary concerned, which has 30 days to formally notify observations (**‘contradictory review procedure’**).

Reviews (including review reports) are in the language of the Agreement.

### **22.1.3 Right to carry out audits**

The Commission may — during the implementation of the action or afterwards — carry out audits on the proper implementation of the action and compliance with the obligations under the Agreement.

Audits may be started **up to five years after the payment of the balance**. They will be formally notified to the coordinator or beneficiary concerned and will be considered to have started on the date of the formal notification.

If the audit is carried out on a third party (see Articles 10 to 16), the beneficiary concerned must inform the third party.

The Commission may carry out audits directly (using its own staff) or indirectly (using external persons or bodies appointed to do so). It will inform the coordinator or beneficiary concerned of the identity of the external persons or bodies. They have the right to object to the appointment on grounds of commercial confidentiality.

The coordinator or beneficiary concerned must provide — within the deadline requested — any information (including complete accounts, individual salary statements or other personal data) to verify compliance with the Agreement. The Commission may request beneficiaries to provide such information to it directly.

For **on-the-spot** audits, the beneficiaries must allow access to their sites and premises, including to external persons or bodies, and must ensure that information requested is readily available.

Information provided must be accurate, precise and complete and in the format requested, including electronic format.

On the basis of the audit findings, a **‘draft audit report’** will be drawn up.

The Commission will formally notify the draft audit report to the coordinator or beneficiary concerned, which has 30 days to formally notify observations (**‘contradictory audit procedure’**). This period may be extended by the Commission in justified cases.

The **‘final audit report’** will take into account observations by the coordinator or beneficiary concerned. The report will be formally notified to it.

Audits (including audit reports) are in the language of the Agreement.

The Commission may also access the beneficiaries’ statutory records for the periodical assessment of unit costs or flat-rate amounts.

## **22.2 Investigations by the European Anti-Fraud Office (OLAF)**

Under Regulations No 883/2013<sup>6</sup> and No 2185/96<sup>7</sup> (and in accordance with their provisions and procedures), the European Anti-Fraud Office (OLAF) may — at any moment during implementation of the action or afterwards — carry out investigations, including on-the-spot checks and inspections, to establish whether there has been fraud, corruption or any other illegal activity affecting the financial interests of the EU.

### **22.3 Checks and audits by the European Court of Auditors (ECA)**

Under Article 287 of the Treaty on the Functioning of the European Union (TFEU) and Article 161 of the Financial Regulation No 966/2012<sup>8</sup>, the European Court of Auditors (ECA) may — at any moment during implementation of the action or afterwards — carry out audits.

The ECA has the right of access for the purpose of checks and audits.

### **22.4 Checks, reviews, audits and investigations for international organisations**

Not applicable

### **22.5 Consequences of findings in checks, reviews, audits and investigations — Extension of findings**

#### **22.5.1 Findings in this grant**

Findings in checks, reviews, audits or investigations carried out in the context of this grant may lead to the rejection of ineligible costs (see Article 42), reduction of the grant (see Article 43), recovery of undue amounts (see Article 44) or to any of the other measures described in Chapter 6.

Rejection of costs or reduction of the grant after the payment of the balance will lead to a revised final grant amount (see Article 5.4).

Findings in checks, reviews, audits or investigations may lead to a request for amendment for the modification of Annex 1 (see Article 55).

Checks, reviews, audits or investigations that find systemic or recurrent errors, irregularities, fraud or breach of obligations may also lead to consequences in other EU or Euratom grants awarded under similar conditions (**‘extension of findings from this grant to other grants’**).

Moreover, findings arising from an OLAF investigation may lead to criminal prosecution under national law.

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<sup>6</sup> Regulation (EU, Euratom) No 883/2013 of the European Parliament and of the Council of 11 September 2013 concerning investigations conducted by the European Anti-Fraud Office (OLAF) and repealing Regulation (EC) No 1073/1999 of the European Parliament and of the Council and Council Regulation (Euratom) No 1074/1999 (OJ L 248, 18.09.2013, p. 1).

<sup>7</sup> Council Regulation (Euratom, EC) No 2185/1996 of 11 November 1996 concerning on-the-spot checks and inspections carried out by the Commission in order to protect the European Communities' financial interests against fraud and other irregularities (OJ L 292, 15.11.1996, p. 2).

<sup>8</sup> Regulation (EU, Euratom) No 966/2012 of the European Parliament and of the Council of 25 October 2012 on the financial rules applicable to the general budget of the Union and repealing Council Regulation (EC, Euratom) No 1605/2002 (OJ L 298, 26.10.2012, p. 1).

### 22.5.2 Findings in other grants

The Commission may extend findings from other grants to this grant ('**extension of findings from other grants to this grant**'), if:

- (a) the beneficiary concerned is found, in other EU or Euratom grants awarded under similar conditions, to have committed systemic or recurrent errors, irregularities, fraud or breach of obligations that have a material impact on this grant and
- (b) those findings are formally notified to the beneficiary concerned — together with the list of grants affected by the findings — no later than **five** years after the payment of the balance of this grant.

The extension of findings may lead to the rejection of costs (see Article 42), reduction of the grant (see Article 43), recovery of undue amounts (see Article 44), suspension of payments (see Article 48), suspension of the action implementation (see Article 49) or termination (see Article 50).

### 22.5.3 Procedure

The Commission will formally notify the beneficiary concerned the systemic or recurrent errors and its intention to extend these audit findings, together with the list of grants affected.

22.5.3.1 If the findings concern **eligibility of costs**: the formal notification will include:

- (a) an invitation to submit observations on the list of grants affected by the findings;
- (b) the request to submit **revised financial statements** for all grants affected;
- (c) the **correction rate for extrapolation** established by the Commission on the basis of the systemic or recurrent errors, to calculate the amounts to be rejected if the beneficiary concerned:
  - (i) considers that the submission of revised financial statements is not possible or practicable or
  - (ii) does not submit revised financial statements.

The beneficiary concerned has 90 days from receiving notification to submit observations, revised financial statements or to propose a duly substantiated **alternative correction method**. This period may be extended by the Commission in justified cases.

The amounts to be rejected will be determined on the basis of the revised financial statements, subject to their approval.

If the Commission does not receive any observations or revised financial statements, does not accept the observations or the proposed alternative correction method or does not approve the revised financial statements, it will formally notify the beneficiary concerned the application of the initially notified correction rate for extrapolation.

If the Commission accepts the alternative correction method proposed by the beneficiary concerned, it will formally notify the application of the accepted alternative correction method.

22.5.3.2 If the findings concern **improper implementation** or a **breach of another obligation**: the formal notification will include:

- (a) an invitation to submit observations on the list of grants affected by the findings and
- (b) the flat-rate the Commission intends to apply according to the principle of proportionality.

The beneficiary concerned has 90 days from receiving notification to submit observations or to propose a duly substantiated alternative flat-rate.

If the Commission does not receive any observations or does not accept the observations or the proposed alternative flat-rate, it will formally notify the beneficiary concerned the application of the initially notified flat-rate.

If the Commission accepts the alternative flat-rate proposed by the beneficiary concerned, it will formally notify the application of the accepted alternative flat-rate.

## **22.6 Consequences of non-compliance**

If a beneficiary breaches any of its obligations under this Article, any insufficiently substantiated costs will be ineligible (see Article 6) and will be rejected (see Article 42).

Such breaches may also lead to any of the other measures described in Chapter 6.

## **ARTICLE 23 — EVALUATION OF THE IMPACT OF THE ACTION**

### **23.1 Right to evaluate the impact of the action**

The Commission may carry out interim and final evaluations of the impact of the action measured against the objective of the Research Fund for Coal and Steel programme.

Evaluations may be started during implementation of the action and up to five years after the payment of the balance. The evaluation is considered to start on the date of the formal notification to the coordinator or beneficiaries.

The Commission may make these evaluations directly (using its own staff) or indirectly (using external bodies or persons it has authorised to do so).

The coordinator or beneficiaries must provide any information relevant to evaluate the impact of the action, including information in electronic format.

### **23.2 Consequences of non-compliance**

If a beneficiary breaches any of its obligations under this Article, the Commission may apply the measures described in Chapter 6.

## **SECTION 3 RIGHTS AND OBLIGATIONS RELATED TO BACKGROUND AND RESULTS**

## **SUBSECTION 1 GENERAL**

### **ARTICLE 23a — MANAGEMENT OF INTELLECTUAL PROPERTY**

#### **23a.1 Obligation to take measures to implement the Commission Recommendation on the management of intellectual property in knowledge transfer activities**

Beneficiaries that are universities or other public research organisations must take measures to implement the principles set out in Points 1 and 2 of the Code of Practice annexed to the Commission Recommendation on the management of intellectual property in knowledge transfer activities<sup>9</sup>.

This does not change the obligations set out in Subsections 2 and 3 of this Section.

The beneficiaries must ensure that researchers and third parties involved in the action are aware of them.

#### **23a.2 Consequences of non-compliance**

If a beneficiary breaches its obligations under this Article, the Commission may apply any of the measures described in Chapter 6.

## **SUBSECTION 2 RIGHTS AND OBLIGATIONS RELATED TO BACKGROUND**

### **ARTICLE 24 — AGREEMENT ON BACKGROUND**

#### **24.1 Agreement on background**

The beneficiaries must identify and agree (in writing) on the background for the action (**'agreement on background'**).

**'Background'** means any data, know-how or information — whatever its form or nature (tangible or intangible), including any rights such as intellectual property rights — that:

- (a) is held by the beneficiaries before they acceded to the Agreement, and
- (b) is needed to implement the action or exploit the results.

#### **24.2 Consequences of non-compliance**

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43).

Such breaches may also lead to any of the other measures described in Chapter 6.

### **ARTICLE 25 — ACCESS RIGHTS TO BACKGROUND**

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<sup>9</sup> Commission Recommendation C (2008) 1329 of 10.4.2008 on the management of intellectual property in knowledge transfer activities and the Code of Practice for universities and other public research institutions attached to this recommendation.

### **25.1 Exercise of access rights — Waiving of access rights — No sub-licensing**

To exercise access rights, this must first be requested in writing (**‘request for access’**).

**‘Access rights’** means rights to use results or background under the terms and conditions laid down in this Agreement.

Waivers of access rights are not valid unless in writing.

Unless agreed otherwise, access rights do not include the right to sub-license.

### **25.2 Access rights for other beneficiaries, for implementing their own tasks under the action**

The beneficiaries must give each other access — on a royalty-free basis — to background needed to implement their own tasks under the action, unless the beneficiary that holds the background has — before acceding to the Agreement —:

- (a) informed the other beneficiaries that access to its background is subject to legal restrictions or limits, including those imposed by the rights of third parties (including personnel), or
- (b) agreed with the other beneficiaries that access would not be on a royalty-free basis.

### **25.3 Access rights for other beneficiaries, for exploiting their own results**

The beneficiaries must give each other access — under fair and reasonable conditions — to background needed for exploiting their own results, unless the beneficiary that holds the background has — before acceding to the Agreement — informed the other beneficiaries that access to its background is subject to legal restrictions or limits, including those imposed by the rights of third parties (including personnel).

**‘Fair and reasonable conditions’** means appropriate conditions, including possible financial terms or royalty-free conditions, taking into account the specific circumstances of the request for access, for example the actual or potential value of the results or background to which access is requested and/or the scope, duration or other characteristics of the exploitation envisaged.

Requests for access may be made — unless agreed otherwise — up to one year after the period set out in Article 3.

### **25.4 Access rights for affiliated entities**

Unless otherwise agreed in the consortium agreement, access to background must also be given — under fair and reasonable conditions (see above; Article 25.3) and unless it is subject to legal restrictions or limits, including those imposed by the rights of third parties (including personnel) — to affiliated entities<sup>10</sup> established in an EU Member State, if this is needed to exploit the results generated by the beneficiaries to which they are affiliated.

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<sup>10</sup> **‘affiliated entity’** means any legal entity that is:

- under the direct or indirect control of a participant, or
- under the same direct or indirect control as the participant, or
- directly or indirectly controlling a participant.

Unless agreed otherwise (see above; Article 25.1), the affiliated entity concerned must make the request directly to the beneficiary that holds the background.

Requests for access may be made — unless agreed otherwise — up to one year after the period set out in Article 3.

### **25.5 Access rights for third parties**

Not applicable

### **25.6 Consequences of non-compliance**

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43).

Such breaches may also lead to any of the other measures described in Chapter 6.

## **SUBSECTION 3 RIGHTS AND OBLIGATIONS RELATED TO RESULTS**

### **ARTICLE 26 — OWNERSHIP OF RESULTS**

#### **26.1 Ownership by the beneficiary that generates the results**

Results are owned by the beneficiary that generates them.

‘**Results**’ means any (tangible or intangible) output of the action such as data, knowledge or information — whatever its form or nature, whether it can be protected or not — that is generated in the action, as well as any rights attached to it, including intellectual property rights.

#### **26.2 Joint ownership by several beneficiaries**

Two or more beneficiaries own results jointly if:

- (a) they have jointly generated them and
- (b) it is not possible to:
  - (i) establish the respective contribution of each beneficiary, or

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‘Control’ may take any of the following forms:

- (a) the direct or indirect holding of more than 50% of the nominal value of the issued share capital in the legal entity concerned, or of a majority of the voting rights of the shareholders or associates of that entity;
- (b) the direct or indirect holding, in fact or in law, of decision-making powers in the legal entity concerned.

However the following relationships between legal entities shall not in themselves be deemed to constitute controlling relationships:

- (a) the same public investment corporation, institutional investor or venture-capital company has a direct or indirect holding of more than 50% of the nominal value of the issued share capital or a majority of voting rights of the shareholders or associates;
- (b) the legal entities concerned are owned or supervised by the same public body.

- (ii) separate them for the purpose of applying for, obtaining or maintaining their protection (see Article 27).

The joint owners must agree (in writing) on the allocation and terms of exercise of their joint ownership (**‘joint ownership agreement’**), to ensure compliance with their obligations under this Agreement.

Unless otherwise agreed in the joint ownership agreement, each joint owner may grant non-exclusive licences to third parties to exploit jointly-owned results (without any right to sub-license), if the other joint owners are given:

- (a) at least 45 days advance notice and
- (b) fair and reasonable compensation.

Once the results have been generated, joint owners may agree (in writing) to apply another regime than joint ownership (such as, for instance, transfer to a single owner (see Article 30) with access rights for the others).

### **26.3 Rights of third parties (including personnel)**

If third parties (including personnel) may claim rights to the results, the beneficiary concerned must ensure that it complies with its obligations under the Agreement.

If a third party generates results, the beneficiary concerned must obtain all necessary rights (transfer, licences or other) from the third party, in order to be able to respect its obligations as if those results were generated by the beneficiary itself.

If obtaining the rights is impossible, the beneficiary must refrain from using the third party to generate the results.

### **26.4 EU ownership, to protect results**

26.4.1 The EU may — with the consent of the beneficiary concerned — assume ownership of results to protect them, if a beneficiary intends — up to four years after the period set out in Article 3 — to disseminate its results without protecting them, except in any of the following cases:

- (a) the lack of protection is because protecting the results is not possible, reasonable or justified (given the circumstances);
- (b) the lack of protection is because there is a lack of potential for commercial or industrial exploitation, or
- (c) the beneficiary intends to transfer the results to another beneficiary or third party established in an EU Member State which will protect them.

Before the results are disseminated and unless any of the cases above under Points (a), (b) or (c) applies, the beneficiary must formally notify the Commission and at the same time inform it of any reasons for refusing consent. The beneficiary may refuse consent only if it can show that its legitimate interests would suffer significant harm.



If the Commission decides to assume ownership, it will formally notify the beneficiary concerned within 45 days of receiving notification.

No dissemination relating to these results may before the end of this period or, if the Commission takes a positive decision, until it has taken the necessary steps to protect the results.

26.4.2 The EU may — with the consent of the beneficiary concerned — assume ownership of results to protect them, if a beneficiary intends — up to four years after the period set out in Article 3 — to stop protecting them or not to seek an extension of protection, except in any of the following cases:

- (a) the protection is stopped because of a lack of potential for commercial or industrial exploitation;
- (b) an extension would not be justified given the circumstances.

A beneficiary that intends to stop protecting results or not seek an extension must — unless any of the cases above under Points (a) or (b) applies — formally notify the Commission at least 60 days before the protection lapses or its extension is no longer possible and at the same time inform it of any reasons for refusing consent. The beneficiary may refuse consent only if it can show that its legitimate interests would suffer significant harm.

If the Commission decides to assume ownership, it will formally notify the beneficiary concerned within 45 days of receiving notification.

## **26.5 Consequences of non-compliance**

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43).

Such breaches may also lead to the any of the other measures described in Chapter 6.

## **ARTICLE 27 — PROTECTION OF RESULTS — VISIBILITY OF EU FUNDING**

### **27.1 Obligation to protect the results**

Each beneficiary must examine the possibility of protecting its results and must adequately protect them — for an appropriate period and with appropriate territorial coverage — if:

- (a) the results can reasonably be expected to be commercially or industrially exploited and
- (b) protecting them is possible, reasonable and justified (given the circumstances).

When deciding on protection, the beneficiary must consider its own legitimate interests and the legitimate interests (especially commercial) of the other beneficiaries.

### **27.2 EU ownership, to protect the results**

If a beneficiary intends not to protect its results, to stop protecting them or not seek an extension of protection, the EU may — under certain conditions (see Article 26.4) — assume ownership to ensure their (continued) protection.

### **27.3 Information on EU funding**

Applications for protection of results (including patent applications) filed by or on behalf of a beneficiary must — unless the Commission requests or agrees otherwise or unless it is impossible — include the following:

*“The project leading to this application has received funding from the Research Fund for Coal and Steel under grant agreement No 847205”.*

### **27.4 Consequences of non-compliance**

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43).

Such a breach may also lead to any of the other measures described in Chapter 6.

## **ARTICLE 28 — EXPLOITATION OF RESULTS**

### **28.1 Obligation to exploit the results**

Each beneficiary must — up to four years after the period set out in Article 3 — take measures aiming to ensure ‘**exploitation**’ of its results (either directly or indirectly, in particular through transfer or licensing; see Article 30) by:

- (a) using them in further research activities (outside the action);
- (b) developing, creating or marketing a product or process;
- (c) creating and providing a service, or
- (d) using them in standardisation activities.

### **28.2 Results that could contribute to European or international standards — Information on EU funding**

If results are incorporated in a standard, the beneficiary concerned must — unless the Commission requests or agrees otherwise or unless it is impossible — ask the standardisation body to include the following statement in (information related to) the standard:

*“Results incorporated in this standard received funding from the Research Fund for Coal and Steel under grant agreement No 847205 ”.*

### **28.3 Consequences of non-compliance**

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced in accordance with Article 43.

Such a breach may also lead to any of the other measures described in Chapter 6.

## **ARTICLE 29 — DISSEMINATION OF RESULTS — OPEN ACCESS — VISIBILITY OF EU FUNDING**

## 29.1 Obligation to disseminate results

Unless it goes against their legitimate interests, each beneficiary must — as soon as possible — ‘disseminate’ its results by disclosing them to the public by appropriate means (other than those resulting from protecting or exploiting the results), including in scientific publications (in any medium).

This does not change the obligation to protect results in Article 27, the confidentiality obligations in Article 36, or the obligations to protect personal data in Article 39, all of which still apply.

A beneficiary that intends to disseminate its results must give advance notice to the other beneficiaries of — unless agreed otherwise — at least 45 days, together with sufficient information on the results it will disseminate.

Any other beneficiary may object within — unless agreed otherwise — 30 days of receiving notification, if it can show that its legitimate interests in relation to the results or background would be significantly harmed. In such cases, the dissemination may not take place unless appropriate steps are taken to safeguard these legitimate interests.

If a beneficiary intends not to protect its results, it may — under certain conditions (see Article 26.4.1) — need to formally notify the Commission before dissemination takes place.

## 29.2 Open access to scientific publications

Each beneficiary must ensure open access (free of charge online access for any user) to all peer-reviewed scientific publications relating to its results.

In particular, it must:

- (a) as soon as possible and at the latest on publication, deposit a machine-readable electronic copy of the published version or final peer-reviewed manuscript accepted for publication in a repository for scientific publications;

Moreover, the beneficiary must aim to deposit at the same time the research data needed to validate the results presented in the deposited scientific publications.

- (b) ensure open access to the deposited publication — via the repository — at the latest:
  - (i) on publication, if an electronic version is available for free via the publisher, or
  - (ii) within six months of publication (twelve months for publications in the social sciences and humanities) in any other case.
- (c) ensure open access — via the repository — to the bibliographic metadata that identify the deposited publication.

The bibliographic metadata must be in a standard format and must include all of the following:

- the terms the terms "*European Union (EU)*" and "*Research Fund for Coal and Steel*";
- the name of the action, acronym and grant number;

- the publication date, and length of embargo period if applicable, and
- a persistent identifier.

### **29.3 Open access to research data**

Not applicable

### **29.4 Information on EU funding — Obligation and right to use the EU emblem**

Unless the Commission requests or agrees otherwise or unless it is impossible, any dissemination of results (in any form, including electronic) must:

- (a) display the EU emblem and
- (b) include the following text:

*“This project has received funding from the Research Fund for Coal and Steel under grant agreement No 847205”.*

When displayed together with another logo, the EU emblem must have appropriate prominence.

For the purposes of their obligations under this Article, the beneficiaries may use the EU emblem without first obtaining approval from the Commission.

This does not however give them the right to exclusive use.

Moreover, they may not appropriate the EU emblem or any similar trademark or logo, either by registration or by any other means.

### **29.5 Disclaimer excluding Commission responsibility**

Any dissemination of results must indicate that it reflects only the author's view and that the Commission is not responsible for any use that may be made of the information it contains.

### **29.6 Consequences of non-compliance**

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43).

Such a breach may also lead to any of the other measures described in Chapter 6.

## **ARTICLE 30 — TRANSFER AND LICENSING OF RESULTS**

### **30.1 Transfer of ownership**

Each beneficiary may transfer ownership of its results.

It must however ensure that its obligations under Articles 26.2, 26.4, 27, 28, 29, 30 and 31 also apply to the new owner and that this owner has the obligation to pass them on in any subsequent transfer.

Unless agreed otherwise (in writing) for specifically-identified third parties or unless impossible under applicable EU and national laws on mergers and acquisitions, a beneficiary that intends to transfer ownership of results must give at least 45 days advance notice (or less if agreed in writing) to the other beneficiaries that still have (or still may request) access rights to the results. This notification must include sufficient information on the new owner to enable any beneficiary concerned to assess the effects on its access rights.

Unless agreed otherwise (in writing) for specifically-identified third parties, any other beneficiary may object within 30 days of receiving notification (or less if agreed in writing), if it can show that the transfer would adversely affect its access rights. In this case, the transfer may not take place until agreement has been reached between the beneficiaries concerned.

### **30.2 Granting licenses**

Each beneficiary may grant licences to its results (or otherwise give the right to exploit them), if this does not impede the access rights under Article 31.

In addition, exclusive licences for results may be granted only if all the other beneficiaries concerned have waived their access rights (see Article 31.1).

This does not change the dissemination obligations in Article 29 which still apply.

### **30.3 Commission right to object to transfers or licensing**

The Commission may — up to four years after the period set out in Article 3 — object to a transfer of ownership or the exclusive licensing of results, if:

- (a) it is to a third party established in a non-EU country and
- (b) the Commission considers that the transfer or licence is not in line with EU interests regarding competitiveness or is inconsistent with ethical principles or security considerations.

A beneficiary that intends to transfer ownership or grant an exclusive licence must formally notify the Commission before the intended transfer or licensing takes place and:

- identify the specific results concerned;
- describe in detail the new owner or licensee and the planned or potential exploitation of the results, and
- include a reasoned assessment of the likely impact of the transfer or licence on EU competitiveness and its consistency with ethical principles and security considerations.

The Commission may request additional information.

If the Commission decides to object to a transfer or exclusive licence, it must formally notify the beneficiary concerned within 60 days of receiving notification (or any additional information it has requested).

No transfer or licensing may take place in the following cases:

- pending the Commission decision, within the period set out above;
- if the Commission objects;
- until the conditions are complied with, if the Commission objection comes with conditions.

### **30.4 Consequences of non-compliance**

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43).

Such a breach may also lead to any of the other measures described in Chapter 6.

## **ARTICLE 31 — ACCESS RIGHTS TO RESULTS**

### **31.1 Exercise of access rights — Waiving of access rights — No sub-licensing**

The conditions set out in Article 25.1 apply.

### **31.2 Access rights for other beneficiaries, for implementing their own tasks under the action**

The beneficiaries must give each other access — on a royalty-free basis — to results needed for implementing their own tasks under the action.

### **31.3 Access rights for other beneficiaries, for exploiting their own results**

The beneficiaries must give each other — under fair and reasonable conditions (see Article 25.3) — access to results needed for exploiting their own results.

Requests for access may be made — unless agreed otherwise — up to one year after the period set out in Article 3.

### **31.4 Access rights of affiliated entities**

Unless agreed otherwise in the consortium agreement, access to results must also be given — under fair and reasonable conditions (Article 25.3) — to affiliated entities established in an EU Member State, if this is needed for those entities to exploit the results generated by the beneficiaries to which they are affiliated.

Unless agreed otherwise (see above; Article 31.1), the affiliated entity concerned must make any such request directly to the beneficiary that owns the results.

Requests for access may be made — unless agreed otherwise — up to one year after the period set out in Article 3.

### **31.5 Access rights for the EU institutions, bodies, offices or agencies and EU Member States**

The beneficiaries must give access to their results — on a royalty-free basis — to EU institutions, bodies, offices or agencies, for developing, implementing or monitoring EU policies or programmes.

Such access rights are limited to non-commercial and non-competitive use.

This does not change the right to use any material, document or information received from the beneficiaries for communication and publicising activities (see Article 38.2).

### **31.6 Access rights for third parties**

Not applicable

### **31.7 Consequences of non-compliance**

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43).

Such breaches may also lead to any of the other measures described in Chapter 6.

## **SECTION 4 OTHER RIGHTS AND OBLIGATIONS**

### **ARTICLE 32 — RECRUITMENT AND WORKING CONDITIONS FOR RESEARCHERS**

#### **32.1 Obligation to take measures to implement the European Charter for Researchers and Code of Conduct for the Recruitment of Researchers**

The beneficiaries must take all measures to implement the principles set out in the Commission Recommendation on the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers<sup>11</sup>, in particular regarding:

- working conditions;
- transparent recruitment processes based on merit, and
- career development.

The beneficiaries must ensure that researchers and third parties involved in the action are aware of them.

#### **32.2 Consequences of non-compliance**

If a beneficiary breaches its obligations under this Article, the Commission may apply any of the measures described in Chapter 6.

### **ARTICLE 33 — GENDER EQUALITY**

#### **33.1 Obligation to aim for gender equality**

The beneficiaries must take all measures to promote equal opportunities between men and women in

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<sup>11</sup> Commission Recommendation 2005/251/EC of 11 March 2005 on the European Charter for Researchers and on a Code of Conduct for the Recruitment of Researchers (OJ L 75, 22.3.2005, p. 67).

the implementation of the action. They must aim, to the extent possible, for a gender balance at all levels of personnel assigned to the action, including at supervisory and managerial level.

### **33.2 Consequences of non-compliance**

If a beneficiary breaches its obligations under this Article, the Commission may apply any of the measures described in Chapter 6.

## **ARTICLE 34 — ETHICS**

### **34.1 Obligation to comply with ethical principles**

The beneficiaries must carry out the action in compliance with:

- (a) ethical principles (including the highest standards of research integrity — as set out, for instance, in the European Code of Conduct for Research Integrity<sup>12</sup> — and including, in particular, avoiding fabrication, falsification, plagiarism or other research misconduct) and
- (b) applicable international, EU and national law.

Funding will not be granted for activities carried out outside the EU if they are prohibited in all Member States.

The beneficiaries must ensure that the activities under the action have an exclusive focus on civil applications.

The beneficiaries must ensure that the activities under the action do not:

- (a) aim at human cloning for reproductive purposes;
- (b) intend to modify the genetic heritage of human beings which could make such changes heritable (with the exception of research relating to cancer treatment of the gonads, which may be financed), or
- (c) intend to create human embryos solely for the purpose of research or for the purpose of stem cell procurement, including by means of somatic cell nuclear transfer.

### **34.2 Activities raising ethical issues**

Activities raising ethical issues must comply with the ‘**ethics requirements**’ set out in Annex 1.

Before the beginning of an activity raising an ethical issue, the coordinator must submit (see Article 52) to the Commission copy of:

- (a) any ethics committee opinion required under national law and
- (b) any notification or authorisation for activities raising ethical issues required under national law.

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<sup>12</sup> The European Code of Conduct for Research Integrity of ALLEA (All European Academies) and ESF (European Science Foundation) of March 2011.  
[http://www.esf.org/fileadmin/Public\\_documents/Publications/Code\\_Conduct\\_ResearchIntegrity.pdf](http://www.esf.org/fileadmin/Public_documents/Publications/Code_Conduct_ResearchIntegrity.pdf)



If these documents are not in English, the coordinator must also submit an English summary of the submitted opinions, notifications and authorisations (containing, if available, the conclusions of the committee or authority concerned).

If these documents are specifically requested for the action, the request must contain an explicit reference to the action title. The coordinator must submit a declaration by each beneficiary concerned that all the submitted documents cover the action tasks.

### **34.3 Activities involving human embryos or human embryonic stem cells**

Not applicable

### **34.4 Consequences of non-compliance**

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43) and the Agreement or participation of the beneficiary may be terminated (see Article 50).

Such breaches may also lead to any of the other measures described in Chapter 6.

## **ARTICLE 35 — CONFLICT OF INTERESTS**

### **35.1 Obligation to avoid a conflict of interests**

The beneficiaries must take all measures to prevent any situation where the impartial and objective implementation of the action is compromised for reasons involving economic interest, political or national affinity, family or emotional ties or any other shared interest (**'conflict of interests'**).

They must formally notify to the Commission without delay any situation constituting or likely to lead to a conflict of interests and immediately take all the necessary steps to rectify this situation.

The Commission may verify that the measures taken are appropriate and may require additional measures to be taken by a specified deadline.

### **35.2 Consequences of non-compliance**

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43) and the Agreement or participation of the beneficiary may be terminated (see Article 50).

Such breaches may also lead to any of the other measures described in Chapter 6.

## **ARTICLE 36 — CONFIDENTIALITY**

### **36.1 General obligation to maintain confidentiality**

During implementation of the action and for four years after the period set out in Article 3, the parties must keep confidential any data, documents or other material (in any form) that is identified as confidential at the time it is disclosed (**'confidential information'**).

If a beneficiary requests, the Commission may agree to keep such information confidential for an additional period beyond the initial four years.

If information has been identified as confidential only orally, it will be considered to be confidential only if this is confirmed in writing within 15 days of the oral disclosure.

Unless otherwise agreed between the parties, they may use confidential information only to implement the Agreement.

The beneficiaries may disclose confidential information to their personnel or third parties involved in the action only if they:

- (a) need to know to implement the Agreement and
- (b) are bound by an obligation of confidentiality.

The Commission may disclose confidential information to its staff, other EU institutions and bodies or third parties, if:

- (a) this is necessary to implement the Agreement or safeguard the EU's financial interests and
- (b) the recipients of the information are bound by an obligation of confidentiality.

The confidentiality obligations no longer apply if:

- (a) the disclosing party agrees to release the other party;
- (b) the information was already known by the recipient or is given to him without obligation of confidentiality by a third party that was not bound by any obligation of confidentiality;
- (c) the recipient proves that the information was developed without the use of confidential information;
- (d) the information becomes generally and publicly available, without breaching any confidentiality obligation, or
- (e) the disclosure of the information is required by EU or national law.

## **36.2 Consequences of non-compliance**

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43).

Such breaches may also lead to any of the other measures described in Chapter 6.

## **ARTICLE 37 — SECURITY-RELATED OBLIGATIONS**

Not applicable

## **ARTICLE 38 — PROMOTING THE ACTION — VISIBILITY OF EU FUNDING**

### **38.1 Communication activities by beneficiaries**

#### **38.1.1 Obligation to promote the action and its results**

The beneficiaries must promote the action and its results, by providing targeted information to multiple audiences (including the media and the public) in a strategic and effective manner.

This does not change the dissemination obligations in Article 29 or the confidentiality obligations in Article 36, all of which still apply.

Before engaging in a communication activity expected to have a major media impact, the beneficiaries must inform the Commission (see Article 52).

### **38.1.2 Information on EU funding — Obligation and right to use the EU emblem**

Unless the Commission requests or agrees otherwise or unless it is impossible, any communication activity related to the action (including in electronic form, via social media, etc.) and any infrastructure, equipment and major results funded by the grant must:

- (a) display the EU emblem and
- (b) include the following text:

For communication activities: *“This project has received funding from the Research Fund for Coal and Steel under grant agreement No 847205”*.

For infrastructure, equipment and major results: *“This [infrastructure][equipment][insert type of result] is part of a project that has received funding from the Research Fund for Coal and Steel under grant agreement No 847205”*.

When displayed together with another logo, the EU emblem must have appropriate prominence.

For the purposes of their obligations under this Article, the beneficiaries may use the EU emblem without first obtaining approval from the Commission.

This does not, however, give them the right to exclusive use.

Moreover, they may not appropriate the EU emblem or any similar trademark or logo, either by registration or by any other means.

### **38.1.3 Disclaimer excluding Commission responsibility**

Any communication activity related to the action must indicate that it reflects only the author's view and that the Commission is not responsible for any use that may be made of the information it contains.

## **38.2 Communication activities by the Commission**

### **38.2.1 Right to use beneficiaries' materials, documents or information**

The Commission may use, for its communication and publicising activities, information relating to the action, documents notably summaries for publication and public deliverables as well as any other material, such as pictures or audio-visual material that it receives from any beneficiary (including in electronic form).

This does not change the confidentiality obligations in Article 36, which still apply.

However, if the Commission's use of these materials, documents or information would risk

compromising legitimate interests, the beneficiary concerned may request the Commission not to use it (see Article 52).

The right to use a beneficiary's materials, documents and information includes:

- (a) **use for its own purposes** (in particular, making them available to persons working for the Commission or any other EU institution, body, office or agency or body or institutions in EU Member States; and copying or reproducing them in whole or in part, in unlimited numbers);
- (b) **distribution to the public** (in particular, publication as hard copies and in electronic or digital format, publication on the internet, as a downloadable or non-downloadable file, broadcasting by any channel, public display or presentation, communicating through press information services, or inclusion in widely accessible databases or indexes);
- (c) **editing or redrafting** for communication and publicising activities (including shortening, summarising, inserting other elements (such as meta-data, legends, other graphic, visual, audio or text elements), extracting parts (e.g. audio or video files), dividing into parts, use in a compilation);
- (d) **translation**;
- (e) giving **access in response to individual requests** under Regulation No 1049/2001<sup>13</sup>, without the right to reproduce or exploit;
- (f) **storage** in paper, electronic or other form;
- (g) **archiving**, in line with applicable document-management rules, and
- (h) the right to authorise **third parties** to act on its behalf or sub-license the modes of use set out in Points (b),(c),(d) and (f) to third parties if needed for the communication and publicising activities of the Commission.

If the right of use is subject to rights of a third party (including personnel of the beneficiary), the beneficiary must ensure that it complies with its obligations under this Agreement (in particular, by obtaining the necessary approval from the third parties concerned).

Where applicable (and if provided by the beneficiaries), the Commission will insert the following information:

“© – [year] – [name of the copyright owner]. All rights reserved. Licensed to the European Union (EU) under conditions.”

### 38.3 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the grant may be reduced (see Article 43).

Such breaches may also lead to any of the other measures described in Chapter 6.

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<sup>13</sup> Regulation (EC) No 1049/2001 of the European Parliament and of the Council of 30 May 2001 regarding public access to European Parliament, Council and Commission documents, OJ L 145, 31.5.2001, p. 43.

## **ARTICLE 39 — PROCESSING OF PERSONAL DATA**

### **39.1 Processing of personal data by the Commission**

Any personal data under the Agreement will be processed by the Commission under Regulation No 45/2001<sup>14</sup> and according to the ‘notifications of the processing operations’ to the Data Protection Officer (DPO) of the Commission (publicly accessible in the DPO register).

Such data will be processed by the ‘**data controller**’ of the Commission, for the purposes of implementing, managing and monitoring the Agreement or protecting the financial interests of the EU or Euratom (including checks, reviews, audits and investigations; see Article 22).

The persons whose personal data are processed have the right to access and correct their own personal data. For this purpose, they must send any queries about the processing of their personal data to the data controller, via the contact point indicated in the ‘privacy statement’ on the Commission websites.

They also have the right to have recourse at any time to the European Data Protection Supervisor (EDPS).

### **39.2 Processing of personal data by the beneficiaries**

The beneficiaries must process personal data under the Agreement in compliance with applicable EU and national law on data protection (including authorisations or notification requirements).

The beneficiaries may grant their personnel access only to data that is strictly necessary for implementing, managing and monitoring the Agreement.

The beneficiaries must inform the personnel whose personal data are collected and processed by the Commission. For this purpose, they must provide them with the ‘privacy statement’ (see above), before transmitting their data to the Commission.

### **39.3 Consequences of non-compliance**

If a beneficiary breaches any of its obligations under Article 39.2, the Commission may apply any of the measures described in Chapter 6.

## **ARTICLE 40 — ASSIGNMENTS OF CLAIMS FOR PAYMENT AGAINST THE COMMISSION**

The beneficiaries may not assign any of their claims for payment against the Commission to any third party, except if approved by the Commission on the basis of a reasoned, written request by the coordinator (on behalf of the beneficiary concerned).

If the Commission has not accepted the assignment or the terms of it are not observed, the assignment will have no effect on it.

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<sup>14</sup> Regulation (EC) No 45/2001 of the European Parliament and of the Council of 18 December 2000 on the protection of individuals with regard to the processing of personal data by the Community institutions and bodies and on the free movement of such data (OJ L 8, 12.01.2001, p. 1).

In no circumstances will an assignment release the beneficiaries from their obligations towards the Commission.

## **CHAPTER 5 DIVISION OF BENEFICIARIES' ROLES AND RESPONSIBILITIES**

### **ARTICLE 41 — DIVISION OF BENEFICIARIES' ROLES AND RESPONSIBILITIES**

#### **41.1 Roles and responsibilities towards the Commission**

The beneficiaries have full responsibility for implementing the action and complying with the Agreement.

The beneficiaries are jointly and severally liable for the **technical implementation** of the action as described in Annex 1. If a beneficiary fails to implement its part of the action, the other beneficiaries become responsible for implementing this part (without being entitled to any additional EU funding for doing so), unless the Commission expressly relieves them of this obligation.

The **financial responsibility** of each beneficiary is governed by Articles 44, 45 and 46.

#### **41.2 Internal division of roles and responsibilities**

The internal roles and responsibilities of the beneficiaries are divided as follows:

(a) Each **beneficiary** must:

- (i) keep information stored in the 'Beneficiary Register' (via the electronic exchange system) up to date (see Article 17);
- (ii) inform the coordinator immediately of any events or circumstances likely to affect significantly or delay the implementation of the action (see Article 17);
- (iii) submit to the coordinator in good time:
  - individual financial statements for itself and, if required, certificates on the financial statements (see Article 20);
  - the data needed to draw up the technical reports (see Article 20);
  - ethics committee opinions and notifications or authorisations for activities raising ethical issues (see Article 34);
  - any other documents or information required by the Commission under the Agreement, unless the Agreement requires the beneficiary to submit this information directly to the Commission;
- (iv) provide a financial guarantee if requested by the Commission (see Article 21.2);

(b) The **coordinator** must:

- (i) monitor that the action is implemented properly (see Article 7);

- (ii) act as the intermediary for all communications between the beneficiaries and the Commission (in particular, providing the Commission with the information described in Article 17), unless the Agreement specifies otherwise;
- (iii) request and review any documents or information required by the Commission and verify their completeness and correctness before passing them on to the Commission;
- (iv) submit the deliverables and reports to the Commission (see Articles 19 and 20);
- (v) ensure that all payments are made to the other beneficiaries without unjustified delay (see Article 21);
- (vi) inform the Commission of the amounts paid to each beneficiary, when required under the Agreement (see Articles 44 and 50) or requested by the Commission.

The coordinator may not delegate the above-mentioned tasks to any other beneficiary or subcontract them to any third party.

#### **41.3 Internal arrangements between beneficiaries — Consortium agreement**

Not applicable

#### **41.4 Relationship with complementary beneficiaries — Collaboration agreement**

Not applicable

#### **41.5 Relationship with partners of a joint action — Coordination agreement**

Not applicable

### **CHAPTER 6 REJECTION OF COSTS — REDUCTION OF THE GRANT — RECOVERY** **— PENALTIES — DAMAGES — SUSPENSION — TERMINATION** **— FORCE MAJEURE**

#### **SECTION 1 REJECTION OF COSTS — REDUCTION OF THE GRANT — RECOVERY** **— PENALTIES**

#### **ARTICLE 42 — REJECTION OF INELIGIBLE COSTS**

##### **42.1 Conditions**

42.1.1 The Commission will — at the time of an **interim payment, at the payment of the balance or afterwards** — reject any costs which are ineligible (see Article 6), in particular following checks, reviews, audits or investigations (see Article 22).

42.1.2 The rejection may also be based on the **extension of findings from other grants to this grant**, under the conditions set out in Article 22.5.2.

## 42.2 Ineligible costs to be rejected — Calculation — Procedure

Ineligible costs will be rejected in full.

If the Commission rejects costs **without reduction of the grant** (see Article 43) or **recovery of undue amounts** (see Article 44), it will formally notify the coordinator or beneficiary concerned the rejection of costs, the amounts and the reasons why (if applicable, together with the notification of amounts due; see Article 21.5). The coordinator or beneficiary concerned may — within 30 days of receiving notification — formally notify the Commission of its disagreement and the reasons why.

If the Commission rejects costs **with reduction of the grant** or **recovery of undue amounts**, it will formally notify the rejection in the ‘**pre-information letter**’ on reduction or recovery set out in Articles 43 and 44.

## 42.3 Effects

If the Commission rejects costs at the time of an **interim payment** or **the payment of the balance**, it will deduct them from the total eligible costs declared, for the action, in the periodic or final summary financial statement (see Articles 20.3 and 20.4). It will then calculate the interim payment or payment of the balance as set out in Articles 21.3 or 21.4.

If the Commission — **after an interim payment but before the payment of the balance** — rejects costs declared in a periodic summary financial statement, it will deduct them from the total eligible costs declared, for the action, in the next periodic summary financial statement or in the final summary financial statement. It will then calculate the interim payment or payment of the balance as set out in Articles 21.3 or 21.4.

If the Commission rejects costs **after the payment of the balance**, it will deduct the amount rejected from the total eligible costs declared, by the beneficiary, in the final summary financial statement. It will then calculate the revised final grant amount as set out in Article 5.4.

## ARTICLE 43 — REDUCTION OF THE GRANT

### 43.1 Conditions

43.1.1 The Commission may — **at the payment of the balance** or **afterwards** — reduce the maximum grant amount (see Article 5.1), if the action has not been implemented properly as described in Annex 1 or another obligation under the Agreement has been breached.

43.1.2 The Commission may also reduce the maximum grant amount on the basis of the **extension of findings from other grants to this grant**, under the conditions set out in Article 22.5.2.

### 43.2 Amount to be reduced — Calculation — Procedure

The amount of the reduction will be proportionate to the improper implementation of the action or to the seriousness of the breach.

Before reduction of the grant, the Commission will formally notify a ‘**pre-information letter**’ to the coordinator or beneficiary concerned:



- informing it of its intention to reduce the grant, the amount it intends to reduce and the reasons why and
- inviting it to submit observations within 30 days of receiving notification

If the Commission does not receive any observations or decides to pursue reduction despite the observations it has received, it will formally notify **confirmation** of the reduction (if applicable, together with the notification of amounts due; see Article 21).

### 43.3 Effects

If the Commission reduces the grant at the time of **the payment of the balance**, it will calculate the reduced grant amount for the action and then determine the amount due as payment of the balance (see Articles 5.3.4 and 21.4).

If the Commission reduces the grant **after the payment of the balance**, it will calculate the revised final grant amount for the beneficiary concerned (see Article 5.4). If the revised final grant amount for the beneficiary concerned is lower than its share of the final grant amount, the Commission will recover the difference (see Article 44).

## ARTICLE 44 — RECOVERY OF UNDUE AMOUNTS

### 44.1 Amount to be recovered — Calculation — Procedure

The Commission will — **at the payment of the balance** or **afterwards** — claim back any amount that was paid, but is not due under the Agreement.

The beneficiaries' financial responsibility in case of recovery is limited, for each beneficiary, to its own debt.

#### 44.1.1 Recovery after termination of a beneficiary's participation

Not applicable

#### 44.1.2 Recovery at payment of the balance

If the payment of the balance takes the form of a recovery (see Article 21.4), the Commission will formally notify a '**pre-information letter**' to the coordinator:

- informing it of its intention to recover, the amount due as the balance and the reasons why;
- requesting the coordinator to submit a report on the distribution of payments to the beneficiaries within 30 days of receiving notification, and
- inviting the coordinator to submit observations within 30 days of receiving notification.

If no observations are submitted or the Commission decides to pursue recovery despite the observations it has received, it will **confirm recovery** (together with the notification of amounts due; see Article 21.5) and formally notify to the coordinator a debit note. This note will also specify the terms and the date for payment.

If the coordinator does not repay the Commission by the date in the debit note and has not submitted the report on the distribution of payments: the Commission will **recover** the amount set out in the debit note from the coordinator (see below).

If the coordinator does not repay the Commission by the date in the debit note, but has submitted the report on the distribution of payments: the Commission will:

- (a) identify the beneficiaries for which the amount calculated as follows is negative:

$$\left\{ \left\{ \left\{ \text{beneficiary's costs declared in the final summary financial statement and approved by the Commission multiplied by the reimbursement rate set out in Article 5.2 for the beneficiary concerned} \right\} \right. \right.$$

divided by

$$\left. \left. \left. \text{the EU contribution for the action calculated according to Article 5.3.1} \right\} \right\}$$

multiplied by

$$\left. \left. \left. \text{the final grant amount (see Article 5.3)} \right\} \right\},$$

minus

$$\left. \left. \left. \left\{ \text{pre-financing and interim payments received by the beneficiary} \right\} \right\} \right\}.$$

- (b) formally notify to each beneficiary identified according to point (a) a **debit note** specifying the terms and date for payment. The amount of the debit note is calculated as follows:

$$\left\{ \left\{ \text{amount calculated according to point (a) for the beneficiary concerned} \right\} \right.$$

divided by

$$\left. \left. \left. \text{the sum of the amounts calculated according to point (a) for all the beneficiaries identified according to point (a)} \right\} \right\}$$

multiplied by

$$\left. \left. \left. \text{the amount set out in the debit note formally notified to the coordinator} \right\} \right\}.$$

If payment is not made by the date specified in the debit note, the Commission will **recover** the amount:

- (a) by '**offsetting**' it — without the beneficiary's consent — against any amounts owed to the beneficiary concerned by the Commission or an executive agency (from the EU or Euratom budget).

In exceptional circumstances, to safeguard the EU's financial interests, the Commission may offset before the payment date specified in the debit note;

- (b) by **drawing on the financial guarantee** of the beneficiary concerned (if any) (see Article 21.2)
- (c) not applicable;
- (d) by **taking legal action** (see Article 57) or by **adopting an enforceable decision** under Article 299 of the Treaty on the Functioning of the EU (TFEU) and Article 79(2) of the Financial Regulation No 966/2012.

If payment is not made by the date in the debit note, the amount to be recovered (see above) will be increased by **late-payment interest** at the rate set out in Article 21.11, from the day following the payment date in the debit note, up to and including the date the Commission receives full payment of the amount.

Partial payments will be first credited against expenses, charges and late-payment interest and then against the principal.

Bank charges incurred in the recovery process will be borne by the beneficiary, unless Directive 2007/64/EC applies.

#### 44.1.3 Recovery of amounts after payment of the balance

If, for a beneficiary, the revised final grant amount (see Article 5.4) is lower than its share of the final grant amount, it must repay the difference to the Commission.

The beneficiary's share of the final grant amount is calculated as follows:

$$\left\{ \left\{ \begin{array}{l} \text{beneficiary's costs declared in the final summary financial statement and approved by the Commission} \\ \text{multiplied by the reimbursement rate set out in Article 5.2 for the beneficiary concerned} \end{array} \right\} \right.$$

divided by

$$\left. \left\{ \begin{array}{l} \text{the EU contribution for the action calculated according to Article 5.3.1} \\ \text{multiplied by} \\ \text{the final grant amount (see Article 5.3)} \end{array} \right\} \right\}.$$

If the coordinator has not distributed amounts received (see Article 21.7), the Commission will also recover these amounts.

The Commission will formally notify a **pre-information letter** to the beneficiary concerned:

- informing it of its intention to recover, the due amount and the reasons why and
- inviting it to submit observations within 30 days of receiving notification.

If no observations are submitted or the Commission decides to pursue recovery despite the observations it has received, it will **confirm** the amount to be recovered and formally notify to the beneficiary concerned a **debit note**. This note will also specify the terms and the date for payment.

If payment is not made by the date specified in the debit note, the Commission will **recover** the amount:

- (a) by '**offsetting**' it — without the beneficiary's consent — against any amounts owed to the beneficiary concerned by the Commission or an executive agency (from the EU or Euratom budget).

In exceptional circumstances, to safeguard the EU's financial interests, the Commission may offset before the payment date specified in the debit note;

- (b) not applicable;

- (c) by **taking legal action** (see Article 57) or by **adopting an enforceable decision** under Article 299 of the Treaty on the Functioning of the EU (TFEU) and Article 79(2) of the Financial Regulation No 966/2012.

If payment is not made by the date in the debit note, the amount to be recovered (see above) will be increased by **late-payment interest** at the rate set out in Article 21.11, from the day following the date for payment in the debit note, up to and including the date the Commission receives full payment of the amount.

Partial payments will be first credited against expenses, charges and late-payment interest and then against the principal.

Bank charges incurred in the recovery process will be borne by the beneficiary, unless Directive 2007/64/EC applies.

## **ARTICLE 45 — ADMINISTRATIVE AND FINANCIAL PENALTIES**

### **45.1 Conditions**

Under Articles 109 and 131(4) of the Financial Regulation No 966/2012 the Commission may impose **administrative** and **financial penalties** if a beneficiary:

- (a) has committed substantial errors, irregularities or fraud or is in serious breach of its obligations under the Agreement or
- (b) has made false declarations about information required under the Agreement or for the submission of the proposal (or has not supplied such information).

Each beneficiary is responsible for paying the financial penalties imposed on it.

Under Article 109(3) of the Financial Regulation No 966/2012, the Commission may — under certain conditions and limits — publish decisions imposing administrative or financial penalties.

### **45.2 Duration — Amount of penalty — Calculation**

**Administrative penalties** exclude the beneficiary from all contracts and grants financed from the EU or Euratom budget for a maximum of five years from the date the infringement is established by the Commission.

If the beneficiary commits another infringement within five years of the date the first infringement is established, the Commission may extend the exclusion period up to 10 years.

**Financial penalties** will be between 2% and 10% of the maximum EU contribution indicated, for the beneficiary concerned, in the estimated budget (see Annex 2).

If the beneficiary commits another infringement within five years of the date the first infringement is established, the Commission may increase the rate of financial penalties to between 4% and 20%.

### **45.3 Procedure**

Before applying a penalty, the Commission will formally notify the beneficiary concerned:

- informing it of its intention to impose a penalty, its duration or amount and the reasons why and
- inviting it to submit observations within 30 days.

If the Commission does not receive any observations or decides to impose the penalty despite of observations it has received, it will formally notify **confirmation** of the penalty to the beneficiary concerned and — in case of financial penalties — deduct the penalty from the payment of the balance or formally notify a **debit note**, specifying the amount to be recovered, the terms and the date for payment.

If payment is not made by the date specified in the debit note, the Commission may **recover** the amount:

- (a) by '**offsetting**' it — without the beneficiary's consent — against any amounts owed to the beneficiary concerned by the Commission or an executive agency (from the EU or Euratom budget).

In exceptional circumstances, to safeguard financial interests, the Commission may offset before the payment date specified in the debit note;

- (b) by **taking legal action** (see Article 57) or by **adopting an enforceable decision** under Article 299 of the Treaty on the Functioning of the EU (TFEU) and Article 79(2) of the Financial Regulation No 966/2012.

If payment is not made by the date in the debit note, the amount to be recovered (see above) will be increased by **late-payment interest** at the rate set out in Article 21.11, from the day following the payment date in the debit note, up to and including the date the Commission receives full payment of the amount.

Partial payments will be first credited against expenses, charges and late-payment interest and then against the principal.

Bank charges incurred in the recovery process will be borne by the beneficiary, unless Directive 2007/64/EC applies.

## **SECTION 2 LIABILITY FOR DAMAGES**

### **ARTICLE 46 — LIABILITY FOR DAMAGES**

#### **46.1 Liability of the Commission**

The Commission cannot be held liable for any damage caused to the beneficiaries or to third parties as a consequence of implementing the Agreement, including for gross negligence.

The Commission cannot be held liable for any damage caused by any of the beneficiaries or third parties involved in the action, as a consequence of implementing the Agreement.

#### **46.2 Liability of the beneficiaries**

### 46.2.1 Conditions

Except in case of force majeure (see Article 51), the beneficiaries must compensate the Commission for any damage it sustains as a result of the implementation of the action or because the action was not implemented in full compliance with the Agreement.

Each beneficiary is responsible for paying the damages claimed from it.

### 46.2.2 Amount of damages - Calculation

The amount the Commission can claim from a beneficiary will correspond to the damage caused by that beneficiary.

### 46.2.3 Procedure

Before claiming damages, the Commission will formally notify the beneficiary concerned:

- informing it of its intention to claim damages, the amount and the reasons why and
- inviting it to submit observations within 30 days.

If the Commission does not receive any observations or decides to claim damages despite the observations it has received, it will formally notify **confirmation** of the claim for damages and a **debit note**, specifying the amount to be recovered, the terms and the date for payment.

If payment is not made by the date specified in the debit note, the Commission may **recover** the amount:

- (a) by '**offsetting**' it — without the beneficiary's consent — against any amounts owed to the beneficiary concerned by the Commission or an executive agency (from the EU or Euratom budget).

In exceptional circumstances, to safeguard the EU's financial interests, the Commission may offset before the payment date specified in the debit note;

- (b) by **taking legal action** (see Article 57) or by **adopting an enforceable decision** under Article 299 of the Treaty on the Functioning of the EU (TFEU) and Article 79(2) of the Financial Regulation No 966/2012.

If payment is not made by the date in the debit note, the amount to be recovered (see above) will be increased by **late-payment interest** at the rate set out in Article 21.11, from the day following the payment date in the debit note, up to and including the date the Commission receives full payment of the amount.

Partial payments will be first credited against expenses, charges and late-payment interest and then against the principal.

Bank charges incurred in the recovery process will be borne by the beneficiary, unless Directive 2007/64/EC applies.

## **SECTION 3 SUSPENSION AND TERMINATION**

### **ARTICLE 47 — SUSPENSION OF PAYMENT DEADLINE**

#### **47.1 Conditions**

The Commission may — at any moment — suspend the payment deadline (see Article 21.2 to 21.4) if a request for payment (see Article 20) cannot be approved because:

- (a) it does not comply with the provisions of the Agreement (see Article 20);
- (b) the technical reports or financial reports have not been submitted or are not complete or additional information is needed, or
- (c) there is doubt about the eligibility of the costs declared in the financial statements and additional checks, reviews, audits or investigations are necessary.

#### **47.2 Procedure**

The Commission will formally notify the coordinator of the suspension and the reasons why.

The suspension will **take effect** the day notification is sent by the Commission (see Article 52).

If the conditions for suspending the payment deadline are no longer met, the suspension will be **lifted** — and the remaining period will resume.

If the suspension exceeds two months, the coordinator may request the Commission if the suspension will continue.

If the payment deadline has been suspended due to the non-compliance of the technical or financial reports (see Article 20) and the revised report or statement is not submitted or was submitted but is also rejected, the Commission may also terminate the Agreement or the participation of the beneficiary (see Article 50.3.1(l)).

### **ARTICLE 48 — SUSPENSION OF PAYMENTS**

#### **48.1 Conditions**

The Commission may — at any moment — suspend, in whole or in part, the pre-financing payment and interim payments for one or more beneficiaries or the payment of the balance for all beneficiaries, if a beneficiary:

- (a) has committed or is suspected of having committed substantial errors, irregularities, fraud or serious breach of obligations in the award procedure or under this Agreement or
- (b) has committed — in other EU or Euratom grants awarded to it under similar conditions — systemic or recurrent errors, irregularities, fraud or serious breach of obligations that have a material impact on this grant (**extension of findings from other grants to this grant**; see Article 22.5.2).

## 48.2 Procedure

Before suspending payments, the Commission will formally notify the coordinator:

- informing it of its intention to suspend payments and the reasons why and
- inviting it to submit observations within 30 days of receiving notification.

If the Commission does not receive observations or decides to pursue the procedure despite the observations it has received, it will formally notify **confirmation** of the suspension. Otherwise, it will formally notify that the suspension procedure is not continued.

The suspension will **take effect** the day the confirmation notification is sent by the Commission.

If the conditions for resuming payments are met, the suspension will be **lifted**. The Commission will formally notify the coordinator.

During the suspension, the periodic report(s) (see Article 20.3) must not contain any individual financial statements from the beneficiary concerned. When the Commission resumes payments, the coordinator may include them in the next periodic report.

The beneficiaries may suspend implementation of the action (see Article 49.1) or terminate the Agreement or the participation of the beneficiary concerned (see Article 50.1 and 50.2).

## ARTICLE 49 — SUSPENSION OF THE ACTION IMPLEMENTATION

### 49.1 Suspension of the action implementation, by the beneficiaries

#### 49.1.1 Conditions

The beneficiaries may suspend implementation of the action or any part of it, if exceptional circumstances — in particular *force majeure* (see Article 51) — make implementation impossible or excessively difficult.

#### 49.1.2 Procedure

The coordinator must immediately formally notify to the Commission the suspension (see Article 52), stating:

- the reasons why and
- the expected date of resumption.

The suspension will **take effect** the day this notification is received by the Commission.

Once circumstances allow for implementation to resume, the coordinator must immediately formally notify the Commission and request an **amendment** of the Agreement to set the date on which the action will be resumed, extend the duration of the action and make other changes necessary to adapt the action to the new situation (see Article 55) — unless the Agreement or the participation of a beneficiary has been terminated (see Article 50).



The suspension will be **lifted** with effect from the resumption date set out in the amendment. This date may be before the date on which the amendment enters into force.

Costs incurred during suspension of the action implementation are not eligible (see Article 6).

## 49.2 Suspension of the action implementation, by the Commission

### 49.2.1 Conditions

The Commission may suspend implementation of the action or any part of it:

- (a) if a beneficiary has committed or is suspected of having committed substantial errors, irregularities, fraud or serious breach of obligations in the award procedure or under this Agreement;
- (b) if a beneficiary has committed — in other EU or Euratom grants awarded to it under similar conditions — systemic or recurrent errors, irregularities, fraud or serious breach of obligations that have a material impact on this grant (**extension of findings from other grants to this grant**; see Article 22.5.2), or
- (c) if the action is suspected of having lost its scientific or technological relevance.

### 49.2.2 Procedure

Before suspending implementation of the action, the Commission will formally notify the coordinator:

- informing it of its intention to suspend the implementation and the reasons why and
- inviting it to submit observations within 30 days of receiving notification.

If the Commission does not receive observations or decides to pursue the procedure despite the observations it has received, it will formally notify **confirmation** of the suspension. Otherwise, it will formally notify that the procedure is not continued.

The suspension will **take effect** five days after confirmation notification is received by the coordinator (or on a later date specified in the notification).

It will be **lifted** if the conditions for resuming implementation of the action are met.

The coordinator will be formally notified of the lifting and the Agreement will be **amended** to set the date on which the action will be resumed, extend the duration of the action and make other changes necessary to adapt the action to the new situation (see Article 55) — unless the Agreement has already been terminated (see Article 50).

The suspension will be lifted with effect from the resumption date set out in the amendment. This date may be before the date on which the amendment enters into force.

Costs incurred during suspension are not eligible (see Article 6).

The beneficiaries may not claim damages due to suspension by the Commission (see Article 46).

Suspension of the action implementation does not affect the Commission's right to terminate the Agreement or participation of a beneficiary (see Article 50), reduce the grant or recover amounts unduly paid (see Articles 43 and 44).

## **ARTICLE 50 — TERMINATION OF THE AGREEMENT OR OF THE PARTICIPATION OF ONE OR MORE BENEFICIARIES**

### **50.1 Termination of the Agreement by the beneficiaries**

#### **50.1.1 Conditions and procedure**

The beneficiaries may terminate the Agreement.

The coordinator must formally notify termination to the Commission (see Article 52), stating:

- the reasons why and
- the date the termination will take effect. This date must be after the notification.

If no reasons are given or if the Commission considers the reasons do not justify termination, the Agreement will be considered to have been '**terminated improperly**'.

The termination will **take effect** on the day specified in the notification.

#### **50.1.2 Effects**

The coordinator must — within 60 days from when termination takes effect — submit:

- (i) a periodic report (for the open reporting period until termination; see Article 20.3) and
- (ii) the final report (see Article 20.4).

If the Commission does not receive the reports within the deadline (see above), only costs which are included in an approved periodic report will be taken into account.

The Commission will **calculate** the final grant amount (see Article 5.3) and the balance (see Article 21.4) on the basis of the reports submitted. Only costs incurred until termination are eligible (see Article 6). Costs relating to contracts due for execution only after termination are not eligible.

Improper termination may lead to a reduction of the grant (see Article 43).

After termination, the beneficiaries' obligations (in particular Articles 20, 22, 23, Section 3 of Chapter 4, 36, 37, 38, 40, 42, 43 and 44) continue to apply.

### **50.2 Termination of the participation of one or more beneficiaries, by the beneficiaries**

#### **50.2.1 Conditions and procedure**

The participation of one or more beneficiaries may be terminated by the coordinator, on request of the beneficiary concerned or on behalf of the other beneficiaries.

The coordinator must formally notify termination to the Commission (see Article 52) and inform the beneficiary concerned.

If the coordinator's participation is terminated without its agreement, the formal notification must be done by another beneficiary (acting on behalf of the other beneficiaries).

The notification must include:

- the reasons why;
- the opinion of the beneficiary concerned (or proof that this opinion has been requested in writing);
- the date the termination takes effect. This date must be after the notification, and
- a request for amendment (see Article 55), with a proposal for reallocation of the tasks and the estimated budget of the beneficiary concerned (see Annexes 1 and 2) and, if necessary, the addition of one or more new beneficiaries (see Article 56). If termination takes effect after the period set out in Article 3, no request for amendment must be included unless the beneficiary concerned is the coordinator. In this case, the request for amendment must propose a new coordinator.

If this information is not given or if the Commission considers that the reasons do not justify termination, the participation will be considered to have been **terminated improperly**.

The termination will **take effect** on the day specified in the notification.

### 50.2.2 Effects

The beneficiary concerned must submit to the coordinator:

- (i) a technical report and
- (ii) a financial statement covering the period from the end of the last reporting period to the date when termination takes effect.

This information must be included by the coordinator in the periodic report for the next reporting period (see Article 20.3).

If the request for amendment is rejected by the Commission, (because it calls into question the decision awarding the grant or breaches the principle of equal treatment of applicants), the Agreement may be terminated according to Article 50.3.1(c).

If the request for amendment is accepted by the Commission, the Agreement is **amended** to introduce the necessary changes (see Article 55).

Improper termination may lead to a reduction of the grant (see Article 42) or termination of the Agreement (see Article 50).

After termination, the concerned beneficiary's obligations (in particular Articles 20, 22, 23, Section 3 of Chapter 4, 36, 37, 38, 40, 42, 43 and 44) continue to apply.

## **50.3 Termination of the Agreement or the participation of one or more beneficiaries, by the Commission**

### **50.3.1 Conditions**

The Commission may terminate the Agreement or the participation of one or more beneficiaries, if:

- (a) one or more beneficiaries do not accede to the Agreement (see Article 56);
- (b) a change to their legal, financial, technical, organisational or ownership situation is likely to substantially affect or delay the implementation of the action or calls into question the decision to award the grant;
- (c) following termination of participation for one or more beneficiaries (see above), the necessary changes to the Agreement would call into question the decision awarding the grant or breach the principle of equal treatment of applicants (see Article 55);
- (d) implementation of the action is prevented by force majeure (see Article 51) or suspended by the coordinator (see Article 49.1) and either:
  - (i) resumption is impossible, or
  - (ii) the necessary changes to the Agreement would call into question the decision awarding the grant or breach the principle of equal treatment of applicants;
- (e) a beneficiary is declared bankrupt, being wound up, having its affairs administered by the courts, has entered into an arrangement with creditors, has suspended business activities, or is subject to any other similar proceedings or procedures under national law;
- (f) a beneficiary (or a natural person who has the power to represent or take decisions on its behalf) has been found guilty of professional misconduct, proven by any means;
- (g) a beneficiary does not comply with the applicable national law on taxes and social security;
- (h) the action has lost scientific or technological relevance;
- (i) not applicable;
- (j) not applicable;
- (k) a beneficiary (or a natural person who has the power to represent or take decisions on its behalf) has committed fraud, corruption, or is involved in a criminal organisation, money laundering or any other illegal activity affecting the EU's financial interests;
- (l) a beneficiary (or a natural person who has the power to represent or take decisions on its behalf) has — in the award procedure or under the Agreement — committed:
  - (i) substantial errors, irregularities, fraud or
  - (ii) serious breach of obligations, including improper implementation of the action,

submission of false information, failure to provide required information, breach of ethical principles;

- (m) a beneficiary has committed — in other EU or Euratom grants awarded to it under similar conditions — systemic or recurrent errors, irregularities, fraud or serious breach of obligations that have a material impact on this grant (**‘extension of findings from other grants to this grant’**).

### 50.3.2 Procedure

Before terminating the Agreement or participation of one or more beneficiaries, the Commission will formally notify the coordinator:

- informing it of its intention to terminate and the reasons why and
- inviting it, within 30 days of receiving notification, to submit observations and — in case of Point (l.ii) above — to inform the Commission of the measures to ensure compliance with the obligations under the Agreement.

If the Commission does not receive observations or decides to pursue the procedure despite the observations it has received, it will formally notify to the coordinator **confirmation** of the termination and the date it will take effect. Otherwise, it will formally notify that the procedure is not continued.

The termination will **take effect**:

- for terminations under Points (b), (c), (e), (g), (h), (j), and (l.ii) above: on the day specified in the notification of the confirmation (see above);
- for terminations under Points (a), (d), (f), (i), (k), (l.i) and (m) above: on the day after the notification of the confirmation is received by the coordinator.

### 50.3.3 Effects

- (a) for **termination of the Agreement**:

The coordinator must — within 60 days from when termination takes effect — submit:

- (i) a periodic report (for the last open reporting period until termination; see Article 20.3) and
- (ii) a final report (see Article 20.4).

If the Agreement is terminated for breach of the obligation to submit the reports (see Articles 20.8 and 50.3.1(l)), the coordinator may not submit any reports after termination.

If the Commission does not receive the reports within the deadline (see above), only costs which are included in an approved periodic report will be taken into account.

The Commission will **calculate** the final grant amount (see Article 5.3) and the balance (see Article 21.4) on the basis of the reports submitted. Only costs incurred until termination takes effect are eligible (see Article 6). Costs relating to contracts due for execution only after termination are not eligible.

This does not affect the Commission's right to reduce the grant (see Article 43) or to impose administrative and financial penalties (Article 45).

The beneficiaries may not claim damages due to termination by the Commission (see Article 46).

After termination, the beneficiaries' obligations (in particular Articles 20, 22, 23, Section 3 of Chapter 4, 36, 37, 38, 40, 42, 43 and 44) continue to apply.

(b) for **termination of the participation of one or more beneficiaries:**

The beneficiary concerned must submit to the coordinator:

- (i) a technical report and
- (ii) a financial statement covering the period from the end of the last reporting period to the date when termination takes effect.

This information must be included by the coordinator in the periodic report for the next reporting period (see Article 20.3).

If the request for amendment is rejected by the Commission (because it calls into question the decision awarding the grant or breaches the principle of equal treatment of applicants), the Agreement may be terminated according to Article 50.3.1(c).

If the request for amendment is accepted by the Commission, the Agreement is **amended** to introduce the necessary changes (see Article 50).

After termination, the concerned beneficiary's obligations (in particular Articles 20, 22, 23, Section 3 of Chapter 4, 36, 37, 38, 40, 42, 43 and 44) continue to apply.

## **SECTION 4 FORCE MAJEURE**

### **ARTICLE 51 — FORCE MAJEURE**

'Force majeure' means any situation or event that:

- prevents either party from fulfilling their obligations under the Agreement,
- was unforeseeable, exceptional situation and beyond the parties' control,
- was not due to error or negligence on their part (or on the part of third parties involved in the action), and
- proves to be inevitable in spite of exercising all due diligence.

The following cannot be invoked as force majeure:

- any default of a service, defect in equipment or material or delays in making them available, unless they stem directly from a relevant case of force majeure,

- labour disputes or strikes, or
- financial difficulties.

Any situation constituting force majeure must be formally notified to the other party without delay, stating the nature, likely duration and foreseeable effects.

The parties must immediately take all the necessary steps to limit any damage due to force majeure and do their best to resume implementation of the action as soon as possible.

The party prevented by force majeure from fulfilling its obligations under the Agreement cannot be considered in breach of them.

## **CHAPTER 7 FINAL PROVISIONS**

### **ARTICLE 52 — COMMUNICATION BETWEEN THE PARTIES**

#### **52.1 Form and means of communication**

Communication under the Agreement (information, requests, submissions, ‘formal notifications’, etc.) must:

- be made in writing and
- bear the number of the Agreement.

**Until the payment of the balance:** all communication must be made through the electronic exchange system and using the forms and templates provided there.

**After the payment of the balance:** formal notifications must be made by registered post with proof of delivery (‘formal notification on paper’).

Communications in the electronic exchange system must be made by persons authorised according to the ‘Terms and Conditions of Use of the electronic exchange system’. For naming the authorised persons, each beneficiary must have designated — before the signature of this Agreement — a ‘Legal Entity Appointed Representative (LEAR)’. The role and tasks of the LEAR are stipulated in his/her appointment letter (see Terms and Conditions of Use of the electronic exchange system).

If the electronic exchange system is temporarily unavailable, instructions will be given on the Commission website.

#### **52.2 Date of communication**

**Communications** are considered to have been made when they are sent by the sending party (i.e. on the date and time they are sent through the electronic exchange system).

**Formal notifications** through the **electronic** exchange system are considered to have been made when they are received by the receiving party (i.e. on the date and time of acceptance by the receiving party,

as indicated by the time stamp). A formal notification that has not been accepted within 10 days after sending is considered to have been accepted.

Formal notifications **on paper** sent by **registered post** with proof of delivery (only after the payment of the balance) are considered to have been made on either:

- the delivery date registered by the postal service or
- the deadline for collection at the post office.

If the electronic exchange system is temporarily unavailable, the sending party cannot be considered in breach of its obligation to send a communication within a specified deadline.

### **52.3 Addresses for communication**

The **electronic** exchange system must be accessed via the following URL:

<https://ec.europa.eu/research/participants/portal/desktop/en/projects/>

The Commission will formally notify the coordinator and beneficiaries in advance any changes to this URL.

**Formal notifications on paper** (only after the payment of the balance) addressed **to the Commission** must be sent to the following address:

European Commission  
Directorate-General for Research and Innovation  
Coal and Steel  
B-1049 Brussels Belgium

Formal notifications on paper (only after the payment of the balance) addressed **to the beneficiaries** must be sent to their legal address as specified in the 'Beneficiary Register'.

## **ARTICLE 53 — INTERPRETATION OF THE AGREEMENT**

### **53.1 Precedence of the Terms and Conditions over the Annexes**

The provisions in the Terms and Conditions of the Agreement take precedence over its Annexes.

Annex 2 takes precedence over Annex 1.

### **53.2 Privileges and immunities**

Not applicable

## **ARTICLE 54 — CALCULATION OF PERIODS, DATES AND DEADLINES**



In accordance with Regulation No 1182/71<sup>15</sup>, periods expressed in days, months or years are calculated from the moment the triggering event occurs.

The day during which that event occurs is not considered as falling within the period.

## **ARTICLE 55 — AMENDMENTS TO THE AGREEMENT**

### **55.1 Conditions**

The Agreement may be amended, unless the amendment entails changes to the Agreement which would call into question the decision awarding the grant or breach the principle of equal treatment of applicants.

Amendments may be requested by any of the parties.

### **55.2 Procedure**

The party requesting an amendment must submit a request for amendment signed in the electronic exchange system (see Article 52).

The coordinator submits and receives requests for amendment on behalf of the beneficiaries (see Annex 3).

If a change of coordinator is requested without its agreement, the submission must be done by another beneficiary (acting on behalf of the other beneficiaries).

The request for amendment must include:

- the reasons why;
- the appropriate supporting documents;
- for a change of coordinator without its agreement: the opinion of the coordinator (or proof that this opinion has been requested in writing).

The Commission may request additional information.

If the party receiving the request agrees, it must sign the amendment in the electronic exchange system within 45 days of receiving notification (or any additional information the Commission has requested). If it does not agree, it must formally notify its disagreement within the same deadline. The deadline may be extended, if necessary for the assessment of the request. If no notification is received within the deadline, the request is considered to have been rejected.

An amendment **enters into force** on the day of the signature of the receiving party.

An amendment **takes effect** on the date agreed by the parties or, in the absence of such an agreement, on the date on which the amendment enters into force.

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<sup>15</sup> Regulation (EEC, Euratom) No 1182/71 of the Council of 3 June 1971 determining the rules applicable to periods, dates and time-limits (OJ L 124, 8.6.1971, p. 1).

## **ARTICLE 56 — ACCESSION TO THE AGREEMENT**

### **56.1 Accession of the beneficiaries mentioned in the Preamble**

The other beneficiaries must accede to the Agreement by signing the Accession Form (see Annex 3) in the electronic exchange system (see Article 52), within 30 days after its entry into force (see Article 58).

They will assume the rights and obligations under the Agreement with effect from the date of its entry into force (see Article 58).

If a beneficiary does not accede to the Agreement within the above deadline, the coordinator must — within 30 days — request an amendment to make any changes necessary to ensure proper implementation of the action. This does not affect the Commission's right to terminate the Agreement (see Article 50).

### **56.2 Addition of new beneficiaries**

In justified cases, the beneficiaries may request the addition of a new beneficiary.

For this purpose, the coordinator must submit a request for amendment in accordance with Article 55. It must include an Accession Form (see Annex 3) signed by the new beneficiary in the electronic exchange system (see Article 52).

New beneficiaries must assume the rights and obligations under the Agreement with effect from the date of their accession specified in the Accession Form (see Annex 3).

## **ARTICLE 57 — APPLICABLE LAW AND SETTLEMENT OF DISPUTES**

### **57.1 Applicable law**

The Agreement is governed by the applicable EU law, supplemented if necessary by the law of Belgium.

### **57.2 Dispute settlement**

If a dispute concerning the interpretation, application or validity of the Agreement cannot be settled amicably, the General Court — or, on appeal, the Court of Justice of the European Union — has sole jurisdiction. Such actions must be brought under Article 272 of the Treaty on the Functioning of the EU (TFEU).

If a dispute concerns administrative or financial penalties, offsetting or an enforceable decision under Article 299 TFEU (see Articles 44, 45 and 46), the beneficiaries must bring action before the General Court — or, on appeal, the Court of Justice of the European Union — under Article 263 TFEU.

## **ARTICLE 58 — ENTRY INTO FORCE OF THE AGREEMENT**

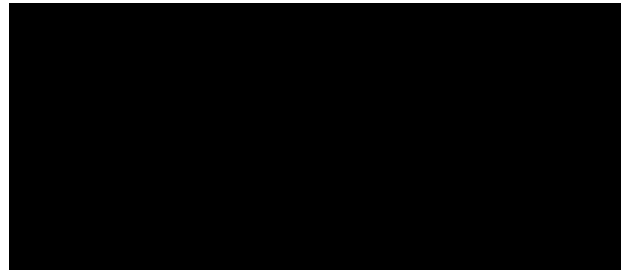
The Agreement will enter into force on the day of signature by the Commission or the coordinator, depending on which is later.

### **SIGNATURES**

For the coordinator



For the Commission





**EUROPEAN COMMISSION**  
Directorate-General for Research and Innovation  
Coal and Steel

**ANNEX 1 (part A)**

**Research project**

**NUMBER — 847205 — RECOVERY**

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# 1.1. The project summary

|                             |        |                              |          |
|-----------------------------|--------|------------------------------|----------|
| Project Number <sup>1</sup> | 847205 | Project Acronym <sup>2</sup> | RECOVERY |
|-----------------------------|--------|------------------------------|----------|

## One form per project

### General information

|                                     |   |
|-------------------------------------|---|
| Project title <sup>3</sup>          | RECOVERY of degraded and transformed ecosystems in coal mining-affected areas |
| Starting date <sup>4</sup>          | 01/07/2019  |
| Duration in months <sup>5</sup>     | 48  |
| Call (part) identifier <sup>6</sup> | RFCS-2018   |
| Topic                               | RFCS-01-2018<br>Coal  |
| Fixed EC Keywords                   |   |
| Free keywords                       | land rehabilitation, ecological restoration, recovery of degraded ecosystems  |

### Abstract <sup>7</sup>

RECOVERY project focuses on land rehabilitation and ecological restoration of coal mining-affected areas, aiming to accelerate the recovery of degraded and transformed ecosystems to a good ecosystem status. It will assess the contribution of these ecosystems to human wellbeing by means of the “ecosystem-services” concept, evaluating the consequences of alternative courses of action in order that their capacity to provide benefits to society will not be diminished.

To achieve these goals, the major aim of the project is to increase the impact of rehabilitation and ecological restoration actions on society and environment, demonstrating the opportunities to improve overall public welfare.

## 1.2. List of Beneficiaries

|                             |        |                              |          |
|-----------------------------|--------|------------------------------|----------|
| Project Number <sup>1</sup> | 847205 | Project Acronym <sup>2</sup> | RECOVERY |
|-----------------------------|--------|------------------------------|----------|

### List of Beneficiaries

| No | Name  | Short name | Country        | Project entry month <sup>8</sup> | Project exit month |
|----|---|------------|----------------|----------------------------------|--------------------|
| 1  | GLOWNY INSTYTUT GORNICTWA                             | GIG        | Poland         | 1                                | 48                 |
| 2  | UNIVERSIDAD DE OVIEDO                                 | UNIOVI     | Spain          | 1                                | 48                 |
| 3  | HUMBOLDT-UNIVERSITAET ZU BERLIN                       | UBER       | Germany        | 1                                | 48                 |
| 4  | VYSOKA SKOLA BANSKA -<br>TECHNICKA UNIVERZITA OSTRAVA | VSB        | Czech Republic | 1                                | 48                 |
| 5  | HULLERAS DEL NORTE SA                                 | HUNOSA     | Spain          | 1                                | 48                 |
| 6  | TAURON WYDOBYCIE SPOLKA<br>AKCYJNA                    | TWD        | Poland         | 1                                | 48                 |
| 7  | PALIVOVY KOMBINAT USTI STATNI<br>PODNIK               | PKU        | Czech Republic | 1                                | 48                 |

# 1.3. Workplan Tables - Details of implementation Associated with document Ref. Arcs(2019)2673832 - 17/04/2019

## 1.3.1. WT1 List of work packages

| WP Number <sup>9</sup> | WP Title                            | Lead beneficiary <sup>10</sup> | Person-months <sup>11</sup> | Start month <sup>12</sup> | End month <sup>13</sup> |
|------------------------|-------------------------------------|--------------------------------|-----------------------------|---------------------------|-------------------------|
| WP1                    | PROJECT COORDINATION AND MANAGEMENT | 1 - GIG                        | 14.00                       | 1                         | 48                      |
| WP2                    | ASSESSMENT OF ECOSYSTEM SERVICES    | 3 - UBER                       | 83.00                       | 1                         | 9                       |
| WP3                    | GENERATION OF SCENARIOS             | 1 - GIG                        | 121.00                      | 3                         | 39                      |
| WP4                    | EVALUATING ECOSYSTEM SERVICES       | 2 - UNIOVI                     | 37.00                       | 27                        | 36                      |
| WP5                    | COST-BENEFIT ASSESSMENT             | 2 - UNIOVI                     | 77.00                       | 36                        | 45                      |
| WP6                    | RESULTS DISSEMINATION               | 3 - UBER                       | 60.00                       | 9                         | 48                      |
| <b>Total</b>           |                                     |                                | 392.00                      |                           |                         |



### 1.3.2. WT2 list of deliverables

| <b>Deliverable Number<sup>14</sup></b> | <b>Deliverable Title</b>  | <b>WP number<sup>9</sup></b> | <b>Lead beneficiary</b> | <b>Type<sup>15</sup></b>        | <b>Dissemination level<sup>16</sup></b> | <b>Due Date (in months)<sup>17</sup></b> |
|--|---|------------------------------|-------------------------|---------------------------------|---|--|
| D1.1                                   | Website operative   | WP1                          | 2 - UNIOVI              | Websites, patents filling, etc. | Public                                  | 3  |
| D1.2                                   | Comprehensive overview of the project: state of the art, problem, proposed approach and outcome | WP1                          | 1 - GIG                 | Report                          | Public                                  | 6  |
| D2.1                                   | Baseline mapping of relevant ecosystems of Figaredo Mine  | WP2                          | 2 - UNIOVI              | Report                          | Public                                  | 6  |
| D2.2                                   | Baseline mapping of relevant ecosystems of Janina Mine  | WP2                          | 1 - GIG                 | Report                          | Public                                  | 6  |
| D2.3                                   | Baseline mapping of relevant ecosystems of The Terezie – Ema mine dumps complex                 | WP2                          | 4 - VSB                 | Report                          | Public                                  | 6  |
| D2.4                                   | Baseline mapping of relevant ecosystems of Chabařovice Mine and Most-Ležáky Mine                | WP2                          | 4 - VSB                 | Report                          | Public                                  | 6  |
| D2.5                                   | Baseline mapping of relevant ecosystems of Mibrag Mines   | WP2                          | 3 - UBER                | Report                          | Public                                  | 6  |
| D2.6                                   | Assessment of ecosystem services of Figaredo Mine   | WP2                          | 2 - UNIOVI              | Report                          | Public                                  | 9  |
| D2.7                                   | Assessment of ecosystem services of Janina Mine   | WP2                          | 1 - GIG                 | Report                          | Public                                  | 9  |
| D2.8                                   | Assessment of ecosystem services of The Terezie – Ema mine dumps complex                        | WP2                          | 4 - VSB                 | Report                          | Public                                  | 9  |
| D2.9                                   | Assessment of ecosystem services of Chabařovice Mine and Most-Ležáky Mine                       | WP2                          | 4 - VSB                 | Report                          | Public                                  | 9  |
| D2.10                                  | Assessment of ecosystem services of Mibrag Mines  | WP2                          | 3 - UBER                | Report                          | Public                                  | 9  |
| D2.11                                  | GIS web interface   | WP2                          | 2 - UNIOVI              | Websites, patents filling, etc. | Public                                  | 9  |

| <b>Deliverable Number<sup>14</sup></b> | <b>Deliverable Title</b>  | <b>WP number<sup>9</sup></b> | <b>Lead beneficiary</b> | <b>Type<sup>15</sup></b>        | <b>Dissemination level<sup>16</sup></b> | <b>Due Date (in months)<sup>17</sup></b> |
|--|---|------------------------------|-------------------------|---------------------------------|---|--|
| D3.1                                   | Blueprint instrument/indicator                                    | WP3                          | 3 - UBER                | Report                          | Public                                  | 18                                       |
| D3.2                                   | Artificial substitutes for soils in difficult terrains            | WP3                          | 1 - GIG                 | Report                          | Public                                  | 39                                       |
| D3.3                                   | Assessment of rehabilitation techniques for waste heaps           | WP3                          | 4 - VSB                 | Report                          | Public                                  | 18                                       |
| D3.4                                   | Assessment of scenarios for Figaredo Mine                         | WP3                          | 2 - UNIOVI              | Report                          | Public                                  | 27                                       |
| D3.5                                   | Assessment of scenarios for Janina Mine                           | WP3                          | 1 - GIG                 | Report                          | Public                                  | 27                                       |
| D3.6                                   | Assessment of scenarios for the Terezie – Ema mine dumps complex  | WP3                          | 4 - VSB                 | Report                          | Public                                  | 27                                       |
| D3.7                                   | Assessment of scenarios for Chabařovice Mine and Most-Ležáky Mine | WP3                          | 4 - VSB                 | Report                          | Public                                  | 27                                       |
| D3.8                                   | GIS web interface expanded  | WP3                          | 2 - UNIOVI              | Websites, patents filling, etc. | Public                                  | 27                                       |
| D4.1                                   | Suitable indicators   | WP4                          | 3 - UBER                | Report                          | Public                                  | 33                                       |
| D4.2                                   | Feasible valuation techniques                                     | WP4                          | 2 - UNIOVI              | Report                          | Public                                  | 36                                       |
| D4.3                                   | Adequate discount rates   | WP4                          | 2 - UNIOVI              | Report                          | Public                                  | 36                                       |
| D5.1                                   | Relevant market price data  | WP5                          | 3 - UBER                | Report                          | Public                                  | 42                                       |
| D5.2                                   | Investment and maintenance costs                                  | WP5                          | 1 - GIG                 | Report                          | Public                                  | 42                                       |
| D5.3                                   | Best scenarios selection  | WP5                          | 2 - UNIOVI              | Report                          | Public                                  | 45                                       |
| D6.1                                   | Best practice guidelines  | WP6                          | 3 - UBER                | Report                          | Public                                  | 48                                       |
| D6.2                                   | A set of three publications in high impact journals               | WP6                          | 3 - UBER                | Report                          | Public                                  | 48                                       |
| D6.3                                   | A set of five presentations at relevant European conferences      | WP6                          | 3 - UBER                | Report                          | Public                                  | 48                                       |
| D6.4                                   | Workshop on RECOVERY's  | WP6                          | 1 - GIG                 | Other                           | Public                                  | 48                                       |

| <b>Deliverable Number<sup>14</sup></b> | <b>Deliverable Title</b> | <b>WP number<sup>9</sup></b> | <b>Lead beneficiary</b> | <b>Type<sup>15</sup></b> | <b>Dissemination level<sup>16</sup></b> | <b>Due Date (in months)<sup>17</sup></b> |
|--|--------------------------|------------------------------|-------------------------|--------------------------|---|--|
|  | developments and results |                              |                         |                          |   |  |

### 1.3.3. WT3 Work package descriptions

|   |                                     |                                       |         |
|---|-------------------------------------|---------------------------------------|---------|
| <b>Work package number</b> <sup>9</sup> | WP1                                 | <b>Lead beneficiary</b> <sup>10</sup> | 1 - GIG |
| <b>Work package title</b>               | PROJECT COORDINATION AND MANAGEMENT |                                       |         |
| <b>Start month</b>                      | 1                                   | <b>End month</b>                      | 48      |

#### Objectives

The main objective of this work package is to perform the general management of the different project elements, in order to assure the smooth progress of the project and the efficient use of resources.

Specific objectives are:

G1.1. To formalize the joint research structures and to arrange the Consortium Agreement.

G1.2. To follow up and ensure the timely delivery of the project deliverables and research schedule.

G1.3. To guarantee that an effective communication and collaboration is maintained among partners.

G1.4. To organize and manage the meetings.

G1.5. To prepare, submit and present the project reports (technical and financial) in line with the deadlines set by the Commission.

G1.6. To design, implement & maintain the project website.

G1.7. To arrange the comprehensive overview of the project. This will form the reference basis for the project monitoring after the first 6 months' period.

#### Description of work and role of partners

**WP1 - PROJECT COORDINATION AND MANAGEMENT** [Months: 1-48]

**GIG, UNIOVI**

This Work Package will comprise the activities regarding the general organisation and legal aspects of the project, the activities to be carried out by the project coordinator in order to ensure that the research work progresses as scheduled, and the activities to be carried out in order to set-up and maintain the project website.

#### Participation per Partner

| Partner number and short name | WP1 effort   |
|-------------------------------|--------------|
| 1 - GIG                       | 10.00        |
| 2 - UNIOVI                    | 4.00         |
| <b>Total</b>                  | <b>14.00</b> |

#### List of deliverables

| Deliverable Number <sup>14</sup> | Deliverable Title   | Lead beneficiary | Type <sup>15</sup>              | Dissemination level <sup>16</sup> | Due Date (in months) <sup>17</sup> |
|----------------------------------|---|------------------|---------------------------------|-----------------------------------|------------------------------------|
| D1.1                             | Website operative   | 2 - UNIOVI       | Websites, patents filling, etc. | Public                            | 3                                  |
| D1.2                             | Comprehensive overview of the project: state of the art, problem, proposed approach and outcome | 1 - GIG          | Report                          | Public                            | 6                                  |

#### Description of deliverables

Deliverables of this Work Package consist on an operative website of the project as well as a comprehensive overview of the project including the state of the art, the problem focused, the proposed approach and the outcome.

D1.1 : Website operative [3]

To prepare a website with the basic contents of the project: objectives, consortium, work packages, etc.

D1.2 : Comprehensive overview of the project: state of the art, problem, proposed approach and outcome [6]

State of the art, problem, proposed approach and outcome of the project.

**Schedule of relevant Milestones**

| Milestone number <sup>18</sup> | Milestone title | Lead beneficiary | Due Date (in months) | Means of verification |
|--------------------------------|-----------------|------------------|----------------------|-----------------------|
|--------------------------------|-----------------|------------------|----------------------|-----------------------|

|   |                                  |                                       |          |
|---|----------------------------------|---------------------------------------|----------|
| <b>Work package number</b> <sup>9</sup> | WP2                              | <b>Lead beneficiary</b> <sup>10</sup> | 3 - UBER |
| <b>Work package title</b>               | ASSESSMENT OF ECOSYSTEM SERVICES |                                       |          |
| <b>Start month</b>                      | 1                                | <b>End month</b>                      | 9        |

**Objectives**

This work package will focus on mapping and assessing the ecosystems and their services of the project's case-studies. Specific objectives are:

G2.1. To identify the adequate boundaries of the different case-studies based on existing spatial connectivity and functional cohesion for each coal mining-affected area.

G2.2. To delineate, categorize and map the different ecosystems types of land covers in the study areas, according to CORINE land cover classes (CLC, 2012 and 2016 where available), although doing detailed field mapping at a higher resolution.

G2.3. To assess the ecosystem services according to the Common International Classification of Ecosystem Services (CICES, 2018) V5.1, in order to achieve standardization and to avoid any overlapping or redundancy within the different categories.

G2.4. To implement a GIS web interface for each-case study, allowing constructing user desired information thematic maps for viewing purposes.

**Description of work and role of partners**

**WP2 - ASSESSMENT OF ECOSYSTEM SERVICES** [Months: 1-9]  
**UBER, GIG, UNIOVI, VSB, HUNOSA , TWD, PKU**  
 This Work Package will comprise the baseline mapping of relevant ecosystems in the project's case-studies, the assessment of ecosystem services according to the CICES classification, as well as the development of a GIS web interface for each case-study.

**Participation per Partner**

| <b>Partner number and short name</b> | <b>WP2 effort</b> |
|--------------------------------------|-------------------|
| 1 - GIG                              | 11.00             |
| 2 - UNIOVI                           | 16.00             |
| 3 - UBER                             | 11.00             |
| 4 - VSB                              | 22.00             |
| 5 - HUNOSA                           | 5.00              |
| 6 - TWD                              | 5.00              |
| 7 - PKU                              | 13.00             |
| <b>Total</b>                         | 83.00             |

**List of deliverables**

| <b>Deliverable Number</b> <sup>14</sup> | <b>Deliverable Title</b>                                 | <b>Lead beneficiary</b> | <b>Type</b> <sup>15</sup> | <b>Dissemination level</b> <sup>16</sup> | <b>Due Date (in months)</b> <sup>17</sup> |
|---|--|-------------------------|---------------------------|--|---|
| D2.1                                    | Baseline mapping of relevant ecosystems of Figaredo Mine | 2 - UNIOVI              | Report                    | Public                                   | 6   |

List of deliverables

| Deliverable Number <sup>14</sup> | Deliverable Title  | Lead beneficiary | Type <sup>15</sup>              | Dissemination level <sup>16</sup> | Due Date (in months) <sup>17</sup> |
|----------------------------------|--|------------------|---------------------------------|-----------------------------------|------------------------------------|
| D2.2                             | Baseline mapping of relevant ecosystems of Janina Mine                           | 1 - GIG          | Report                          | Public                            | 6                                  |
| D2.3                             | Baseline mapping of relevant ecosystems of The Terezie – Ema mine dumps complex  | 4 - VSB          | Report                          | Public                            | 6                                  |
| D2.4                             | Baseline mapping of relevant ecosystems of Chabařovice Mine and Most-Ležáky Mine | 4 - VSB          | Report                          | Public                            | 6                                  |
| D2.5                             | Baseline mapping of relevant ecosystems of Míbrag Mines                          | 3 - UBER         | Report                          | Public                            | 6                                  |
| D2.6                             | Assessment of ecosystem services of Figaredo Mine                                | 2 - UNIOVI       | Report                          | Public                            | 9                                  |
| D2.7                             | Assessment of ecosystem services of Janina Mine                                  | 1 - GIG          | Report                          | Public                            | 9                                  |
| D2.8                             | Assessment of ecosystem services of The Terezie – Ema mine dumps complex         | 4 - VSB          | Report                          | Public                            | 9                                  |
| D2.9                             | Assessment of ecosystem services of Chabařovice Mine and Most-Ležáky Mine        | 4 - VSB          | Report                          | Public                            | 9                                  |
| D2.10                            | Assessment of ecosystem services of Míbrag Mines                                 | 3 - UBER         | Report                          | Public                            | 9                                  |
| D2.11                            | GIS web interface  | 2 - UNIOVI       | Websites, patents filling, etc. | Public                            | 9                                  |

Description of deliverables

Mapping of the ecosystems of Chabařovice Mine and Most-Ležáky Mine according to Corine Land Cover classification.

D2.5 : Baseline mapping of relevant ecosystems of Mibrag Mines [6]

Mapping of the ecosystems of Mibrag mines according to Corine Land Cover classification.

D2.6 : Assessment of ecosystem services of Figaredo Mine [9]

Determining the ecosystem services existent at Figaredo Mine.

D2.7 : Assessment of ecosystem services of Janina Mine [9]

Determining the ecosystem services existent at Janina Mine.

D2.8 : Assessment of ecosystem services of The Terezie – Ema mine dumps complex [9]

Determining the ecosystem services existent at the Terezie – Ema mine dumps complex.

D2.9 : Assessment of ecosystem services of Chabařovice Mine and Most-Ležáky Mine [9]

Determining the ecosystem services existent at Chabařovice Mine and Most-Ležáky Mine.

D2.10 : Assessment of ecosystem services of Mibrag Mines [9]

Determining the ecosystem services existent at Mibrag mines.

D2.11 : GIS web interface [9]

A GIS web interface with the ecosystem services of every case-study.

#### Schedule of relevant Milestones

| Milestone number <sup>18</sup> | Milestone title | Lead beneficiary | Due Date (in months) | Means of verification |
|--------------------------------|-----------------|------------------|----------------------|-----------------------|
|--------------------------------|-----------------|------------------|----------------------|-----------------------|



|   |                         |                                       |         |
|---|-------------------------|---------------------------------------|---------|
| <b>Work package number</b> <sup>9</sup> | WP3                     | <b>Lead beneficiary</b> <sup>10</sup> | 1 - GIG |
| <b>Work package title</b>               | GENERATION OF SCENARIOS |                                       |         |
| <b>Start month</b>                      | 3                       | <b>End month</b>                      | 39      |

**Objectives**

The general objective of this work package is to undergo the generation of scenarios for each case-study, in order to enable the analysis of changes in services delivery which are required for quantifying trade-offs among them. Specific objectives are:

G3.1. To develop a blueprint instrument/indicator for both coal mining impact assessment and post-mining landscape (e)valuation: a feasible ex-ante impact assessment planning instrument to make recommendations for future planning and development of post-mining landscapes.

G3.2. To develop artificial substitutes for soils suitable to several types of plant communities that provide a wide range of ecosystem services, addressing ‘difficult terrains’ in coal mining waste heaps.

G3.3. To propose suitable land rehabilitation techniques that allow successful environmental and vegetal developments in coal mining waste heaps.

G3.3. To formulate alternative land rehabilitation and ecological restoration actions for the case studies, with special emphasis on stakeholder consultation, in order to guarantee the success of the scenarios generation process.

G3.4. To map and quantify the new ecosystem services provision of the different scenarios.

G3.5. To expand the GIS web interface with the different scenarios.

**Description of work and role of partners**

**WP3 - GENERATION OF SCENARIOS** [Months: 3-39]  
**GIG, UNIOVI, UBER, VSB, HUNOSA , TWD, PKU**

This work package will comprise the development of a blueprint instrument/indicator for the functional assessment of landscape and land-use changes caused by coal mining, the development of artificial substitutes for soils in difficult terrains addressing coal mining waste heaps with intensive eroded slopes and high acidic character, the assessment of rehabilitation techniques in waste heaps, the formulation of alternative land rehabilitation and ecological restoration actions, as well as the expansion of the GIS web interface with the new ecosystem services provision for every alternative selected.

**Participation per Partner**

| <b>Partner number and short name</b> | <b>WP3 effort</b> |
|--------------------------------------|-------------------|
| 1 - GIG                              | 25.00             |
| 2 - UNIOVI                           | 23.00             |
| 3 - UBER                             | 19.00             |
| 4 - VSB                              | 25.00             |
| 5 - HUNOSA                           | 9.00              |
| 6 - TWD                              | 10.00             |
| 7 - PKU                              | 10.00             |
| <b>Total</b>                         | 121.00            |

**List of deliverables**

| <b>Deliverable Number<sup>14</sup></b> | <b>Deliverable Title</b>  | <b>Lead beneficiary</b> | <b>Type<sup>15</sup></b>        | <b>Dissemination level<sup>16</sup></b> | <b>Due Date (in months)<sup>17</sup></b> |
|--|---|-------------------------|---------------------------------|---|--|
| D3.1                                   | Blueprint instrument/indicator                                    | 3 - UBER                | Report                          | Public                                  | 18                                       |
| D3.2                                   | Artificial substitutes for soils in difficult terrains            | 1 - GIG                 | Report                          | Public                                  | 39                                       |
| D3.3                                   | Assessment of rehabilitation techniques for waste heaps           | 4 - VSB                 | Report                          | Public                                  | 18                                       |
| D3.4                                   | Assessment of scenarios for Figaredo Mine                         | 2 - UNIOVI              | Report                          | Public                                  | 27                                       |
| D3.5                                   | Assessment of scenarios for Janina Mine                           | 1 - GIG                 | Report                          | Public                                  | 27                                       |
| D3.6                                   | Assessment of scenarios for the Terezie – Ema mine dumps complex  | 4 - VSB                 | Report                          | Public                                  | 27                                       |
| D3.7                                   | Assessment of scenarios for Chabařovice Mine and Most-Ležáky Mine | 4 - VSB                 | Report                          | Public                                  | 27                                       |
| D3.8                                   | GIS web interface expanded  | 2 - UNIOVI              | Websites, patents filling, etc. | Public                                  | 27                                       |

**Description of deliverables**

Deliverables of this Work package consist in first place in a blueprint instrument/indicator for the functional assessment of landscape and land-use changes caused by coal mining, followed by the composition of artificial substitutes for soils in difficult terrains. Also, the assessment of scenarios for the rest of case-studies together with the GIS web interface expanded for each of them.

D3.1 : Blueprint instrument/indicator [18]

An integrated and functional assessment of landscape and land-use changes caused by coal mining.

D3.2 : Artificial substitutes for soils in difficult terrains [39]

Testing different techniques to enhance land rehabilitation of mining-affected areas in the case of 'difficult terrains' (coal mining waste heaps with intensive eroded slopes and high acidic character)

D3.3 : Assessment of rehabilitation techniques for waste heaps [18]

This Deliverable will determine which rehabilitation practices allow successful environmental and vegetal developments in waste heaps.

D3.4 : Assessment of scenarios for Figaredo Mine [27]

Generation of different con- and diverging scenarios for Figaredo Mine.

D3.5 : Assessment of scenarios for Janina Mine [27]

Generation of different con- and diverging scenarios for Janina mine.

D3.6 : Assessment of scenarios for the Terezie – Ema mine dumps complex [27]

Generation of different con- and diverging scenarios for the Terezie – Ema mine dumps complex.

D3.7 : Assessment of scenarios for Chabařovice Mine and Most-Ležáky Mine [27]

Generation of different con- and diverging scenarios for Chabařovice Mine and Most-Ležáky Mine.

D3.8 : GIS web interface expanded [27]

GIS web interface updated with the new ecosystem services provision for every alternative selected.

**Schedule of relevant Milestones**

| <b>Milestone number<sup>18</sup></b> | <b>Milestone title</b> | <b>Lead beneficiary</b> | <b>Due Date (in months)</b> | <b>Means of verification</b> |
|--------------------------------------|------------------------|-------------------------|-----------------------------|------------------------------|
|--------------------------------------|------------------------|-------------------------|-----------------------------|------------------------------|

|   |                               |                                       |            |
|---|-------------------------------|---------------------------------------|------------|
| <b>Work package number</b> <sup>9</sup> | WP4                           | <b>Lead beneficiary</b> <sup>10</sup> | 2 - UNIOVI |
| <b>Work package title</b>               | EVALUATING ECOSYSTEM SERVICES |                                       |            |
| <b>Start month</b>                      | 27                            | <b>End month</b>                      | 36         |

### Objectives

The general objective of this work package is to develop the formulation that will be used later for the cost-benefit assessment.

Specific objectives are:

G4.1. To select suitable indicators for each ecosystem service that will allow a proper quantification of every ecosystem service involved in the coal mining-affected areas.

G4.2. To define the best feasible valuation technique for every suitable indicator.

G4.3. To select an adequate discount rate for each case-study.

### Description of work and role of partners

**WP4 - EVALUATING ECOSYSTEM SERVICES** [Months: 27-36]

UNIOVI, GIG, UBER, VSB, HUNOSA , TWD, PKU

This work package will comprise the selection of suitable indicators that will allow a proper quantification of every ecosystem service involved in the coal-mining affected areas, the definition of the best feasible valuation technique for every suitable indicator, and the selection of adequate discount rates.

### Participation per Partner

| Partner number and short name | WP4 effort |
|-------------------------------|------------|
| 1 - GIG                       | 5.00       |
| 2 - UNIOVI                    | 11.00      |
| 3 - UBER                      | 7.00       |
| 4 - VSB                       | 6.00       |
| 5 - HUNOSA                    | 2.00       |
| 6 - TWD                       | 2.00       |
| 7 - PKU                       | 4.00       |
| <b>Total</b>                  | 37.00      |

### List of deliverables

| Deliverable Number <sup>14</sup> | Deliverable Title             | Lead beneficiary | Type <sup>15</sup> | Dissemination level <sup>16</sup> | Due Date (in months) <sup>17</sup> |
|----------------------------------|-------------------------------|------------------|--------------------|-----------------------------------|------------------------------------|
| D4.1                             | Suitable indicators           | 3 - UBER         | Report             | Public                            | 33                                 |
| D4.2                             | Feasible valuation techniques | 2 - UNIOVI       | Report             | Public                            | 36                                 |
| D4.3                             | Adequate discount rates       | 2 - UNIOVI       | Report             | Public                            | 36                                 |

### Description of deliverables

Deliverables of this Work Package will consist in a list of suitable indicators for the previously analysed ecosystem services, the feasible valuation techniques for these indicators and the determination of the adequate discount rates that should be used for valuating the ecosystem services.

D4.1 : Suitable indicators [33]

Selecting the suitable indicators that will allow a proper quantification of every ecosystem service involved in the coal-mining affected areas.

D4.2 : Feasible valuation techniques [36]

Definition of the best feasible valuation technique for every suitable indicator will be addressed by means of the Total Economic Value (TEV) concept.

D4.3 : Adequate discount rates [36]

Determining the optimum discount rates to be used in the valuation of ecosystem services.

**Schedule of relevant Milestones**

| <b>Milestone number<sup>18</sup></b> | <b>Milestone title</b> | <b>Lead beneficiary</b> | <b>Due Date (in months)</b> | <b>Means of verification</b> |
|--------------------------------------|------------------------|-------------------------|-----------------------------|------------------------------|
|--------------------------------------|------------------------|-------------------------|-----------------------------|------------------------------|

|   |                         |                                       |            |
|---|-------------------------|---------------------------------------|------------|
| <b>Work package number</b> <sup>9</sup> | WP5                     | <b>Lead beneficiary</b> <sup>10</sup> | 2 - UNIOVI |
| <b>Work package title</b>               | COST-BENEFIT ASSESSMENT |                                       |            |
| <b>Start month</b>                      | 36                      | <b>End month</b>                      | 45         |

### Objectives

The general objective of this work package is to develop the cost-benefit assessment of the different scenarios by quantifying the costs of the alternative actions as well as the economic value of the ecosystem services provision, in order to determine which options will deliver the greatest benefits in relation to their costs.

Specific objectives are:

G5.1. To collect all the relevant market price data and determine when prices are distorted in order to correct distortions.

G4.2. To collect detailed costs of the restoration processes as well as the maintenance costs.

G4.3. To estimate the net present value for every scenario, together with a sensitivity and uncertainty analysis.

G4.4. To determine which options will deliver the greatest benefits in relation to their investment and maintenance costs.

### Description of work and role of partners

**WP5 - COST-BENEFIT ASSESSMENT** [Months: 36-45]

UNIOVI, GIG, UBER, VSB, HUNOSA , TWD, PKU

This work package will comprise collecting relevant market price data, collecting restoration costs, and estimating NPV and uncertainty for every generated scenario so that net economic consequences in the ecosystem services provision can be established.

### Participation per Partner

| Partner number and short name | WP5 effort   |
|-------------------------------|--------------|
| 1 - GIG                       | 16.00        |
| 2 - UNIOVI                    | 14.00        |
| 3 - UBER                      | 12.00        |
| 4 - VSB                       | 12.00        |
| 5 - HUNOSA                    | 8.00         |
| 6 - TWD                       | 3.00         |
| 7 - PKU                       | 12.00        |
| <b>Total</b>                  | <b>77.00</b> |

### List of deliverables

| Deliverable Number <sup>14</sup> | Deliverable Title                | Lead beneficiary | Type <sup>15</sup> | Dissemination level <sup>16</sup> | Due Date (in months) <sup>17</sup> |
|----------------------------------|----------------------------------|------------------|--------------------|-----------------------------------|------------------------------------|
| D5.1                             | Relevant market price data       | 3 - UBER         | Report             | Public                            | 42                                 |
| D5.2                             | Investment and maintenance costs | 1 - GIG          | Report             | Public                            | 42                                 |
| D5.3                             | Best scenarios selection         | 2 - UNIOVI       | Report             | Public                            | 45                                 |

### Description of deliverables

Deliverables of this Work package will consist on the relevant market price data in order to valuate the ecosystem services, the collection of investment and maintenance costs from the industrial partners as well as the selection of the best scenarios for ecosystem restoration.

D5.1 : Relevant market price data [42]

Collecting all the relevant market price data and determining when prices are distorted in order to correct distortions finding comparable products or services at undistorted prices in similar environments.

D5.2 : Investment and maintenance costs [42]

Detailed costs of the investment processes and their maintenance costs, as well as quite good approximations for the alternative actions that will be proposed.

D5.3 : Best scenarios selection [45]

Selecting the best scenario for each considered case-study, highlighting the main advantages and disadvantages that were detected during the whole process.

**Schedule of relevant Milestones**

| <b>Milestone number<sup>18</sup></b> | <b>Milestone title</b> | <b>Lead beneficiary</b> | <b>Due Date (in months)</b> | <b>Means of verification</b> |
|--------------------------------------|------------------------|-------------------------|-----------------------------|------------------------------|
|--------------------------------------|------------------------|-------------------------|-----------------------------|------------------------------|

|   |                       |                                       |          |
|---|-----------------------|---------------------------------------|----------|
| <b>Work package number</b> <sup>9</sup> | WP6                   | <b>Lead beneficiary</b> <sup>10</sup> | 3 - UBER |
| <b>Work package title</b>               | RESULTS DISSEMINATION |                                       |          |
| <b>Start month</b>                      | 9                     | <b>End month</b>                      | 48       |

**Objectives**

The general objective of this work package is to support the dissemination and transfer of the project’s knowledge and results to the whole European coal industry, policy makers and scientific community, ensuring a relevant impact on the competitiveness of the EU coal mining sector, and strengthening the environment policy-science interface at EU level. Specific objectives are:

G6.1. To develop an innovative framework for land rehabilitation and ecological restoration of coal mining-affected areas, aiming to accelerate the recovery of degraded and transformed ecosystems to a good ecosystem status.

G6.2. To deliver ‘Best practice guidelines’ addressing both practitioners and policy makers, with special emphasis on the enforcement of EU waste management, climate, energy and biodiversity policies.

G6.3. To publish RECOVERY’s results in open-access publications in high impact journals ranked Q1 or Q2 in the Journals Citation Report (JCR), and to present contributions at relevant European conferences.

G6.4. To develop a workshop addressing representatives and practitioners from all coal mining European companies as well as policy makers, about the developments and results generated by the project.

**Description of work and role of partners**

**WP6 - RESULTS DISSEMINATION** [Months: 9-48]

**UBER, GIG, UNIOVI, VSB, HUNOSA , TWD, PKU**

This work package will comprise the deliver of an Innovative Framework for land rehabilitation and ecological restoration of coal mining-affected areas during or after mine operations, the deliver of publications and presentations, as well as a Workshop on RECOVERY’s results.

**Participation per Partner**

| <b>Partner number and short name</b> | <b>WP6 effort</b> |
|--------------------------------------|-------------------|
| 1 - GIG                              | 13.00             |
| 2 - UNIOVI                           | 11.00             |
| 3 - UBER                             | 11.00             |
| 4 - VSB                              | 11.00             |
| 5 - HUNOSA                           | 5.00              |
| 6 - TWD                              | 2.00              |
| 7 - PKU                              | 7.00              |
| <b>Total</b>                         | 60.00             |

**List of deliverables**

| <b>Deliverable Number</b> <sup>14</sup> | <b>Deliverable Title</b> | <b>Lead beneficiary</b> | <b>Type</b> <sup>15</sup> | <b>Dissemination level</b> <sup>16</sup> | <b>Due Date (in months)</b> <sup>17</sup> |
|---|--------------------------|-------------------------|---------------------------|--|---|
| D6.1                                    | Best practice guidelines | 3 - UBER                | Report                    | Public                                   | 48  |



**List of deliverables**

| <b>Deliverable Number<sup>14</sup></b> | <b>Deliverable Title</b>                                     | <b>Lead beneficiary</b> | <b>Type<sup>15</sup></b> | <b>Dissemination level<sup>16</sup></b> | <b>Due Date (in months)<sup>17</sup></b> |
|--|--|-------------------------|--------------------------|---|--|
| D6.2                                   | A set of three publications in high impact journals          | 3 - UBER                | Report                   | Public                                  | 48                                       |
| D6.3                                   | A set of five presentations at relevant European conferences | 3 - UBER                | Report                   | Public                                  | 48                                       |
| D6.4                                   | Workshop on RECOVERY's developments and results              | 1 - GIG                 | Other                    | Public                                  | 48                                       |

**Description of deliverables**

Deliverables of this Work package will consist on the best practice guidelines, the sets of publications and presentations to be developed about the project as well as a workshop on the project developments and results.

D6.1 : Best practice guidelines [48]

An innovative framework for land rehabilitation and ecological restoration of coal mining-affected areas during or after mine operations.

D6.2 : A set of three publications in high impact journals [48]

Three open access publications in high impact journals ranked Q1 or Q2 in the Journals Citation Reports.

D6.3 : A set of five presentations at relevant European conferences [48]

Five presentations at relevant European conferences, addressing mainly an overall description of RECOVERY's goals, methodology, and findings.

D6.4 : Workshop on RECOVERY's developments and results [48]

A specific workshop about the developments and results generated during the project, together with its policy enforcement measures, to be held in Katowice (Poland).

**Schedule of relevant Milestones**

| <b>Milestone number<sup>18</sup></b> | <b>Milestone title</b> | <b>Lead beneficiary</b> | <b>Due Date (in months)</b> | <b>Means of verification</b> |
|--------------------------------------|------------------------|-------------------------|-----------------------------|------------------------------|
|--------------------------------------|------------------------|-------------------------|-----------------------------|------------------------------|

### ***1.3.4. WT4 List of milestones***

No milestones indicated

### 1.3.5. WT5 Critical Implementation risks and mitigation actions

| Risk number | Description of risk  | WP Number                    | Proposed risk-mitigation measures  |
|-------------|--|------------------------------|--|
| 1           | RECOVERY has four scientific partners and three industrial partners. There is an improbable case that one partner leaves the consortium.   | WP1, WP2, WP3, WP4, WP5, WP6 | The coordinator will help all the partners with any problem related with their permanence within the consortium. Moreover, if one partner leaves the consortium, the rest of the partners will develop its work. |
| 2           | The technical visit to Janina Mine cannot be developed due to any unexpected reason.   | WP6                          | The workshop to be developed in WP6, will be transferred to Oviedo (Spain), under the auspices of UNIOVI, and the technical visit will take place in Figaredo Mine (HUNOSA).                                     |
| 3           | The development of the blueprint instrument/ indicator for the Mibrag Mine case-study, as well as the formulation of land rehabilitation and ecological restoration actions in the rest of the case-studies, are critical tasks for the success of the proposal. | WP3                          | Both tasks have in the time schedule a three months' buffer time.  |

*1.3.6. WT6 Summary of project effort in person-months*

|                            | <b>WP1</b> | <b>WP2</b> | <b>WP3</b> | <b>WP4</b> | <b>WP5</b> | <b>WP6</b> | <b>Total Person/Months per Participant</b> |
|----------------------------|------------|------------|------------|------------|------------|------------|--|
| 1 - GIG                    | 10         | 11         | 25         | 5          | 16         | 13         | 80   |
| 2 - UNIOVI                 | 4          | 16         | 23         | 11         | 14         | 11         | 79   |
| 3 - UBER                   | 0          | 11         | 19         | 7          | 12         | 11         | 60   |
| 4 - VSB                    | 0          | 22         | 25         | 6          | 12         | 11         | 76   |
| 5 - HUNOSA                 | 0          | 5          | 9          | 2          | 8          | 5          | 29   |
| 6 - TWD                    | 0          | 5          | 10         | 2          | 3          | 2          | 22   |
| 7 - PKU                    | 0          | 13         | 10         | 4          | 12         | 7          | 46   |
| <b>Total Person/Months</b> | 14         | 83         | 121        | 37         | 77         | 60         | 392  |

### *1.3.7. WT7 Tentative schedule of project reviews*

No project reviews indicated

### **1. Project number**

The project number has been assigned by the Commission as the unique identifier for your project. It cannot be changed. The project number **should appear on each page of the grant agreement preparation documents (part A and part B)** to prevent errors during its handling.

### **2. Project acronym**

Use the project acronym as given in the submitted proposal. It can generally not be changed. The same acronym **should appear on each page of the grant agreement preparation documents (part A and part B)** to prevent errors during its handling.

### **3. Project title**

Use the title (preferably no longer than 200 characters) as indicated in the submitted proposal. Minor corrections are possible if agreed during the preparation of the grant agreement.

### **4. Starting date**

Unless a specific (fixed) starting date is duly justified and agreed upon during the preparation of the Grant Agreement, the project will start on the first day of the month following the entry into force of the Grant Agreement (NB : entry into force = signature by the Commission). Please note that if a fixed starting date is used, you will be required to provide a written justification.

### **5. Duration**

Insert the duration of the project in full months.

### **6. Call (part) identifier**

The Call (part) identifier is the reference number given in the call or part of the call you were addressing, as indicated in the publication of the call in the Official Journal of the European Union. You have to use the identifier given by the Commission in the letter inviting to prepare the grant agreement.

### **7. Abstract**

### **8. Project Entry Month**

The month at which the participant joined the consortium, month 1 marking the start date of the project, and all other start dates being relative to this start date.

### **9. Work Package number**

Work package number: WP1, WP2, WP3, ..., WPn

### **10. Lead beneficiary**

This must be one of the beneficiaries in the grant (not a third party) - Number of the beneficiary leading the work in this work package

### **11. Person-months per work package**

The total number of person-months allocated to each work package.

### **12. Start month**

Relative start date for the work in the specific work packages, month 1 marking the start date of the project, and all other start dates being relative to this start date.

### **13. End month**

Relative end date, month 1 marking the start date of the project, and all end dates being relative to this start date.

### **14. Deliverable number**

Deliverable numbers: D1 - Dn

### **15. Type**

Please indicate the type of the deliverable using one of the following codes:

R Document, report  
DEM Demonstrator, pilot, prototype  
DEC Websites, patent filings, videos, etc.  
OTHER  
ETHICS Ethics requirement  
ORDP Open Research Data Pilot

### **16. Dissemination level**

Please indicate the dissemination level using one of the following codes:

- PU Public
- CO Confidential, only for members of the consortium (including the Commission Services)
- EU-RES Classified Information: RESTREINT UE (Commission Decision 2005/444/EC)
- EU-CON Classified Information: CONFIDENTIEL UE (Commission Decision 2005/444/EC)
- EU-SEC Classified Information: SECRET UE (Commission Decision 2005/444/EC)

**17. Delivery date for Deliverable**

Month in which the deliverables will be available, month 1 marking the start date of the project, and all delivery dates being relative to this start date.

**18. Milestone number**

Milestone number: MS1, MS2, ..., MSn

**19. Review number**

Review number: RV1, RV2, ..., RVn

**20. Installation Number**

Number progressively the installations of a same infrastructure. An installation is a part of an infrastructure that could be used independently from the rest.

**21. Installation country**

Code of the country where the installation is located or IO if the access provider (the beneficiary or linked third party) is an international organization, an ERIC or a similar legal entity.

**22. Type of access**

- VA if virtual access,
- TA-uc if trans-national access with access costs declared on the basis of unit cost,
- TA-ac if trans-national access with access costs declared as actual costs, and
- TA-cb if trans-national access with access costs declared as a combination of actual costs and costs on the basis of unit cost.

**23. Access costs**

Cost of the access provided under the project. For virtual access fill only the second column. For trans-national access fill one of the two columns or both according to the way access costs are declared. Trans-national access costs on the basis of unit cost will result from the unit cost by the quantity of access to be provided.

**Research & Innovation  
Research Fund for Coal and Steel****TECHNICAL ANNEX**

|                            |   |
|----------------------------|---|
| <b>Project acronym:</b>    | RECOVERY  |
| <b>Project title:</b>      | Recovery of degraded and transformed ecosystems in coal mining-affected areas |
| <b>Grant Agreement N°:</b> | <i>(will be attributed by the Commission)</i>                                 |

**B2-1 PROJECT OBJECTIVES**

RECOVERY project focuses on land rehabilitation and ecological restoration of coal mining-affected areas, aiming to accelerate the recovery of degraded and transformed ecosystems to a good ecosystem status. It will assess the contribution of these ecosystems to human wellbeing by means of the 'ecosystem-services' concept, evaluating the consequences of alternative courses of action to ensure that their capacity to provide benefits to society is not diminished.

The objectives of RECOVERY are:

1. To give guidance for policy and decision-makers in order to select the land rehabilitation and ecological restoration actions which deliver the greatest benefits relative to their costs, identifying optimal alternatives and devising suitable strategies.
2. To increase the impact of land rehabilitation and ecological restoration actions on both society and environment by demonstrating the opportunities that coal mining sites have to improve overall public welfare, and giving information on the environmental and social cost-effectiveness of these actions.
3. To enhance simultaneously the delivery of EU policies by the coal mining industry: waste management policy (Directive 2006/21/EC), climate and energy policies (COM/2016/0479 final), and biodiversity policy (COM/2011/244).
4. To deliver a blueprint instrument/indicator for both coal mining impact assessment and post-mining landscape (e)valuation: a feasible ex-ante impact assessment planning instrument to make recommendations for future planning and development of post-mining landscapes.
5. To deliver, addressing specifically coal mining-affected areas: (a) detailed costs of alternative land rehabilitation and ecological restoration actions, as well as the benefits in the provision of ecosystem services; (b) a first set of suitable indicators for these ecosystem services; and (c) feasible valuation techniques and optimal discount rates.
6. To deliver and innovative framework for land rehabilitation and ecological restoration of coal mining-affected areas, conceived as "Best practice guidelines" aiming to accelerate the recovery of these degraded and transformed ecosystems to a good ecosystem status.
7. To develop artificial substitutes for soils suitable to several types of plant communities, addressing 'difficult terrains' in coal mining waste heaps.
8. To propose suitable land rehabilitation techniques that allow successful environmental and vegetal developments in coal mining waste heaps.
9. To illustrate the benefits of implementing the project results and communicate the findings to the coal mining community across Europe.



**B2-2 WORK PACKAGE DESCRIPTION****WP No** 1

| <b>Work package Title</b>  | <b>PROJECT COORDINATION AND MANAGEMENT</b> | <b>Person-Months</b> |
|--|--|----------------------|
| <b>WP Leader</b><br>(full name or acronym)   | Główny Instytut Górnictwa (GIG)            | 10                   |
| <b>Participants, linked third parties and subcontractors</b><br>(full name or acronym) | Universidad de Oviedo (UNIOVI)             | 4                    |
|  |  |                      |
|  |  |                      |
| <b>Total</b>   |  | 14                   |

**1 - Objectives**

The main objective of this work package is to perform the general management of the different project elements, in order to assure the smooth progress of the project and the efficient use of resources.

Specific objectives are:

G1.1. To formalize the joint research structures and to arrange the Consortium Agreement.

G1.2. To follow up and ensure the timely delivery of the project deliverables and research schedule.

G1.3. To guarantee that an effective communication and collaboration is maintained among partners.

G1.4. To organize and manage the meetings.

G1.5. To prepare, submit and present the project reports (technical and financial) in line with the deadlines set by the Commission.

G1.6. To design, implement & maintain the project website.

G1.7. To arrange the comprehensive overview of the project. This will form the reference basis for the project monitoring after the first 6 months' period.

**2 - Work programme and distribution of tasks**

This work package covers the activities to be performed in order to meet the above objectives.

The work will be organized in three tasks:

**T1.1 Project coordination (GIG)**

This task comprises the activities regarding the general organisation and legal aspects of the project, including the preparation of a Consortium Agreement, the organisation, chairing and attendance at project-meetings, and the preparation of meeting minutes.

It will also include the activities required to satisfy reporting requirements, including the call for contributions, the synthesis and presentation of research reports and financial reporting, and the comprehensive overview of the project (state of the art, problem, proposed approach and outcome), which will form the reference basis for the project monitoring after the first 6 months' period.

Finally, it comprises all activities related to the settlement of disputes among partners, proposing measures to be taken against defaulting partners or, in case of withdrawal of partners, etc., according to the Contract with the Commission and to the aforesaid Consortium Agreement.

**T1.2 Project management and control (GIG)**

This task comprises the activities to be carried out by the project coordinator in order to ensure that the research work progresses as scheduled, as well as the correct use of resources.

With regard to the administrative, financial and technical aspects, project controls will be implemented in a manner that assures a smooth operational sequence of the project.

**T1.3 Website management (UNIOVI)**

This task will comprise the activities to be carried out in order to set-up and maintain the project website, which will be used for both collaborative information sharing in a private area and to disseminate the project results to the wider public.

Activities will include editing and publishing information to be supplied by partners: information to be generated as a part of the research work to be conducted in the remaining work packages.

**3 - Interrelation with other work packages (please give WP No)**

WP1 will receive input from the rest of work packages in the form of contributions to reports, submission of deliverables, assessment of work progress, etc.

In return, this work package will act on other work packages through actions that may be needed to correct any deviation and to ensure the correct use of resources.

**4 - Deliverables and milestones**

According to the 2018 RFCS Information Package, Periodic or Final Reports were not classified as deliverables.

D1.1. Consortium Agreement (GIG), Month 1.

D1.2. Website operative (UNIOVI), Month 3.

D1.3. Comprehensive overview of the project: state of the art, problem, proposed approach and outcome, (GIG), Month 6.

## B2-2 WORK PACKAGE DESCRIPTION

|              |          |
|--------------|----------|
| <b>WP No</b> | <b>2</b> |
|--------------|----------|

| Work package Title   | ASSESSMENT OF ECOSYSTEM SERVICES            | Person-Months |
|--|---|---------------|
| <b>WP Leader</b><br>(full name or acronym)   | Humboldt Universität zu Berlin (UBER)       | 11            |
| <b>Participants, linked third parties and subcontractors</b><br>(full name or acronym) | Universidad de Oviedo (UNIOVI)              | 16            |
|  | Główny Instytut Górnictwa (GIG)             | 11            |
|  | VŠB -Technická univerzita Ostrava (VŠB)     | 22            |
|  | Hulleras del Norte S.A. (HUNOSA)            | 5             |
|  | Tauron Wydobycie S.A. (TWD)                 | 5             |
|  | Palivový kombinát Ústí, státní podnik (PKÚ) | 13            |
|  |   |               |
| <b>Total</b>   |   | 83            |

### 1 - Objectives

This work package will focus on mapping and assessing the ecosystems and their services of the project's case-studies.

Specific objectives are:

G2.1. To identify the adequate boundaries of the different case-studies based on existing spatial connectivity and functional cohesion for each coal mining-affected area.

G2.2. To delineate, categorize and map the different ecosystems types of land covers in the study areas, according to CORINE land cover classes (CLC, 2012 and 2016 where available), although doing detailed field mapping at a higher resolution.

G2.3. To assess the ecosystem services according to the Common International Classification of Ecosystem Services (CICES, 2018) V5.1, in order to achieve standardization and to avoid any overlapping or redundancy within the different categories.

G2.4. To implement a GIS web interface for each-case study, allowing constructing user desired information thematic maps for viewing purposes.

### 2 - Work programme and distribution of tasks

The typology of ecosystems and ecosystem services will provide the analytical frame for the project. To operationalize this work package, it will comprise the following tasks:

#### **T2.1 Baseline mapping of relevant ecosystems (UBER, all partners)**

Under the coordination of UBER, with a lot of experience in this field, for each case-study the surrounding limits of the different coal mining-affected areas will be defined on the basis of existing spatial connectivity and functional cohesion.

It is critical for establishing an ecosystem services context to determine with accuracy the adequate boundaries of the areas where the impact of the planned activities may produce changes in forms of land use, monetary value of properties, and potential of ecosystem services.

In second place, CORINE land cover classes (CLC, 2012 and 2016 where available) will be used to delineate, categorize and map the different ecosystems types of land cover in the study areas, although doing detailed field mapping at a higher resolution.

A minimum unit mapping size will be defined for each case-study in order to monitor adequately regional land use for managing sensitive areas.

Work distribution among partners will be made as follows:

1. Figaredo Mine (Asturias, Spain). (UNIOVI & HUNOSA)
2. Janina Mine (Silesia, Poland). (GIG & TWD)
3. The Terezie – Ema mine dumps complex (Silesia, Czech Republic). (VŠB)
4. Chabařovice Mine (Bohemia, Czech Republic). (VŠB & PKÚ)
5. Most-Ležáky Mine (Bohemia, Czech Republic). (VŠB & PKÚ)
6. Mibrag Mines (South of Leipzig, Germany). (UBER)

### **T2.2 Assessment of ecosystem services** (UBER, all partners)

In order to achieve the higher degree of standardization and to avoid any overlapping or redundancy within the different categories, the hierarchical structure of the Common International Classification of Ecosystem Services (CICES, 2018) V5.1 will be used to make the assessment of the ecosystem services of each case-study.

For each relevant land cover the three main section categories (provisioning services, regulating and maintenance services, and cultural services) will be considered and divided into main types of output or process.

After that, they will be split into group levels according to the biological, physical or cultural type or process, and sub-divided into class categories and class types. These will allow to link ecosystem services with identifiable services, suggesting ways of measuring the associated ecosystem services output.

Again, under the coordination of UBER, distribution of work among partners will be as indicated in the previous task.

### **T2.3 GIS web interface** (UNIOVI, all partners)

Finally, a GIS web interface will be provided by UNIOVI for each case-study reinforced with the data supplied by the partners.

These will be created using an open source Geographic Information System (GIS) such as QGIS or SAGA, where different layers will be considered, such as topographical maps and Digital Terrain Models (DTM), spatial point or line entities like water sources and rivers, and relevant land covers.

A Graphical User Interface will allow to construct the user desired information thematic map for viewing purposes. All the layers will be accessible in 2D or 3D as user selectable layers. The technology for this web interface will be Open layers or Leaflets and JavaScript.

The initial datasets for this web spatial interface will come from: national topographic maps, DTM, field surveying data, etc. All this information will be converted to a common spatial reference frame in the GIS system and further processed to agree with the project established standards.

Every partner will help with his own data, in order to achieve an integrated approach that will result on a significant improvement in quality, data availability, access and visualisation, aiding direct comparison and aggregation, robust transfer and meta-analysis.

### **3 - Interrelation with other work packages (please give WP No)**

WP2 will provide the basis to develop WP3, WP4 and WP5.

WP6 will disseminate the results of this work package.

### **4 - Deliverables and milestones**

Although partners mentioned above will contribute to the relevant tasks, the partner referred to after the deliverable title will be responsible for the deliverable:

- D2.1. Baseline mapping of relevant ecosystems of Figaredo Mine (UNIOVI), Month 6.
- D2.2. Baseline mapping of relevant ecosystems of Janina Mine (GIG), Month 6.
- D2.3. Baseline mapping of relevant ecosystems of The Terezie – Ema mine dumps complex (VŠB), Month 6.
- D2.4. Baseline mapping of relevant ecosystems of Chabařovice Mine and Most-Ležáky Mine (VŠB), Month 6.
- D2.5. Baseline mapping of relevant ecosystems of Mibrag Mines (UBER), Month 6.
- D2.6. Assessment of ecosystem services of Figaredo Mine (UNIOVI), Month 6.
- D2.7. Assessment of ecosystem services of Janina Mine (GIG), Month 9.
- D2.8. Assessment of ecosystem services of The Terezie – Ema mine dumps complex (VŠB), Month 9.
- D2.9. Assessment of ecosystem services of Chabařovice Mine and Most-Ležáky Mine (VŠB), Month 9.
- D2.10. Assessment of ecosystem services of Mibrag Mines (UBER), Month 9.
- D2.11. GIS web interface (UNIOVI). Month 9.

## B2-2 WORK PACKAGE DESCRIPTION

WP No 3

| Work package Title   | GENERATION OF SCENARIOS                     | Person-Months |
|--|---|---------------|
| <b>WP Leader</b><br>(full name or acronym)   | Główny Instytut Górnictwa (GIG)             | 25            |
| <b>Participants, linked third parties and subcontractors</b><br>(full name or acronym) | Humboldt Universität zu Berlin (UBER)       | 19            |
|  | Universidad de Oviedo (UNIOVI)              | 23            |
|  | VŠB -Technická univerzita Ostrava (VŠB)     | 25            |
|  | Hulleras del Norte S.A. (HUNOSA)            | 9             |
|  | Tauron Wydobycie S.A. (TWD)                 | 10            |
|  | Palivový kombinát Ústí, státní podnik (PKÚ) | 10            |
|  |   |               |
| <b>Total</b>   |   | 121           |

**1 - Objectives**

The general objective of this work package is to undergo the generation of scenarios for each case-study, in order to enable the analysis of changes in services delivery which are required for quantifying trade-offs among them.

Specific objectives are:

G3.1. To develop a blueprint instrument/indicator for both coal mining impact assessment and post-mining landscape (e)valuation: a feasible ex-ante impact assessment planning instrument to make recommendations for future planning and development of post-mining landscapes.

G3.2. To develop artificial substitutes for soils suitable to several types of plant communities that provide a wide range of ecosystem services, addressing 'difficult terrains' in coal mining waste heaps.

G3.3. To propose suitable land rehabilitation techniques that allow successful environmental and vegetal developments in coal mining waste heaps.

G3.3. To formulate alternative land rehabilitation and ecological restoration actions for the case-studies, with special emphasis on stakeholder consultation, in order to guarantee the success of the scenarios generation process.

G3.4. To map and quantify the new ecosystem services provision of the different scenarios.

G3.5. To expand the GIS web interface with the different scenarios.

**2 - Work programme and distribution of tasks**

To operationalize this work package, it will comprise the following tasks:

**T3.1 Developing a blueprint instrument/indicator (UBER, GIG, UNIOVI, VŠB)**

In the case of Mibrag Mines, that will be analysed led by UBER and with the cooperation of GIG, UNIOVI and VŠB, a feasible ex-ante impact assessment planning instrument will be developed: an integrated and functional assessment of landscape and land-use changes caused by coal mining, as there is yet no state-of-the-art or blueprint instrument/indicator (a way to support best practices in assessments by delivering control of pre-operative planning and guiding the creation of items) set for both mining impact assessment and post-mining landscape (e)valuation.

The ecosystem services concept will be applied to assess the pre-mining rural landscape, prevailing restoration activities and different future scenarios for the modified landscape.

The extensive and dynamic landscape changes will be studied, using an ecosystem services approach to assess the impacts of mining activity over a 100-year period, spanning pre- and post-mining states.

Historical land use data from maps will be recorded, and several future potential land use scenarios will be outlined based on current planning documents. The results will show the potential to provide ecosystem services support for the prioritization of preference areas in regional planning.

For example, forested and heterogeneous habitats are predicted to enhance future urban development and mitigation of future climate change, a goal of the Saxon government. In contrast, if future development priorities are on local food production and bio-energy use, more arable and grassland areas should be pursued. The use of freely and publicly available data and the simple methods of the intended approach can be used to inform and improve regional landscape planning.

In this context, ecosystem services are assumed to serve as landscape assessments, evaluating the individual parts (e.g., field plots, landscape elements or compartments) and functions (e.g., production, retention or information) demarcated by different users.

The ecosystem services approach will be used to assess the ecosystem functions and services of different post-mining land use scenarios, relative to the pre-mining and mining landscapes. The objectives being as follows:

1. Assessing the pre-mining, mining and post-mining landscapes with respect to function and sustainability, seeking a quantitative pragmatic assessment.
2. Applying the ecosystem services approach to this assessment.
3. Evaluating the applicability of the ecosystem services concept to mining impact assessment and post-mining landscape patterns.
4. Developing a blueprint instrument/indicator set for both mining impact assessment and post-mining landscape (e)valuation.

### **T3.2 Artificial substitutes for soils in difficult terrains (GIG, TWD)**

Within this task that will be developed by TWD with the scientific advice of GIG who will also undergo water analysis and soil characterization, different techniques to enhance land rehabilitation of mining-affected areas in the case of 'difficult terrains' (coal mining waste heaps with intensive eroded slopes and high acidic character) will be tested, attempting to develop artificial substitutes for soils suitable to several types of plant communities that deliver a wide range of ecosystem services.

Several blends consisting of rock wastes and fine-grained wastes, fly ashes and sewage sludge, will be tested as substrate for different plant communities:

1. Meadow communities.
2. Xerophyte communities.
3. Bush communities
4. Wetland wet terrains communities.

Test polygons will be created in real conditions of the big, acidified and exposed to erosion waste heap of Libiąż, property of Janina Mine (TWD), by means of:

1. Delivery of waste materials as a component of artificial soils.
2. Preparation of a protective layer for the test polygon against acidification and contamination from stored mine wastes.
3. Preparation of anthropogenic soils on the basis of various types of gangue providing optimal habitat conditions for the plant communities.
4. Maintenance and care of the plants on a stage of vegetation.

5. Observations of natural processes and monitoring of changes in physicochemical parameters of the substrate and runoff water characteristics.

6. Evaluation of the effectiveness of the reclamation methods used.

As during the winter in Poland it is not possible to undergo planting processes, the schedule of the work to be developed within this work package is planned according to this restriction, and in order to give time enough to allow a proper evaluation of the effectiveness of the reclamation methods used.

Preparations of blends will start on January 2020, and the plantations on March 2020. These will allow to analyse results after two complete vegetation cycles (two years), and have them on time to be included within the "Best practices guidelines".

### **T3.3 Assessing rehabilitation techniques in waste heaps (VŠB, HUNOSA, UNIOVI)**

Apart from the handicap of developing soils in 'difficult terrains' that will be analyzed in the previous task, soil composition, runoff water characteristics and the degree of vegetal development of restored waste heaps, represent the main parameters in order to quantify the success of this rehabilitation process.

For this purpose, water analysis and soil characterization campaigns, together with an assessment of vegetation, will be developed in the waste heaps of Figaredo Mine and in the Terezie – Ema mine dumps complex, providing data about their behavior in order to determine which rehabilitation practices allow successful environmental and vegetal developments.

Also, and complementing the previous research, a comparative assessment of above-ground vegetation in the dumps will be carried out on selected areas in the waste heaps of Figaredo Mine and in the Terezie – Ema mine dumps complex, according to the following criteria: a) reclamation - spontaneous succession b) forest biotopes - treeless biotopes c) biotopes on the plane - biotopes on the slope - biotopes on the foot of slope d) wet biotopes - dry biotopes.

VŠB will lead this task, based on its previous experience on this field, and will have the cooperation of HUNOSA and UNIOVI regarding the work to be done at the waste heaps of Figaredo Mine.

The results from this task will be considered for the formulation of alternative land rehabilitation and ecological restoration actions, in order to generate scenarios.

### **T3.4 Formulating alternative actions (GIG-TWD, UNIOVI-HUNOSA, VŠB-PKÚ, UBER)**

The importance of using scenarios in ecosystem services assessments is beginning to be realized, as early assessments presented a static picture in a changing world.

The necessity of providing counter-facts is now being demanded in conservation research and will become the norm in ecosystem services research as well.

The generation of different con- and diverging scenarios is particularly important for monetary valuation, since scenarios enable the analysis of changes in services delivery which are required for quantifying trade-offs among them.

Within this task, and leaded by GIG, alternative land rehabilitation and ecological restoration actions will be defined for Figaredo Mine (UNIOVI-HUNOSA), Janina Mine (GIG-TWD), Chrabarovice Mine and Most-Ležáky Mine (VŠB-PKÚ), and Terezie – Ema mine dumps complex (VŠB).

Taking into account the recommendations for future planning and development of the post-mining landscape from the blueprint instrument/indicator with the cooperation of UBER, as well as the need to improve socio-economic outcomes and to catalyse the development of new jobs, different types of land rehabilitation and ecosystem restoration actions will be proposed in order to generate different scenarios, e.g.:

1. Recolonization of the site by local vegetation.
2. Commercial forestry plantations and secondary forests using local plant species.
3. Development for agriculture (arable land and pasture).



4. Installations for leisure and recreational purposes.
5. Space for wildlife and nature conservation including forms of 'badland sites'.
6. Development of artificial water bodies, e.g. reservoirs, streams, cascades, etc.

Special emphasis will be given to consultation of scenarios with stakeholders (local authorities, neighbourhood associations, coal mining industry, trade unions and environmental NGOs), in order to guarantee the success of the whole process.

Each partner will be responsible for the involvement of stakeholders from his case-study areas.

Finally, the new ecosystem services provision of each generated scenario will be mapped and quantified, in order to enable the analysis of changes in services delivery which are required for quantifying trade-offs among them.

The energetic valorisation of mining wastes, the extraction of valuable substances, or its use in the process of obtaining crushed road and construction aggregates, natural aggregates, raw materials for the cement industry, void backfilling, etc., will not be considered, as these valorisation processes are previous to the development of any land rehabilitation and ecological restoration action.

### **T3.5 Expanding GIS web interface (UNIOVI, all partners)**

Finally, UNIOVI will update the GIS web interface with the new ecosystem services provision for every alternative selected.

Every partner will help with his data, in order to obtain an integrated approach that will result on a significant improvement in quality, data availability, access and visualisation, in order to aid direct comparison and aggregation, robust transfer and meta-analysis.

### **3 - Interrelation with other work packages (please give WP No)**

WP3 will provide the basis for developing the ecosystem services valuation, that will take place in WP4 and, later, the cost-benefit assessment in WP5.

Results for T3.2 (Artificial substitutes for soils in difficult terrains) will directly feed into WP6, that will also disseminate the rest of results from WP3.

### **4 - Deliverables and milestones**

Although partners listed above will contribute to the relevant tasks, the partner referred to after the deliverable title will be responsible for the deliverable.

- D3.1. Blueprint instrument/indicator (UBER), Month 18.
- D3.2. Artificial substitutes for soils in difficult terrains (GIG), Month 39.
- D3.3. Assessment of rehabilitation techniques for waste heaps (VŠB), Month 18.
- D3.4. Assessment of scenarios for Figaredo Mine (UNIOVI), Month 27.
- D3.5. Assessment of scenarios for Janina Mine (GIG), Month 27.
- D3.6. Assessment of scenarios for the Terezie – Ema mine dumps complex (VŠB), Month 27.
- D3.7. Assessment of scenarios for Chabařovice Mine and Most-Ležáky Mine (VŠB), Month 27.
- D3.8. GIS web interface expanded (UNIOVI), Month 27.

## B2-2 WORK PACKAGE DESCRIPTION

WP No 4

| Work package Title   | EVALUATING ECOSYSTEM SERVICES               | Person-Months |
|--|---|---------------|
| <b>WP Leader</b><br>(full name or acronym)   | Universidad de Oviedo (UNIOVI)              | 11            |
| <b>Participants, linked third parties and subcontractors</b><br>(full name or acronym) | Humboldt Universität zu Berlin (UBER)       | 7             |
|  | Główny Instytut Górnictwa (GIG)             | 5             |
|  | VŠB -Technická univerzita Ostrava (VŠB)     | 6             |
|  | Hulleras del Norte S.A. (HUNOSA)            | 2             |
|  | Tauron Wydobycie S.A. (TWD)                 | 2             |
|  | Palivový kombinát Ústí, státní podnik (PKÚ) | 4             |
|  |   |               |
| <b>Total</b>   |   | 37            |

**1 - Objectives**

The general objective of this work package is to develop the formulation that will be used later for the cost-benefit assessment.

Specific objectives are:

G4.1. To select suitable indicators for each ecosystem service that will allow a proper quantification of every ecosystem service involved in the coal mining-affected areas.

G4.2. To define the best feasible valuation technique for every suitable indicator.

G4.3. To select an adequate discount rate for each case-study.

**2 - Work programme and distribution of tasks**

This work package will comprise the following tasks:

**T4.1 Selection of suitable indicators (UBER, all partners)**

First step of this work package will be to select the suitable indicators that will allow a proper quantification of every ecosystem service involved in the coal-mining affected areas.

Indicators of ecosystem services are scientific constructs that use quantitative data to measure ecosystems condition and human well-being. Properly constituted, indicators can convey relevant information for the whole process.

With this purpose, RECOVERY will take into account indicators developed in other studies, as well as from the scientific literature, as well as developing new and specific indicators if appropriate.

The following criteria will be considered in order to select the most suitable indicators:

1. *Stakeholders-relevant and meaningful*: indicators should send a clear message and provide information at a level appropriate for management decision-making by assessing changes in the status of ecosystem services.

2. *Ecosystem services-relevant*: indicators should address key properties of ecosystem services or related issues as pressures, state, impacts and responses.

3. *Acceptance and intelligibility*: the power of an indicator depends on its broad acceptance. Involvement of all the partners of the project in the development of indicators is crucial.

4. *Cause-effect relationship*: information on cause-effect relationships should be achievable and quantifiable in order to link pressures, state and response indicators. These relationship models allow scenario analysis and represent the basis of the ecosystem approach.

5. *Spatial coverage*: indicators should ideally be relevant for coal mining affected landscapes.

6. *Country comparison*: as far as possible, it should be possible to make valid comparisons between countries using the indicators selected.

Under the coordination of UBER, each partner will be responsible for his case-studies.

#### **T4.2 Defining feasible valuation techniques (UNIOVI, VŠB, GIG, UBER)**

Next, the definition of the best feasible valuation technique for every suitable indicator will be addressed by means of the Total Economic Value (TEV) concept, following the TEEB (2010) taxonomy when appropriate.

The concept of the TEV of ecosystems is defined as the sum of the values of all service flows that natural capital generates both now and in the future, appropriately discounted. TEV encompasses all components of (dis)utility derived from ecosystem services using a common unit of account: money or any market-based unit of measurement that allows comparisons of the benefits of various goods.

Since in our societies people are already familiar with money as a unit of account, expressing relative preferences in terms of money values will give useful information to RECOVERY's purposes.

Within the TEV framework, values are derived, if available, from information of individual behaviour provided by market transactions relating directly to the ecosystem service. In the absence of such information, price information must be derived from parallel market transactions that are associated indirectly with the good to be valued, or by simulating a market and demand when no surrogate markets exist.

These situations correspond to a categorization of the available approaches, among which the best feasible valuation technique will be defined for every suitable indicator:

1. *Direct market valuation approaches*: the main advantage of using these approaches is that they use data from actual markets, and thus reflect actual preferences or costs to individuals.

2. *Revealed preference approaches*: they are based on the observation of individual choices in existing markets that are related to the ecosystem service that is subject of valuation. In this case it is said that economic agents "reveal" their preferences through their choices.

3. *Stated preferences approaches*: they simulate a market and demand for ecosystem services by means of surveys on hypothetical changes in the provision of ecosystem services, and can be used when no surrogate markets exist from which the value of ecosystems can be deduced.

Under the coordination of UNIOVI, based on its experience on this field, the rest of scientific partners (VŠB, GIG and UBER) will cooperate with this task in order to achieve adequate valuation techniques according to the different perceptions of markets and demand that may exist in their own countries.

#### **T4.3 Selecting adequate discount rates (UNIOVI, VŠB, GIG, UBER)**

As discounting is a key issue in the economics of ecosystems, special emphasis will be put on the choice of the discount rate for each case-study, as there are no purely economic guidelines for choosing it, and a variety of discount rates, including zero and negative rates, could be used, depending on the time period involved, the degree of uncertainty, the scope, and the country of the project.

In general, a higher discount rate applied to specific cases will lead to the long-term degradation of ecosystems, but a low discount rate for the entire economy might favour more investment and growth and more environmental destruction.

Resource economics has a long tradition in applying a higher discount rate to the benefits of development and a lower rate to the environmental costs of that development:

$$NPV(D) = -1 + D / (r + k) - P (r - h)$$

Where D is the value of development and P is the value of preservation. In this setup, a factor k is added to the discount rate applied to development benefits to reflect the depreciation of development benefits over time. In a similar vein, a factor h is subtracted from the rate of discount applied to the benefits of preservation.

Here, h represents growth in the value of environmental services over time based on increased material prosperity that augments willingness to pay for scarce nonmarket goods. No hard and fast rules can be applied to determine exactly how much these discount rates should be adjusted.

In terms of the discounting equation, estimates of how well-off those will be in the future is the key factor as to how much we should leave the future.

UNIOVI will again lead this task, with the cooperation of GIG, VŠB and UBER, as discount rates may be country-specific and thus, project-specific.

### **3 - Interrelation with other work packages (please give WP No)**

WP4 will provide the formulation needed to develop the cost-benefit assessment that will take place in WP5.

Findings of this work package will also be used in WP6 in order to present the project results.

### **4 - Deliverables and milestones**

Although partners listed above will contribute to the relevant tasks, the partner referred to after the deliverable title will be responsible for the deliverable:

D4.1. Suitable indicators (UBER), Month 33.

D4.2. Feasible valuation techniques (UNIOVI), Month 36.

D4.3. Adequate discount rates (UNIOVI), Month 36.

## B2-2 WORK PACKAGE DESCRIPTION

WP No 5

| Work package Title   | COST-BENEFIT ASSESSMENT                     | Person-Months |
|--|---|---------------|
| <b>WP Leader</b><br>(full name or acronym)   | Universidad de Oviedo (UNIOVI)              | 14            |
| <b>Participants, linked third parties and subcontractors</b><br>(full name or acronym) | VŠB -Technická univerzita Ostrava (VŠB)     | 12            |
|  | Główny Instytut Górnictwa (GIG)             | 16            |
|  | Humboldt Universität zu Berlin (UBER)       | 12            |
|  | Hulleras del Norte S.A. (HUNOSA)            | 8             |
|  | Tauron Wydobycie S.A. (TWD)                 | 3             |
|  | Palivový kombinát Ústí, státní podnik (PKÚ) | 12            |
|  |   |               |
| <b>Total</b>   |   | 77            |

**1 - Objectives**

The general objective of this work package is to develop the cost-benefit assessment of the different scenarios by quantifying the costs of the alternative actions as well as the economic value of the ecosystem services provision, in order to determine which options will deliver the greatest benefits in relation to their costs.

Specific objectives are:

G5.1. To collect all the relevant market price data and determine when prices are distorted in order to correct distortions.

G4.2. To collect detailed costs of the restoration processes as well as the maintenance costs.

G4.3. To estimate the net present value for every scenario, together with a sensitivity and uncertainty analysis.

G4.4. To determine which options will deliver the greatest benefits in relation to their investment and maintenance costs.

**2 - Work programme and distribution of tasks**

In order to develop the operational phase, this work package will comprise the following tasks:

**T5.1 Collecting relevant market price data (UBER, all partners)**

Market values are derived, if available, from information of individual behaviour provided by market transactions relating directly to the ecosystem service. In the absence of such information, price information must be derived from parallel market transactions that are associated indirectly with the good to be valued.

The main ways to collect relevant market prices differ according to the ecosystem services valuation technique selected:

1. *Supply-based techniques*: relate changes in the output of marketed goods and services to a measurable change in ecosystem goods and services.
2. *Demand-based techniques*: to determine how much it costs to buy an ecosystem product or service or what its sales value is.
3. *Cost-based techniques*: the cost of replacing ecosystem goods or services with artificial or man-made products, infrastructure or technologies.
4. *Value transfer techniques*: these techniques use average willingness-to-pay values taken from existing and similar studies, and adapts these to specific cases.

After collecting all the relevant market price data and determining when prices are distorted in order to correct distortions finding comparable products or services at undistorted prices in similar environments, the monetary values will be standardized to common spatial, temporal and currency units, namely Euros per hectare per year, making the information comparable and accessible.

Under the coordination of UBER, each partner will be responsible for collecting data about relevant market prices in their own countries.

#### **T5.2 Collecting costs (GIG, all partners)**

As HUNOSA, TWD and PKÚ are partners of RECOVERY, it will be possible to obtain detailed costs of their investment processes and their maintenance costs, as well as quite good approximations for the alternative actions that will be proposed, allowing precise cost-benefit calculations.

Again, the monetary values will be standardized to common spatial, temporal and currency units, namely Euros per hectare per year, making the information from all the case-studies comparable and accessible.

GIG will lead this task, while the rest of the partners will be responsible for collecting cost and maintenance data in their own countries.

#### **T5.3 Estimating NPV and uncertainty (UNIOVI, all partners)**

The last task will be to estimate the net present value for every generated scenario so that net economic consequences in the ecosystem services provision can be established.

Nevertheless, valuation techniques in general and stated preference methods specifically are affected by uncertainty, stemming from gaps in knowledge about ecosystem dynamics, human preferences and technical issues in the valuation process.

Thus, RECOVERY will include uncertainty issues in its valuation process in order to consider the limitations of valuation techniques in situations of radical uncertainty or ignorance about regime shifts and to investigate the robustness of the whole process, using Monte Carlo simulation. For this purpose, the “@RISK” software for risk & decision analysis will be used by UNIOVI.

Finally, the best scenario for each considered case-study will be selected, highlighting the main advantages and disadvantages that were detected during the whole process.

UNIOVI will lead this task, while the rest of the partners will be responsible for analysing the uncertainty issues that may arise in relation with their own countries.

### **3 - Interrelation with other work packages (please give WP No)**

Using the formulation from WP4, WP5 will provide the final input needed for determining which options will deliver the greatest benefits in relation to their costs, and its outputs will be used in WP6.

### **4 - Deliverables and milestones**

Although partners listed above will contribute to the relevant tasks, the partner referred to after the deliverable title will be responsible for the deliverable:

D5.1. Relevant market price data (UBER), Month 42.

D5.2. Investment and maintenance costs (GIG), Month 42.

D5.3. Best scenarios selection (UNIOVI), Month 45.

## B2-2 WORK PACKAGE DESCRIPTION

WP No 6

| Work package Title   | RESULTS DISSEMINATION                       | Person-Months |
|--|---|---------------|
| <b>WP Leader</b><br>(full name or acronym)   | Humboldt Universität zu Berlin (UBER)       | 11            |
| <b>Participants, linked third parties and subcontractors</b><br>(full name or acronym) | VŠB -Technická univerzita Ostrava (VŠB)     | 11            |
|  | Główny Instytut Górnictwa (GIG)             | 13            |
|  | Universidad de Oviedo (UNIOVI)              | 11            |
|  | Hulleras del Norte S.A. (HUNOSA)            | 5             |
|  | Tauron Wydobycie S.A. (TWD)                 | 2             |
|  | Palivový kombinát Ústí, státní podnik (PKÚ) | 7             |
|  |   |               |
| <b>Total</b>   |   | 60            |

**1 - Objectives**

The general objective of this work package is to support the dissemination and transfer of the project's knowledge and results to the whole European coal industry, policy makers and scientific community, ensuring a relevant impact on the competitiveness of the EU coal mining sector, and strengthening the environment policy-science interface at EU level.

Specific objectives are:

G6.1. To develop an innovative framework for land rehabilitation and ecological restoration of coal mining-affected areas, aiming to accelerate the recovery of degraded and transformed ecosystems to a good ecosystem status.

G6.2. To deliver 'Best practice guidelines' addressing both practitioners and policy makers, with special emphasis on the enforcement of EU waste management, climate, energy and biodiversity policies.

G6.3. To publish RECOVERY's results in open-access publications in high impact journals ranked Q1 or Q2 in the Journals Citation Report (JCR), and to present contributions at relevant European conferences.

G6.4. To develop a workshop addressing representatives and practitioners from all coal mining European companies as well as policy makers, about the developments and results generated by the project.

**2 - Work programme and distribution of tasks**

In order to achieve its objectives, this work package will be distributed in the following tasks:

**T6.1 Delivering an Innovative framework (UBER, all partners)**

From the lessons learned during the project, an innovative framework for land rehabilitation and ecological restoration of coal mining-affected areas during or after mine operations will be developed, led by UBER and with the cooperation of the rest of the partners, aiming to increase the impact of rehabilitation and ecological restoration actions on society and environment and demonstrating the opportunities to increase overall public welfare.

Conceived as 'Best practice guidelines' and addressing both practitioners and policy makers, the innovative framework will shift actual land rehabilitation and ecosystem restoration actions to novel goals allowing an optimal planning/prioritizing of this task in coal mining-affected areas.

Moreover, special emphasis will be focused on how these 'Best practice guidelines' enhance the delivery of EU waste management, climate, energy and biodiversity policies by the coal mining companies.

RECOVERY's 'Best practices guidelines' will be published in an electronic book format with ISBN and reported to every coal mining company, policy makers and other stakeholders across Europe. They will be available for free download from the project's web site.

In order to ensure a long-term dissemination of the knowledge gained and the dissemination of the project results, UNIOVI will take charge of and maintain the RECOVERY's project web page for at least five years after the project completion, including all the information and publications generated through the project.

**T6.2 Publications and presentations (UBER, VŠB, UNIOVI, GIG)**

At least three open access publications in high impact journals ranked Q1 or Q2 in the Journals Citation Reports, such as Resources Policy, Journal of Cleaner Production, Ecological Engineering, etc., will be published.

At least five presentations at relevant European conferences will be delivered, addressing mainly an overall description of RECOVERY's goals, methodology, and findings, in order to support a wide dissemination of the existence and results of this project.

**T6.3 Workshop on RECOVERY's results (GIG, TWD, all partners)**

Finally, a specific workshop about the developments and results generated during the project, together with its policy enforcement measures, will be held in Katowice (Poland), as it is the place of the major coal mining companies within the European Union, and representatives from all coal mining companies, policy maker bodies and other stakeholders across Europe will be invited.

The workshop will include a technical visit to Janina Mine's Libiąż waste heap where the attendants will see the conducted techniques to develop artificial substitutes for soils in the case of 'difficult terrains', and assess their effectiveness.

GIG will lead this task, with the participation of the rest of partners.

**3 - Interrelation with other work packages (please give WP No)**

This work package will use the inputs from the previous work packages in order to deliver the 'Best practice guidelines' and to disseminate the results of the project.

**4 - Deliverables and milestones**

Although partners listed above will contribute to the relevant tasks, the partner referred to after the deliverable title will be responsible for the deliverable.

D6.1. Best practice guidelines (UBER), Month 48.

D6.2. A set of three publications in high impact journals (UBER), Month 48.

D6.3. A set of five presentations at relevant European conferences (UBER). Month 48.

D6.4. Workshop on RECOVERY's developments and results (GIG), Month 48.



**B2-3 PROGRAMME BAR CHART (TASK, PARTNER, DELIVERABLES, MILESTONES)**

Assisted and Controlled Prof. Ares(2019)2673832 - 17/04/20 19

| Work Packages                         | Work package title                         | Deliv.  | Person-Months |           |           |           |           |           |           | 1 <sup>st</sup> year |    |     |    | 2 <sup>nd</sup> year |    |     |    | 3 <sup>rd</sup> year |    |     |    | 4 <sup>th</sup> year |    |     |    |
|---------------------------------------|--|---------|---------------|-----------|-----------|-----------|-----------|-----------|-----------|----------------------|----|-----|----|----------------------|----|-----|----|----------------------|----|-----|----|----------------------|----|-----|----|
|                                       |  |         | GIG           | UNI       | UBER      | VSB       | HUN       | TWD       | PKU       | I                    | II | III | IV | I                    | II | III | IV | I                    | II | III | IV | I                    | II | III | IV |
| <b>WP 1</b>                           | <b>PROJECT COORDINATION AND MANAGEMENT</b> |         |               |           |           |           |           |           |           |                      |    |     |    |                      |    |     |    |                      |    |     |    |                      |    |     |    |
| Task 1.1                              | Project coordination                       | D1.1,3  | 5             |           |           |           |           |           |           |                      |    |     |    |                      |    |     |    |                      |    |     |    |                      |    |     |    |
| Task 1.2                              | Project management and control             |         | 5             |           |           |           |           |           |           |                      |    |     |    |                      |    |     |    |                      |    |     |    |                      |    |     |    |
| Task 1.3                              | Website management                         | D1.2    |               | 4         |           |           |           |           |           |                      |    |     |    |                      |    |     |    |                      |    |     |    |                      |    |     |    |
| <b>WP 2</b>                           | <b>ASSESSMENT OF ECOSYSTEM SERVICES</b>    |         |               |           |           |           |           |           |           |                      |    |     |    |                      |    |     |    |                      |    |     |    |                      |    |     |    |
| Task 2.1                              | Baseline mapping of ecosystems             | D2.1-5  | 4             | 4         | 4         | 9         | 2         | 2         | 6         |                      |    |     |    |                      |    |     |    |                      |    |     |    |                      |    |     |    |
| Task 2.2                              | Assessment of ecosystem services           | D2.6-10 | 6             | 6         | 6         | 12        | 2         | 2         | 6         |                      |    |     |    |                      |    |     |    |                      |    |     |    |                      |    |     |    |
| Task 2.3                              | GIS web interface                          | D2.11   | 1             | 6         | 1         | 1         | 1         | 1         | 1         |                      |    |     |    |                      |    |     |    |                      |    |     |    |                      |    |     |    |
| <b>WP 3</b>                           | <b>GENERATION OF SCENARIOS</b>             |         |               |           |           |           |           |           |           |                      |    |     |    |                      |    |     |    |                      |    |     |    |                      |    |     |    |
| Task 3.1                              | Blueprint instrument/indicator             | D3.1    | 6             | 9         | 12        | 6         |           |           |           |                      |    |     |    |                      |    |     |    |                      |    |     |    |                      |    |     |    |
| Task 3.2                              | Artificial substitutes for soils           | D3.2    | 12            |           |           |           |           | 7         |           |                      |    |     |    |                      |    |     |    |                      |    |     |    |                      |    |     |    |
| Task 3.3                              | Assessing rehabilitation techniques        | D3.3    |               | 2         |           | 9         | 2         |           |           |                      |    |     |    |                      |    |     |    |                      |    |     |    |                      |    |     |    |
| Task 3.4                              | Formulating alternative actions            | D3.4-7  | 6             | 6         | 6         | 9         | 6         | 2         | 9         |                      |    |     |    |                      |    |     |    |                      |    |     |    |                      |    |     |    |
| Task 3.5                              | Expanding GIS web interface                | D3.8    | 1             | 6         | 1         | 1         | 1         | 1         | 1         |                      |    |     |    |                      |    |     |    |                      |    |     |    |                      |    |     |    |
| <b>WP 4</b>                           | <b>EVALUATING ECOSYSTEM SERVICES</b>       |         |               |           |           |           |           |           |           |                      |    |     |    |                      |    |     |    |                      |    |     |    |                      |    |     |    |
| Task 4.1                              | Selection of suitable indicators           | D4.1    | 2             | 2         | 4         | 3         | 2         | 2         | 4         |                      |    |     |    |                      |    |     |    |                      |    |     |    |                      |    |     |    |
| Task 4.2                              | Defining valuation techniques              | D4.2    | 2             | 6         | 2         | 2         |           |           |           |                      |    |     |    |                      |    |     |    |                      |    |     |    |                      |    |     |    |
| Task 4.3                              | Selecting adequate discount rates          | D4.3    | 1             | 3         | 1         | 1         |           |           |           |                      |    |     |    |                      |    |     |    |                      |    |     |    |                      |    |     |    |
| <b>WP 5</b>                           | <b>COST-BENEFIT ASSESSMENT</b>             |         |               |           |           |           |           |           |           |                      |    |     |    |                      |    |     |    |                      |    |     |    |                      |    |     |    |
| Task 5.1                              | Collecting relevant market price data      | D5.1    | 6             | 6         | 6         | 6         | 2         | 1         | 6         |                      |    |     |    |                      |    |     |    |                      |    |     |    |                      |    |     |    |
| Task 5.2                              | Collecting costs                           | D5.2    | 8             | 4         | 4         | 4         | 4         | 1         | 4         |                      |    |     |    |                      |    |     |    |                      |    |     |    |                      |    |     |    |
| Task 5.3                              | Estimating NPV and uncertainty             | D5.3    | 2             | 4         | 2         | 2         | 2         | 1         | 2         |                      |    |     |    |                      |    |     |    |                      |    |     |    |                      |    |     |    |
| <b>WP 6</b>                           | <b>RESULTS DISSEMINATION</b>               |         |               |           |           |           |           |           |           |                      |    |     |    |                      |    |     |    |                      |    |     |    |                      |    |     |    |
| Task 6.1                              | Delivering an innovative framework         | D6.1    | 6             | 6         | 6         | 6         | 4         | 1         | 6         |                      |    |     |    |                      |    |     |    |                      |    |     |    |                      |    |     |    |
| Task 6.2                              | Publications and presentations             | D6.2,3  | 4             | 4         | 4         | 4         |           |           |           |                      |    |     |    |                      |    |     |    |                      |    |     |    |                      |    |     |    |
| Task 6.3                              | Workshop on RECOVERY's results             | D6.4    | 3             | 1         | 1         | 1         | 1         | 1         | 1         |                      |    |     |    |                      |    |     |    |                      |    |     |    |                      |    |     |    |
| <b>Total Person-Months on project</b> |  |         | <b>80</b>     | <b>79</b> | <b>60</b> | <b>76</b> | <b>29</b> | <b>22</b> | <b>46</b> |                      |    |     |    |                      |    |     |    |                      |    |     |    |                      |    |     |    |

ESTIMATED BUDGET FOR THE ACTION (page 1 of 2)

| Estimated eligible <sup>1</sup> costs (per budget category) |                           |                   |                                   |             |                   |        |                       |                  |                                | EU contribution    |                                |                    | Additional information                           |                      |                                      |                                   |                                |                          |   |                                      |  |  |
|---|---------------------------|-------------------|-----------------------------------|-------------|-------------------|--------|-----------------------|------------------|--------------------------------|--------------------|--------------------------------|--------------------|--|----------------------|--------------------------------------|-----------------------------------|--------------------------------|--------------------------|---|--------------------------------------|--|--|
| Form of costs <sup>6</sup>                                  | A. Direct personnel costs |                   | B. Direct costs of subcontracting |             | C. Not applicable |        | D. Other direct costs |                  | E. Indirect costs <sup>2</sup> |                    | F. Not applicable <sup>5</sup> |                    | Total costs                                      | Reimbursement rate % | Maximum EU contribution <sup>3</sup> | Maximum grant amount <sup>4</sup> | Information for indirect costs | Information for auditors | Other information:  |                                      |  |  |
|   | Actual                    | Unit <sup>7</sup> | Unit <sup>8</sup>                 |             | Actual            | Actual | Actual                | Actual           | Flat-rate <sup>9</sup>         | Unit <sup>10</sup> |                                | Unit <sup>11</sup> |  |                      |                                      |                                   |                                |                          |   |                                      |  |  |
|   | a                         | Total b           | No hours                          | Total c     | d                 | [e]    | f                     | f1               | $g = 0,35 \times (a+c)^{12}$   | No units           | Total [h1]                     | Total [h2]         | (i)=<br>a+b+c+<br>d+[e]+f<br>+f1+<br>g+[h1]+[h2] | j                    | k                                    | l                                 | m                              | Yes/No                   | Estimated costs of in-kind contributions not used on premises | Declaration of costs under Point D.4 | Estimated costs of beneficiaries/linked third parties not receiving EU funding |  |
| 1. GIG  | 337,216.00                |                   |                                   | 0.00        | 0.00              |        | 0.00                  | 25,100.00        | 118,025.60                     |                    |                                |                    | 480,341.60                                       | 60.00                | 288,204.96                           |                                   |                                |                          |   |                                      |  |  |
| 2. UNIOVI   | 316,000.00                |                   |                                   | 0.00        | 0.00              |        | 0.00                  | 4,000.00         | 110,600.00                     |                    |                                |                    | 430,600.00                                       | 60.00                | 258,360.00                           |                                   |                                |                          |   |                                      |  |  |
| 3. UBER   | 180,000.00                |                   |                                   | 0.00        | 0.00              |        | 1,543.00              | 5,000.00         | 63,000.00                      |                    |                                |                    | 249,543.00                                       | 60.00                | 149,725.80                           |                                   |                                |                          |   |                                      |  |  |
| 4. VSB  | 256,000.00                |                   |                                   | 0.00        | 0.00              |        | 0.00                  | 10,000.00        | 89,600.00                      |                    |                                |                    | 355,600.00                                       | 60.00                | 213,360.00                           |                                   |                                |                          |   |                                      |  |  |
| 5. HUNOSA   | 187,050.00                |                   |                                   | 0.00        | 0.00              |        | 0.00                  | 10,000.00        | 65,467.50                      |                    |                                |                    | 262,517.50                                       | 60.00                | 157,510.50                           |                                   |                                |                          |   |                                      |  |  |
| 6. TWD  | 46,500.00                 |                   |                                   | 0.00        | 0.00              |        | 0.00                  | 45,800.00        | 16,275.00                      |                    |                                |                    | 108,575.00                                       | 60.00                | 65,145.00                            |                                   |                                |                          |   |                                      |  |  |
| 7. PKU  | 69,000.00                 |                   |                                   | 0.00        | 0.00              |        | 0.00                  | 0.00             | 24,150.00                      |                    |                                |                    | 93,150.00  | 60.00                | 55,890.00                            |                                   |                                |                          |   |                                      |  |  |
| <b>Total consortium</b>                                     | <b>1,391,766.00</b>       |                   | <b>0.00</b>                       | <b>0.00</b> | <b>0.00</b>       |        | <b>1,543.00</b>       | <b>99,900.00</b> | <b>487,118.10</b>              |                    |                                |                    | <b>1,980,327.10</b>                              |                      | <b>1,188,196.26</b>                  | <b>1,188,196.26</b>               |                                |                          |   |                                      |  |  |

ESTIMATED BUDGET FOR THE ACTION (page 2 of 2)

- (1) See Article 6 for the eligibility conditions
- (2) The indirect costs covered by the operating grant (received under any EU or Euratom funding programme; see Article 6.5.(b)) are ineligible under the GA. Therefore, a beneficiary that receives an operating grant during the action's duration cannot declare indirect costs for the year(s)/reporting period(s) covered by the operating grant (see Article 6.2.E).
- (3) This is the theoretical amount of EU contribution that the system calculates automatically (by multiplying all the budgeted costs by the reimbursement rate). This theoretical amount is capped by the 'maximum grant amount' (that the Commission/Agency decided to grant for the action) (see Article 5.1).
- (4) The 'maximum grant amount' is the maximum grant amount decided by the Commission/Agency. It normally corresponds to the requested grant, but may be lower.
- (5) Not applicable.
- (6) See Article 5 for the forms of costs
- (7) Unit : hours worked on the action; costs per unit (hourly rate) : calculated according to beneficiary's usual accounting practice
- (8) See Annex 2a 'Additional information on the estimated budget' for the details (costs per hour (hourly rate)).
- (9) Flat rate : 35% of direct personnel costs (see Article 6.2 point A)
- (10) Not applicable.
- (11) Not applicable.
- (12) Not applicable.
- (13) See Article 9 for beneficiaries not receiving EU funding
- (14) Only for linked third parties that receive EU funding

**ACCESSION FORM FOR BENEFICIARIES**

**UNIVERSIDAD DE OVIEDO (UNIOVI)**, established in CALLE SAN FRANCISCO 3, OVIEDO 33003, Spain, VAT number: ESQ3318001I, ('the beneficiary'), represented for the purpose of signing this Accession Form by the undersigned,

**hereby agrees**

**to become *beneficiary*** No ('2')

**in Grant Agreement No** 847205 ('the Agreement')

**between** GLOWNY INSTYTUT GORNICITWA **and** the European Union ('the EU', represented by the European Commission ('the Commission'))

**for the action entitled** 'RECOVERY of degraded and transformed ecosystems in coal mining-affected areas (RECOVERY)'.

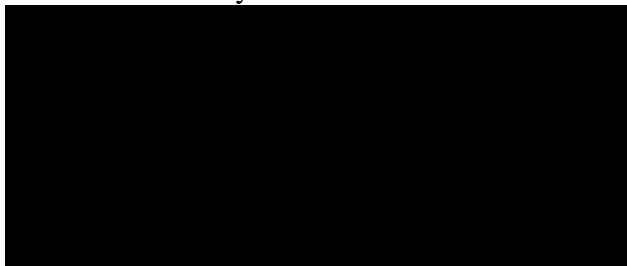
***and mandates***

***the coordinator*** to submit and sign in its name and on its behalf any ***amendments*** to the Agreement, in accordance with Article 55.

By signing this Accession Form, the beneficiary accepts the grant and agrees to implement the grant in accordance with the Agreement, with all the obligations and conditions it sets out.

SIGNATURE

For the beneficiary



**ACCESSION FORM FOR BENEFICIARIES**

**HUMBOLDT-UNIVERSITAET ZU BERLIN (UBER)**, established in UNTER DEN LINDEN 6, BERLIN 10099, Germany, VAT number: DE137176824, ('the beneficiary'), represented for the purpose of signing this Accession Form by the undersigned,

**hereby agrees**

**to become *beneficiary*** No ('3')

**in Grant Agreement No** 847205 ('the Agreement')

**between** GLOWNY INSTYTUT GORNICTWA **and** the European Union ('the EU', represented by the European Commission ('the Commission'))

**for the action entitled** 'RECOVERY of degraded and transformed ecosystems in coal mining-affected areas (RECOVERY)'.

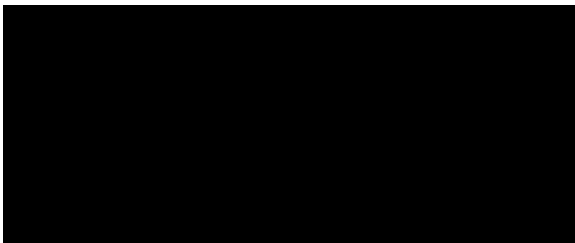
*and mandates*

*the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 55.*

By signing this Accession Form, the beneficiary accepts the grant and agrees to implement the grant in accordance with the Agreement, with all the obligations and conditions it sets out.

SIGNATURE

For the beneficiary



## ACCESSION FORM FOR BENEFICIARIES

**VYSOKA SKOLA BANSKA - TECHNICKA UNIVERZITA OSTRAVA (VSB)**, established in 17 LISTOPADU 15/2172, OSTRAVA PORUBA 708 00, Czech Republic, VAT number: CZ61989100, ('the beneficiary'), represented for the purpose of signing this Accession Form by the undersigned,

**hereby agrees**

**to become *beneficiary*** No ('4')

**in Grant Agreement No** 847205 ('the Agreement')

**between** GLOWNY INSTYTUT GORNICHTWA **and** the European Union ('the EU', represented by the European Commission ('the Commission'))

**for the action entitled** 'RECOVERY of degraded and transformed ecosystems in coal mining-affected areas (RECOVERY)'.

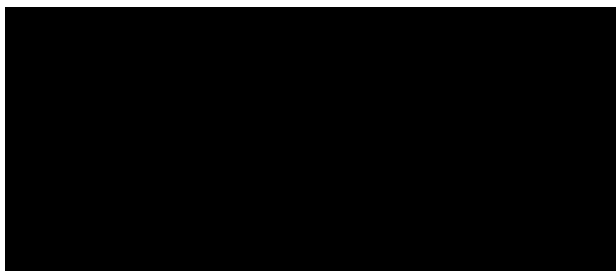
*and mandates*

*the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 55.*

By signing this Accession Form, the beneficiary accepts the grant and agrees to implement the grant in accordance with the Agreement, with all the obligations and conditions it sets out.

SIGNATURE

For the beneficiary



## ACCESSION FORM FOR BENEFICIARIES

**HULLERAS DEL NORTE SA (HUNOSA)**, established in AVDA. DE GALICIA 44, OVIEDO 33005, Spain, VAT number: ESA28185684, ('the beneficiary'), represented for the purpose of signing this Accession Form by the undersigned,

**hereby agrees**

**to become *beneficiary*** No ('5')

**in Grant Agreement No** 847205 ('the Agreement')

**between** GLOWNY INSTYTUT GORNICTWA **and** the European Union ('the EU', represented by the European Commission ('the Commission'))

**for the action entitled** 'RECOVERY of degraded and transformed ecosystems in coal mining-affected areas (RECOVERY)'.

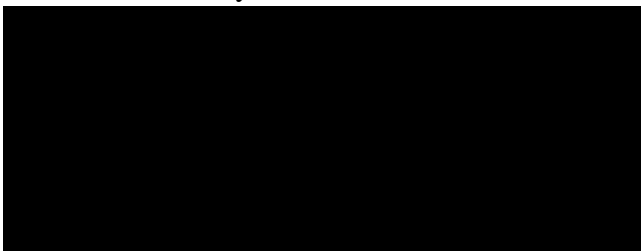
*and mandates*

*the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 55.*

By signing this Accession Form, the beneficiary accepts the grant and agrees to implement the grant in accordance with the Agreement, with all the obligations and conditions it sets out.

SIGNATURE

For the beneficiary



## **ACCESSION FORM FOR BENEFICIARIES**

**TAURON WYDOBYCIE SPOLKA AKCYJNA (TWD)**, established in UL. GRUNWALDZKA 37, JAWORZNO 43 600, Poland, VAT number: PL6321880539, ('the beneficiary'), represented for the purpose of signing this Accession Form by the undersigned,

**hereby agrees**

**to become *beneficiary*** No ('6')

**in Grant Agreement No** 847205 ('the Agreement')

**between** GLOWNY INSTYTUT GORNICTWA **and** the European Union ('the EU', represented by the European Commission ('the Commission'))

**for the action entitled** 'RECOVERY of degraded and transformed ecosystems in coal mining-affected areas (RECOVERY)'.

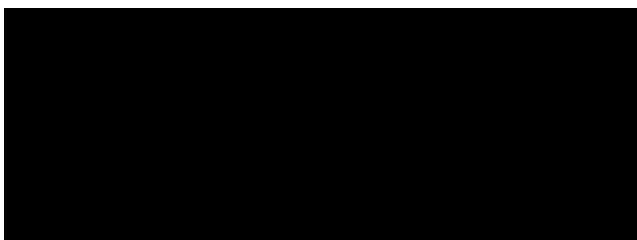
***and mandates***

***the coordinator*** to submit and sign in its name and on its behalf any ***amendments*** to the Agreement, in accordance with Article 55.

By signing this Accession Form, the beneficiary accepts the grant and agrees to implement the grant in accordance with the Agreement, with all the obligations and conditions it sets out.

SIGNATURE

For the beneficiary





## **ACCESSION FORM FOR BENEFICIARIES**

**PALIVOVY KOMBINAT USTI STATNI PODNIK (PKU)**, established in HRBOVICKA 2, CHLUMEC 40339, Czech Republic, VAT number: CZ00007536, ('the beneficiary'), represented for the purpose of signing this Accession Form by the undersigned,

**hereby agrees**

**to become *beneficiary*** No ('7')

**in Grant Agreement No** 847205 ('the Agreement')

**between** GLOWNY INSTYTUT GORNICHTWA **and** the European Union ('the EU', represented by the European Commission ('the Commission'))

**for the action entitled** 'RECOVERY of degraded and transformed ecosystems in coal mining-affected areas (RECOVERY)'.

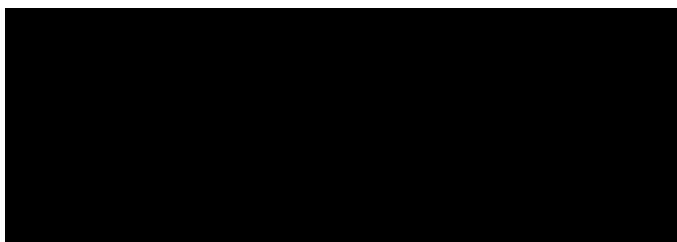
*and mandates*

*the coordinator to submit and sign in its name and on its behalf any **amendments** to the Agreement, in accordance with Article 55.*

By signing this Accession Form, the beneficiary accepts the grant and agrees to implement the grant in accordance with the Agreement, with all the obligations and conditions it sets out.

SIGNATURE

For the beneficiary



print  
format A4  
landscape

MODEL ANNEX 4 FOR RFCS MGA

FINANCIAL STATEMENT FOR [BENEFICIARY [name]/ LINKED THIRD PARTY [name]] FOR REPORTING PERIOD [reporting period]

| Eligible <sup>1</sup> costs (per budget category)   |        |                               |  |                                   |                   |                       |               |                                |                   |                             |             |   | Receipts             | EU contribution                      |                           | Additional information<br>Information for indirect costs:<br>Costs of in-kind contributions not used on premises<br>o |          |                      |                                      |
|---|--------|-------------------------------|--|-----------------------------------|-------------------|-----------------------|---------------|--------------------------------|-------------------|-----------------------------|-------------|---|----------------------|--------------------------------------|---------------------------|---|----------|----------------------|--------------------------------------|
| A. Direct personnel costs   |        |                               |  | B. Direct costs of subcontracting | C. Not applicable | D. Other direct costs |               | E. Indirect costs <sup>2</sup> | F. Not applicable |                             | Total costs | Receipts  | Reimbursement rate % | Maximum EU contribution <sup>3</sup> | Requested EU contribution |   |          |                      |                                      |
| A.1 Employees (or equivalent)   |        | A.4 SME owners without salary |  |                                   |                   | D.1 Not applicable    | D.2 Equipment | D.3 Operating costs            |                   |                             |             | Receipts of the action, to be reported in the last reporting period, according to Article 5.3.3 |                      |                                      |                           |   |          |                      |                                      |
| A.2 Natural persons under direct<br>A.3 Seconded persons<br>[A.6 Personnel for providing access to research infrastructure] |        | A.5 Beneficiaries that        |  |                                   |                   | Total costs           |               |                                |                   |                             |             |   |                      |                                      |                           |   | Receipts | Reimbursement rate % | Maximum EU contribution <sup>3</sup> |
| Form of costs <sup>4</sup>  | Actual | Unit                          |  | Actual                            | Actual            | Actual                | Actual        | Flat-rate <sup>5</sup><br>35%  | Unit              |                             | Unit        |   |                      |                                      |                           |   |          |                      |                                      |
|   | a      | Total b                       |  | No hours                          | Total c           | d                     | [e]           | f                              | f1                | h=0,35 x (a+c) <sup>6</sup> | No units    | Total [i1]  | Total [i2]           | j = a+b+c+d-[e] +f+f1+h+[i1] +[i2]   | k                         | l   | m        | n                    |                                      |
| [short name beneficiary /linked third party]  |        |                               |  |                                   |                   |                       |               |                                |                   |                             |             |   |                      |                                      |                           |   |          |                      |                                      |

The beneficiary/linked third party hereby confirms that:  
 The information provided is complete, reliable and true.  
 The costs declared are eligible (see Article 6).  
 The costs can be substantiated by adequate records and supporting documentation that will be produced upon request or in the context of checks, reviews, audits and investigations (see Articles 17, 18 and 22).  
 For the last reporting period: that all the receipts have been declared (see Article 5.3.3).

<sup>1</sup> Please declare all eligible costs, even if they exceed the amounts indicated in the estimated budget (see Annex 2). Only amounts that were declared in your individual financial statements can be taken into account later on, in order to replace other costs that are found to be ineligible.

<sup>1</sup> See Article 6 for the eligibility conditions

<sup>2</sup> The indirect costs claimed must be free of any amounts covered by an operating grant (received under any EU or Euratom funding programme; see Article 6.2.E). If you have received an operating grant during this reporting period, you cannot claim any indirect costs.

<sup>3</sup> This is the theoretical amount of EU contribution that the system calculates automatically (by multiplying the reimbursement rate by the total costs declared). The amount you request (in the column 'requested EU contribution') may have to be less (e.g. if you and the other beneficiaries are above budget, if the 80% limit (see Article 21) is reached, etc).

<sup>4</sup> See Article 5 for the form of costs

<sup>5</sup> Flat rate : 35% of direct personnel costs (see Article 6.2 point A)

<sup>6</sup> Not applicable

**ANNEX 5**

**MODEL FOR THE CERTIFICATE ON THE FINANCIAL STATEMENTS**

- For options [*in italics in square brackets*]: choose the applicable option. Options not chosen should be deleted.
- For fields in [grey in square brackets]: enter the appropriate data

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**TERMS OF REFERENCE FOR AN INDEPENDENT REPORT OF FACTUAL FINDINGS ON COSTS DECLARED UNDER A GRANT AGREEMENT FINANCED UNDER RESEARCH FUND FOR COAL AND STEEL (RFCS) PROGRAMME ..... 2**

**INDEPENDENT REPORT OF FACTUAL FINDINGS ON COSTS DECLARED UNDER A GRANT AGREEMENT FINANCED UNDER RESEARCH FUND FOR COAL AND STEEL (RFCS) PROGRAMME..... 5**

## **Terms of Reference for an Independent Report of Factual Findings on costs declared under a Grant Agreement financed under the Research Fund for Coal and Steel (RFCS) Programme**

This document sets out the ‘**Terms of Reference (ToR)**’ under which

[*OPTION 1: [insert name of the beneficiary] (‘the Beneficiary’)*] [*OPTION 2: [insert name of the linked third party] (‘the Linked Third Party’), third party linked to the Beneficiary [insert name of the beneficiary] (‘the Beneficiary’)*]

agrees to engage

[**insert legal name of the auditor**] (‘the Auditor’)

to produce an independent report of factual findings (‘the Report’) concerning the Financial Statement(s)<sup>1</sup> drawn up by the [*Beneficiary*] [*Linked Third Party*] for the RFCS grant agreement [insert number of the grant agreement, title of the action, acronym and duration from/to] (‘the Agreement’), and

to issue a Certificate on the Financial Statements’ (‘CFS’) referred to in Article 20.3 of the Agreement based on the compulsory reporting template stipulated by the Commission.

The Agreement has been concluded under the **Research Fund for Coal and Steel (RFCS) Programme** between the Beneficiary and *the European Union, represented by the European Commission (‘the Commission’)*.

The Commission is mentioned as a signatory of the Agreement with the Beneficiary only. The European Union is not a party to this engagement.

### **1.1 Subject of the engagement**

The coordinator must submit to the Commission the periodic financial report within 60 days following the end of the reporting period which should include, amongst other documents, a CFS for each beneficiary and for each linked third party that requests a total contribution of EUR 200 000 or more, as reimbursement of actual costs (see Article 20.3 of the Agreement).<sup>2</sup>

The Beneficiary must submit to the coordinator the CFS for itself and for its linked third party(ies), if the CFS must be included in the periodic financial report according to Article 20.3 of the Agreement.

The CFS is composed of two separate documents:

- The Terms of Reference (‘the ToR’) to be signed by the [*Beneficiary*] [*Linked Third Party*] and the Auditor;
- The Auditor’s Independent Report of Factual Findings (‘the Report’) to be issued on the Auditor’s letterhead, dated, stamped and signed by the Auditor (or the competent public officer) which includes the agreed-upon procedures (‘the Procedures’) to be performed by the Auditor, and the standard factual findings (‘the Findings’) to be confirmed by the Auditor.

<sup>1</sup> By which costs under the Agreement are declared (see template ‘Model Financial Statements’ in Annex 4 to the Grant Agreement).

<sup>2</sup> a ‘certificate on the financial statements’ is requested, if the (cumulative) amount of payments requested as reimbursement of actual costs (and for which no certificate has yet been submitted) is EUR 200 000 or more and the maximum grant amount indicated, for that beneficiary, in the estimated budget as reimbursement of actual costs is EUR 750 000 or more.

If the CFS must be included in the periodic financial report according to Article 20.3 of the Agreement, the request for payment of the balance relating to the Agreement cannot be made without the CFS. However, the payment for reimbursement of costs covered by the CFS does not preclude the Commission, the European Anti-Fraud Office and the European Court of Auditors from carrying out checks, reviews, audits and investigations in accordance with Article 22 of the Agreement.

## 1.2 Responsibilities

The *[Beneficiary]* *[Linked Third Party]*:

- must draw up the Financial Statement(s) for the action financed by the Agreement in compliance with the obligations under the Agreement. The Financial Statement(s) must be drawn up according to the *[Beneficiary's]* *[Linked Third Party's]* accounting and book-keeping system and the underlying accounts and records;
- must send the Financial Statement(s) to the Auditor;
- is responsible and liable for the accuracy of the Financial Statement(s);
- is responsible for the completeness and accuracy of the information provided to enable the Auditor to carry out the Procedures. It must provide the Auditor with a written representation letter supporting these statements. The written representation letter must state the period covered by the statements and must be dated;
- accepts that the Auditor cannot carry out the Procedures unless it is given full access to the *[Beneficiary's]* *[Linked Third Party's]* staff and accounting as well as any other relevant records and documentation.

The Auditor:

- *[Option 1 by default: is qualified to carry out statutory audits of accounting documents in accordance with Directive 2006/43/EC of the European Parliament and of the Council of 17 May 2006 on statutory audits of annual accounts and consolidated accounts, amending Council Directives 78/660/EEC and 83/349/EEC and repealing Council Directive 84/253/EEC or similar national regulations].*
- *[Option 2 if the Beneficiary or Linked Third Party has an independent Public Officer: is a competent and independent Public Officer for which the relevant national authorities have established the legal capacity to audit the Beneficiary].*
- *[Option 3 if the Beneficiary or Linked Third Party is an international organisation: is an [internal] [external] auditor in accordance with the internal financial regulations and procedures of the international organisation].*

The Auditor:

- must be independent from the Beneficiary *[and the Linked Third Party]*, in particular, it must not have been involved in preparing the *[Beneficiary's]* *[Linked Third Party's]* Financial Statement(s);
- must plan work so that the Procedures may be carried out and the Findings may be assessed;
- must adhere to the Procedures laid down and the compulsory report format;
- must carry out the engagement in accordance with this ToR;
- must document matters which are important to support the Report;
- must base its Report on the evidence gathered;
- must submit the Report to the *[Beneficiary]* *[Linked Third Party]*.

The Commission sets out the Procedures to be carried out by the Auditor. The Auditor is not responsible for their suitability or pertinence. As this engagement is not an assurance engagement, the Auditor does not provide an audit opinion or a statement of assurance.

## 1.3 Applicable Standards

The Auditor must comply with these Terms of Reference and with<sup>3</sup>:

- the International Standard on Related Services ('ISRS') 4400 *Engagements to perform Agreed-upon Procedures regarding Financial Information* as issued by the International Auditing and Assurance Standards Board (IAASB);
- the *Code of Ethics for Professional Accountants* issued by the International Ethics Standards Board for Accountants (IESBA). Although ISRS 4400 states that independence is not a requirement for engagements to carry out agreed-upon procedures, the Commission requires that the Auditor also complies with the Code's independence requirements.

The Auditor's Report must state that there is no conflict of interests in establishing this Report between the Auditor and the Beneficiary [*and the Linked Third Party*], and must specify - if the service is invoiced - the total fee paid to the Auditor for providing the Report.

## 1.4 Reporting

The Report must be written in the language of the Agreement (see Article 20.7).

Under Article 22 of the Agreement, the Commission, the European Anti-Fraud Office and the Court of Auditors have the right to audit any work that is carried out under the action and for which costs are declared from [*the European Union*] [*Euratom*] budget. This includes work related to this engagement. The Auditor must provide access to all working papers (e.g. recalculation of hourly rates, verification of the time declared for the action) related to this assignment if the Commission, the European Anti-Fraud Office or the European Court of Auditors requests them.

## 1.5 Timing

The Report must be provided by [dd Month yyyy].

## 1.6 Other terms

[*The [Beneficiary] [Linked Third Party] and the Auditor can use this section to agree other specific terms, such as the Auditor's fees, liability, applicable law, etc. Those specific terms must not contradict the terms specified above.*]

[legal name of the Auditor]

[name & function of authorised representative]

[dd Month yyyy]

Signature of the Auditor

[legal name of the [Beneficiary][Linked Third Party]]

[name & function of authorised representative]

[dd Month yyyy]

Signature of the [Beneficiary][Linked Third Party]

<sup>3</sup> Supreme Audit Institutions applying INTOSAI-standards may carry out the Procedures according to the corresponding International Standards of Supreme Audit Institutions and code of ethics issued by INTOSAI instead of the International Standard on Related Services ('ISRS') 4400 and the Code of Ethics for Professional Accountants issued by the IAASB and the IESBA.

## Independent Report of Factual Findings on costs declared under Research Fund for Coal and Steel (RFCS) Programme

(To be printed on the Auditor's letterhead)

To  
[ name of contact person(s)], [Position]  
[ [Beneficiary's] [Linked Third Party's] name ]  
[ Address]  
[ dd Month yyyy]

Dear [Name of contact person(s)],

As agreed under the terms of reference dated [dd Month yyyy]

with [OPTION 1: [insert name of the beneficiary] ('the Beneficiary')] [OPTION 2: [insert name of the linked third party] ('the Linked Third Party'), third party linked to the Beneficiary [insert name of the beneficiary] ('the Beneficiary')],

we  
[name of the auditor] ('the Auditor'),  
established at  
[full address/city/state/province/country],  
represented by  
[name and function of an authorised representative],

have carried out the procedures agreed with you regarding the costs declared in the Financial Statement(s)<sup>4</sup> of the [Beneficiary] [Linked Third Party] concerning the grant agreement [insert grant agreement reference: number, title of the action and acronym] ('the Agreement'),

with a total cost declared of  
[total amount] EUR,

and a total of actual costs declared of

[sum of total actual costs] EUR

and **hereby provide our Independent Report of Factual Findings ('the Report')** using the compulsory report format agreed with you.

### **The Report**

Our engagement was carried out in accordance with the terms of reference ('the ToR') appended to this Report. The Report includes the agreed-upon procedures ('the Procedures') carried out and the standard factual findings ('the Findings') examined.

The Procedures were carried out solely to assist the Commission in evaluating whether the [Beneficiary's] [Linked Third Party's] costs in the accompanying Financial Statement(s) were

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<sup>4</sup> By which the Beneficiary declares costs under the Agreement (see template 'Model Financial Statement' in Annex 4 to the Agreement).

RFCS MGA — Multi: dd.mm.2015

declared in accordance with the Agreement. The Commission draws its own conclusions from the Report and any additional information it may require.

The scope of the Procedures was defined by the Commission. Therefore, the Auditor is not responsible for their suitability or pertinence. Since the Procedures carried out constitute neither an audit nor a review made in accordance with International Standards on Auditing or International Standards on Review Engagements, the Auditor does not give a statement of assurance on the Financial Statements.

Had the Auditor carried out additional procedures or an audit of the [Beneficiary's] [Linked Third Party's] Financial Statements in accordance with International Standards on Auditing or International Standards on Review Engagements, other matters might have come to its attention and would have been included in the Report.

### **Not applicable Findings**

We examined the Financial Statement(s) stated above and considered the following Findings not applicable:

*Explanation (to be removed from the Report):*

*If a Finding was not applicable, it must be marked as 'N.A.' ('Not applicable') in the corresponding row on the right-hand column of the table and means that the Finding did not have to be corroborated by the Auditor and the related Procedure(s) did not have to be carried out.*

*The reasons of the non-application of a certain Finding must be obvious i.e.*

- i) if no cost was declared under a certain category then the related Finding(s) and Procedure(s) are not applicable;*
- ii) if the condition set to apply certain Procedure(s) are not met the related Finding(s) and those Procedure(s) are not applicable. For instance, for 'beneficiaries with accounts established in a currency other than euro' the Procedure and Finding related to 'beneficiaries with accounts established in euro' are not applicable. Similarly, if no additional remuneration is paid, the related Finding(s) and Procedure(s) for additional remuneration are not applicable.*

**List here all Findings considered not applicable for the present engagement and explain the reasons of the non-applicability.**

....

### **Exceptions**

Apart from the exceptions listed below, the [Beneficiary] [Linked Third Party] provided the Auditor all the documentation and accounting information needed by the Auditor to carry out the requested Procedures and evaluate the Findings.

*Explanation (to be removed from the Report):*

- If the Auditor was not able to successfully complete a procedure requested, it must be marked as 'E' ('Exception') in the corresponding row on the right-hand column of the table. The reason such as the inability to reconcile key information or the unavailability of data that prevents the Auditor from carrying out the Procedure must be indicated below.*
- If the Auditor cannot corroborate a standard finding after having carried out the corresponding procedure, it must also be marked as 'E' ('Exception') and, where possible, the reasons why the Finding was not fulfilled and its possible impact must be explained here below.*

**List here any exceptions and add any information on the cause and possible consequences of each exception, if known. If the exception is quantifiable, include the corresponding amount.**

....

*Example (to be removed from the Report):*

- 1. The Beneficiary was unable to substantiate the Finding number 1 on ... because ....*
- 2. After carrying out the agreed procedures to confirm the Finding number 31, the Auditor found a difference of \_\_\_\_\_ EUR. The difference can be explained by ...*



## **Further Remarks**

In addition to reporting on the results of the specific procedures carried out, the Auditor would like to make the following general remarks:

*Example (to be removed from the Report):*

1. *Regarding Finding number 8 the conditions for additional remuneration were considered as fulfilled because ...*
2. *In order to be able to confirm the Finding number 15 we carried out the following additional procedures: ....*

## **Use of this Report**

This Report may be used only for the purpose described in the above objective. It was prepared solely for the confidential use of the [Beneficiary] [Linked Third Party] and the Commission, and only to be submitted to the Commission in connection with the requirements set out in Article 20.3 of the Agreement. The Report may not be used by the [Beneficiary] [Linked Third Party] or by the Commission for any other purpose, nor may it be distributed to any other parties. The Commission may only disclose the Report to authorised parties, in particular to the European Anti-Fraud Office (OLAF) and the European Court of Auditors.

This Report relates only to the Financial Statement(s) submitted to the Commission by the [Beneficiary] [Linked Third Party] for the Agreement. Therefore, it does not extend to any other of the [Beneficiary's] [Linked Third Party's] Financial Statement(s).

There was no conflict of interest<sup>5</sup> between the Auditor and the Beneficiary [and Linked Third Party] in establishing this Report. The total fee paid to the Auditor for providing the Report was EUR [ ] (including EUR [ ] of deductible VAT).

We look forward to discussing our Report with you and would be pleased to provide any further information or assistance.

[legal name of the Auditor]

[name and function of an authorised representative]

[dd Month yyyy]

Signature of the Auditor

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<sup>5</sup> A conflict of interest arises when the Auditor's objectivity to establish the certificate is compromised in fact or in appearance when the Auditor for instance:

- was involved in the preparation of the Financial Statements;
- stands to benefit directly should the certificate be accepted;
- has a close relationship with any person representing the beneficiary;
- is a director, trustee or partner of the beneficiary; or
- is in any other situation that compromises his or her independence or ability to establish the certificate impartially.

**Agreed-upon procedures to be performed and standard factual findings to be confirmed by the Auditor**

The Commission reserves the right to i) provide the auditor with additional guidance regarding the procedures to be followed or the facts to be ascertained and the way in which to present them (this may include sample coverage and findings) or to ii) change the procedures, by notifying the Beneficiary in writing. The procedures carried out by the auditor to confirm the standard factual finding are listed in the table below.

If this certificate relates to a Linked Third Party, any reference here below to ‘the Beneficiary’ is to be considered as a reference to ‘the Linked Third Party’.

The ‘result’ column has three different options: ‘C’, ‘E’ and ‘N.A.’:

- ‘C’ stands for ‘confirmed’ and means that the auditor can confirm the ‘standard factual finding’ and, therefore, there is no exception to be reported.
- ‘E’ stands for ‘exception’ and means that the Auditor carried out the procedures but cannot confirm the ‘standard factual finding’, or that the Auditor was not able to carry out a specific procedure (e.g. because it was impossible to reconcile key information or data were unavailable),
- ‘N.A.’ stands for ‘not applicable’ and means that the Finding did not have to be examined by the Auditor and the related Procedure(s) did not have to be carried out. The reasons of the non-application of a certain Finding must be obvious i.e. i) if no cost was declared under a certain category then the related Finding(s) and Procedure(s) are not applicable; ii) if the condition set to apply certain Procedure(s) are not met then the related Finding(s) and Procedure(s) are not applicable. For instance, for ‘beneficiaries with accounts established in a currency other than the euro’ the Procedure related to ‘beneficiaries with accounts established in euro’ is not applicable. Similarly, if no additional remuneration is paid, the related Finding(s) and Procedure(s) for additional remuneration are not applicable.

| Ref      | Procedures   | Standard factual finding | Result<br>(C / E / N.A.) |
|----------|--|--------------------------|--------------------------|
| <b>A</b> | <b>ACTUAL PERSONNEL COSTS</b>  |                          |                          |
|          | <p>The Auditor draws a sample of persons whose costs were declared in the Financial Statement(s) to carry out the procedures indicated in the consecutive points of this section A.</p> <p><i>(The sample should be selected randomly so that it is representative. Full coverage is required if there are fewer than 10 people (including employees, natural persons working under a direct contract and personnel seconded by a third party), otherwise the sample should have a minimum of 10 people, or 10% of the total, whichever number is the highest)</i></p> |                          |                          |

| Ref | Procedures  | Standard factual finding   | Result<br>(C / E / N.A.) |
|-----|---|--|--------------------------|
|     | The Auditor sampled [ ] people out of the total of [ ] people.  |  |                          |
| A.1 | <p><b>PERSONNEL COSTS</b></p> <p><u>For the persons included in the sample and working under an employment contract or equivalent act (general procedures for individual actual personnel costs)</u></p> <p>To confirm standard factual findings 1-5 listed in the next column, the Auditor reviewed following information/documents provided by the Beneficiary:</p> <ul style="list-style-type: none"> <li>○ a list of the persons included in the sample indicating the period(s) during which they worked for the action, their position (classification or category) and type of contract;</li> <li>○ the payslips of the employees included in the sample;</li> <li>○ reconciliation of the personnel costs declared in the Financial Statement(s) with the accounting system (project accounting and general ledger) and payroll system;</li> <li>○ information concerning the employment status and employment conditions of personnel included in the sample, in particular their employment contracts or equivalent;</li> <li>○ the Beneficiary’s usual policy regarding payroll matters (e.g. salary policy, overtime policy, variable pay);</li> <li>○ applicable national law on taxes, labour and social security and</li> <li>○ any other document that supports the personnel costs declared.</li> </ul> <p>The Auditor also verified the eligibility of all components of the retribution (see Article 6 GA)</p> | <p>1) The employees were i) directly hired by the Beneficiary in accordance with its national legislation, ii) under the Beneficiary’s sole technical supervision and responsibility and iii) remunerated in accordance with the Beneficiary’s usual practices.</p> <p>2) Personnel costs were recorded in the Beneficiary's accounts/payroll system.</p> <p>3) Costs were adequately supported and reconciled with the accounts and payroll records.</p> <p>4) Personnel costs did not contain any ineligible elements.</p> |                          |

| Ref | Procedures  | Standard factual finding   | Result<br>(C / E / N.A.) |
|-----|---|--|--------------------------|
|     | and recalculated the personnel costs for employees included in the sample.  | 5) There were no discrepancies between the personnel costs charged to the action and the costs recalculated by the Auditor.  |                          |
|     | <p><i>Further procedures if 'additional remuneration' is paid</i></p> <p>To confirm standard factual findings 6-9 listed in the next column, the Auditor:</p> <ul style="list-style-type: none"> <li>○ reviewed relevant documents provided by the Beneficiary (legal form, legal/statutory obligations, the Beneficiary's usual policy on additional remuneration, criteria used for its calculation...);</li> <li>○ recalculated the amount of additional remuneration eligible for the action based on the supporting documents received (full-time or part-time work, exclusive or non-exclusive dedication to the action, etc.) to arrive at the applicable FTE/year and pro-rata rate (see data collected in the course of carrying out the procedures under A.2 'Productive hours' and A.4 'Time recording system').</li> </ul> <p><i>IF ANY PART OF THE REMUNERATION PAID TO THE EMPLOYEE IS NOT MANDATORY ACCORDING TO THE NATIONAL LAW OR THE EMPLOYMENT CONTRACT ("ADDITIONAL REMUNERATION") AND IS ELIGIBLE UNDER THE PROVISIONS OF ARTICLE 6.2.A.1, THIS CAN BE CHARGED AS ELIGIBLE COST TO THE ACTION UP TO THE FOLLOWING AMOUNT:</i></p> <p><i>(A) IF THE PERSON WORKS FULL TIME AND EXCLUSIVELY ON THE ACTION DURING THE FULL YEAR: UP TO EUR 8 000/YEAR;</i></p> <p><i>(B) IF THE PERSON WORKS EXCLUSIVELY ON THE ACTION BUT NOT FULL-TIME OR NOT FOR THE FULL YEAR: UP TO THE CORRESPONDING PRO-RATA AMOUNT OF EUR 8 000, OR</i></p> <p><i>(C) IF THE PERSON DOES NOT WORK EXCLUSIVELY ON THE ACTION: UP TO A PRO-RATA AMOUNT</i></p> | 6) Not applicable.   |                          |
|     |   | 7) The amount of additional remuneration paid corresponded to the Beneficiary's usual remuneration practices and was consistently paid whenever the same kind of work or expertise was required. |                          |
|     |   | 8) The criteria used to calculate the additional remuneration were objective and generally applied by the Beneficiary regardless of the source of funding used.                                  |                          |
|     |   | 9) Not applicable  |                          |

| Ref | Procedures  | Standard factual finding   | Result<br>(C / E / N.A.) |
|-----|---|--|--------------------------|
|     | <i>CALCULATED IN ACCORDANCE TO ARTICLE 6.2.A.1.</i>   |  |                          |
|     | <ul style="list-style-type: none"> <li>○ <i>Not Applicable</i></li> </ul>   | 10) N/A  |                          |
|     |   | 11) N/A  |                          |
|     |   | 12) N/A.   |                          |
|     |   | 13) N/A  |                          |
|     | <p><u>For natural persons included in the sample and working with the Beneficiary under a direct contract other than an employment contract, such as consultants (no subcontractors).</u></p> <p>To confirm standard factual findings 14-18 listed in the next column the Auditor reviewed following information/documents provided by the Beneficiary:</p> <ul style="list-style-type: none"> <li>○ the contracts, especially the cost, contract duration, work description, place of work, ownership of the results and reporting obligations to the Beneficiary;</li> <li>○ the employment conditions of staff in the same category to compare costs and;</li> <li>○ any other document that supports the costs declared and its registration (e.g. invoices,</li> </ul> | 14) The natural persons reported to the Beneficiary (worked under the Beneficiary’s instructions). |                          |
|     |   | 15) They worked on the Beneficiary’s premises (unless otherwise agreed with the Beneficiary).      |                          |
|     |   | 16) The results of work carried out belong to the Beneficiary.                                     |                          |

| Ref | Procedures   | Standard factual finding  | Result<br>(C / E / N.A.) |
|-----|--|---|--------------------------|
|     | accounting records, etc.).   | 17) Their costs were not significantly different from those for staff who performed similar tasks under an employment contract with the Beneficiary.  |                          |
|     |  | 18) The costs were supported by audit evidence and registered in the accounts.  |                          |
|     | <p><u>For personnel seconded by a third party and included in the sample (not subcontractors)</u></p> <p>To confirm standard factual findings 19-22 listed in the next column, the Auditor reviewed following information/documents provided by the Beneficiary:</p> <ul style="list-style-type: none"> <li>○ their secondment contract(s) notably regarding costs, duration, work description, place of work and ownership of the results;</li> <li>○ any other document that supports the costs declared (e.g. invoices, etc.).</li> </ul> | 19) Seconded personnel reported to the Beneficiary and worked on the Beneficiary’s premises (unless otherwise agreed with the Beneficiary).   |                          |
|     |  | 20) The results of work carried out belong to the Beneficiary.  |                          |
|     |  | <p><i>If personnel is seconded against payment:</i></p> <p>21) The costs declared were supported with documentation and recorded in the Beneficiary’s accounts. The third party did not include any profit.</p> |                          |
|     |  | <p><i>If personnel is seconded free of charge:</i></p> <p>22) The costs declared did not</p>  |                          |

| Ref | Procedures   | Standard factual finding   | Result<br>(C / E / N.A.) |
|-----|--|--|--------------------------|
|     |  | exceed the third party's cost as recorded in the accounts of the third party and were supported with documentation.  |                          |
| A.2 | <p><b>PRODUCTIVE HOURS</b></p> <p>To confirm standard factual findings 23-28 listed in the next column, the Auditor reviewed relevant documents, especially national legislation, labour agreements and contracts and time records of the persons included in the sample, to verify that:</p> <ul style="list-style-type: none"> <li>○ the annual productive hours applied were calculated in accordance with one of the methods described below,</li> <li>○ the full-time equivalent (FTEs) ratios for employees not working full-time were correctly calculated.</li> </ul> <p>If the Beneficiary applied method B, the auditor verified that the correctness in which the total number of hours worked was calculated and that the contracts specified the annual workable hours.</p> <p>If the Beneficiary applied method C, the auditor verified that the ‘annual productive hours’ applied when calculating the hourly rate were equivalent to at least 90 % of the ‘standard annual workable hours’. The Auditor can only do this if the calculation of the standard annual workable hours can be supported by records, such as national legislation, labour agreements, and contracts.</p> <p><i>BENEFICIARY'S PRODUCTIVE HOURS' FOR PERSONS WORKING FULL TIME SHALL BE ONE OF THE FOLLOWING METHODS:</i></p> <p><i>A. 1720 ANNUAL PRODUCTIVE HOURS (PRO-RATA FOR PERSONS NOT WORKING FULL-TIME)</i></p> <p><i>B. THE TOTAL NUMBER OF HOURS WORKED BY THE PERSON FOR THE BENEFICIARY IN THE YEAR</i></p> | <p>23) The Beneficiary applied method [choose one option and delete the others]</p> <p>[A: 1720 hours]</p> <p>[B: the ‘total number of hours worked’]</p> <p>[C: ‘annual productive hours’ used correspond to usual accounting practices]</p> <p>24) Productive hours were calculated annually.</p> <p>25) For employees not working full-time the full-time equivalent (FTE) ratio was correctly applied.</p> <p><i>If the Beneficiary applied method B.</i></p> <p>26) The calculation of the number of ‘annual workable hours’, overtime and absences was verifiable based on the documents provided by the</p> |                          |

| Ref        | Procedures  | Standard factual finding  | Result<br>(C / E / N.A.) |
|------------|---|---|--------------------------|
|            | <p><i>(THIS METHOD IS ALSO REFERRED TO AS ‘TOTAL NUMBER OF HOURS WORKED’ IN THE NEXT COLUMN). THE CALCULATION OF THE TOTAL NUMBER OF HOURS WORKED WAS DONE AS FOLLOWS: ANNUAL WORKABLE HOURS OF THE PERSON ACCORDING TO THE EMPLOYMENT CONTRACT, APPLICABLE LABOUR AGREEMENT OR NATIONAL LAW PLUS OVERTIME WORKED MINUS ABSENCES (SUCH AS SICK LEAVE OR SPECIAL LEAVE).</i></p> <p><i>C. THE STANDARD NUMBER OF ANNUAL HOURS GENERALLY APPLIED BY THE BENEFICIARY FOR ITS PERSONNEL IN ACCORDANCE WITH ITS USUAL COST ACCOUNTING PRACTICES (THIS METHOD IS ALSO REFERRED TO AS ‘TOTAL ANNUAL PRODUCTIVE HOURS’ IN THE NEXT COLUMN). THIS NUMBER MUST BE AT LEAST 90% OF THE STANDARD ANNUAL WORKABLE HOURS.</i></p> <p><i>‘ANNUAL WORKABLE HOURS’ MEANS THE PERIOD DURING WHICH THE PERSONNEL MUST BE WORKING, AT THE EMPLOYER’S DISPOSAL AND CARRYING OUT HIS/HER ACTIVITY OR DUTIES UNDER THE EMPLOYMENT CONTRACT, APPLICABLE COLLECTIVE LABOUR AGREEMENT OR NATIONAL WORKING TIME LEGISLATION.</i></p> | <p>Beneficiary.</p> <p><i>If the Beneficiary applied method C.</i></p> <p>27) The calculation of the number of ‘standard annual workable hours’ was verifiable based on the documents provided by the Beneficiary.</p> <p>28) The ‘annual productive hours’ used for calculating the hourly rate were consistent with the usual cost accounting practices of the Beneficiary and were equivalent to at least 90 % of the ‘annual workable hours’.</p> |                          |
| <b>A.3</b> | <p><b>HOURLY PERSONNEL RATES</b></p> <p><u>For individual hourly rates:</u></p> <p>The Auditor:</p> <ul style="list-style-type: none"> <li>○ reviewed the documentation provided by the Beneficiary, including manuals and internal guidelines that explain how to calculate hourly rates;</li> <li>○ recalculated the hourly rates of staff included in the sample following the results of the procedures carried out in A.1 and A.2.</li> </ul>  | <p>29) The Beneficiary applied Individual hourly rates were applied</p> <p>30) N/A</p>  |                          |



| Ref | Procedures   | Standard factual finding   | Result<br>(C / E / N.A.) |
|-----|--|--|--------------------------|
|     | <p><i><u>HOURLY RATE FOR INDIVIDUAL ACTUAL PERSONAL COSTS:</u></i><br/> <i>IT IS CALCULATED BY DIVIDING THE TOTAL AMOUNT OF PERSONNEL COSTS OF AN EMPLOYEE VERIFIED IN LINE WITH PROCEDURE A.1 BY THE NUMBER OF ANNUAL PRODUCTIVE HOURS VERIFIED IN LINE WITH PROCEDURE A.2.</i></p>   | 31) N/A  |                          |
|     |  | 32) The individual rates re-calculated by the Auditor were the same as the rates applied by the Beneficiary.   |                          |
| A.4 | <p><b>TIME RECORDING SYSTEM</b></p> <p>To verify that the time recording system ensures the fulfilment of all minimum requirements and that the hours declared for the action were correct, accurate and properly authorised and supported by documentation, the Auditor made the following checks for the persons included in the sample that declare time as worked for the action on the basis of time records:</p> <ul style="list-style-type: none"> <li>○ description of the time recording system provided by the Beneficiary (registration, authorisation, processing in the HR-system);</li> <li>○ its actual implementation;</li> <li>○ time records were signed at least monthly by the employees (on paper or electronically) and authorised by the project manager or another manager;</li> <li>○ the hours declared were worked within the project period;</li> <li>○ there were no hours declared as worked for the action if HR-records showed absence due to holidays or sickness (further cross-checks with travels are carried out in B.1 below);</li> <li>○ the hours charged to the action matched those in the time recording system.</li> </ul> | 33) All persons recorded their time dedicated to the action on a <b>daily/ weekly/ monthly</b> basis using a <b>paper/computer-based</b> system. <i>(delete the answers that are not applicable)</i> |                          |
|     |  | 34) Their time-records were authorised at least monthly by the project manager or other superior.  |                          |
|     |  | 35) Hours declared were worked within the project period and were consistent with the presences/absences recorded in HR-records.   |                          |

| Ref        | Procedures  | Standard factual finding  | Result<br>(C / E / N.A.) |
|------------|---|---|--------------------------|
|            | <p><i>ONLY THE HOURS WORKED ON THE ACTION CAN BE CHARGED. ALL WORKING TIME TO BE CHARGED SHOULD BE RECORDED THROUGHOUT THE DURATION OF THE PROJECT, ADEQUATELY SUPPORTED BY EVIDENCE OF THEIR REALITY AND RELIABILITY (SEE SPECIFIC PROVISIONS BELOW FOR PERSONS WORKING EXCLUSIVELY FOR THE ACTION WITHOUT TIME RECORDS).</i></p>  | 36) There were no discrepancies between the number of hours charged to the action and the number of hours recorded.   |                          |
|            | <p><u>If the persons are working exclusively for the action and without time records</u></p> <p>For the persons selected that worked exclusively for the action without time records, the Auditor verified evidence available demonstrating that they were in reality exclusively dedicated to the action and that the Beneficiary signed a declaration confirming that they have worked exclusively for the action.</p>  | 37) The exclusive dedication is supported by a declaration signed by the Beneficiary's and by any other evidence gathered.  |                          |
| <b>B</b>   | <b>COSTS OF SUBCONTRACTING</b>  |   |                          |
| <b>B.1</b> | <p><b>The Auditor obtained the detail/breakdown of subcontracting costs and sampled [redacted] cost items selected randomly (full coverage is required if there are fewer than 10 items, otherwise the sample should have a minimum of 10 item, or 10% of the total, whichever number is highest).</b></p> <p>To confirm standard factual findings 38-42 listed in the next column, the Auditor reviewed the following for the items included in the sample:</p> <ul style="list-style-type: none"> <li>○ the use of subcontractors was foreseen in Annex 1;</li> <li>○ subcontracting costs were declared in the subcontracting category of the Financial Statement;</li> <li>○ supporting documents on the selection and award procedure were followed;</li> <li>○ the Beneficiary ensured best value for money (key elements to appreciate the respect of this principle are the award of the subcontract to the bid offering best price-quality ratio, under conditions of transparency and equal treatment. In case an existing framework</li> </ul> | <p>38) The use of claimed subcontracting costs was foreseen in Annex 1 and costs were declared in the Financial Statements under the subcontracting category.</p> <p>39) There were documents of requests to different providers, different offers and assessment of the offers before selection of the provider in line with internal procedures and procurement rules. Subcontracts were awarded in accordance with the principle</p> |                          |

| Ref        | Procedures  | Standard factual finding   | Result<br>(C / E / N.A.) |
|------------|---|--|--------------------------|
|            | <p>contract was used the Beneficiary ensured it was established on the basis of the principle of best value for money under conditions of transparency and equal treatment).</p> <p>In particular,</p> <ul style="list-style-type: none"> <li>i. if the Beneficiary acted as a contracting authority within the meaning of Directive 2004/18/EC or of Directive 2004/17/EC, the Auditor verified that the applicable national law on public procurement was followed and that the subcontracting complied with the Terms and Conditions of the Agreement.</li> <li>ii. if the Beneficiary did not fall under the above-mentioned category the Auditor verified that the Beneficiary followed their usual procurement rules and respected the Terms and Conditions of the Agreement.</li> </ul> <p>For the items included in the sample the Auditor also verified that:</p> <ul style="list-style-type: none"> <li>o the subcontracts were not awarded to other Beneficiaries in the consortium;</li> <li>o there were signed agreements between the Beneficiary and the subcontractor;</li> <li>o there was evidence that the services were provided by subcontractor;</li> </ul> | <p>of best value for money.</p> <p><i>(When different offers were not collected the Auditor explains the reasons provided by the Beneficiary under the caption “Exceptions” of the Report. The Commission will analyse this information to evaluate whether these costs might be accepted as eligible)</i></p> |                          |
|            |   | 40) The subcontracts were not awarded to other Beneficiaries of the consortium.  |                          |
|            |   | 41) All subcontracts were supported by signed agreements between the Beneficiary and the subcontractor.  |                          |
|            |   | 42) There was evidence that the services were provided by the subcontractors.  |                          |
| <b>C</b>   | <b>COSTS OF PROVIDING FINANCIAL SUPPORT TO THIRD PARTIES</b>  |  |                          |
| <b>C.1</b> | <b>Not applicable .</b>   | 43) N/A  |                          |

| D   | OTHER ACTUAL DIRECT COSTS   |  |  |
|-----|---|--|--|
| D.1 | <b>Not applicable</b>   | 44) N/A  |  |
|     |   | 45) N/A  |  |
|     |   | 46) N/A  |  |
|     |   | 47) N/A  |  |
| D.2 | <b>DEPRECIATION COSTS FOR EQUIPMENT, INFRASTRUCTURE OR OTHER ASSETS</b><br><b>The Auditor sampled [redacted] cost items selected randomly</b> <i>(full coverage is required if there are fewer than 10 items, otherwise the sample should have a minimum of 10 item, or 10% of the total, whichever number is the highest).</i><br><br>For “equipment, infrastructure or other assets” [from now on called “asset(s)”] selected in the sample the Auditor verified that: <ul style="list-style-type: none"> <li>○ the assets were acquired in conformity with the Beneficiary's internal guidelines and procedures;</li> <li>○ they were correctly allocated to the action (with supporting documents such as delivery note invoice or any other proof demonstrating the link to the action)</li> <li>○ they were entered in the accounting system;</li> <li>○ the extent to which the assets were used for the action (as a percentage) was supported by reliable documentation (e.g. usage overview table);</li> </ul> The Auditor recalculated the depreciation costs and verified that they were in line with the applicable rules in the Beneficiary’s country and with the Beneficiary’s usual accounting policy (e.g. depreciation calculated on the acquisition value). | 48) Procurement rules, principles and guides were followed.  |  |
|     |   | 49) There was a link between the grant agreement and the asset charged to the action.  |  |
|     |   | 50) The asset charged to the action was traceable to the accounting records and the underlying documents.  |  |
|     |   | 51) The depreciation method used to charge the asset to the action was in line with the applicable rules of the Beneficiary's country and the Beneficiary's usual accounting policy. |  |
|     |   | 52) The amount charged corresponded to the actual usage for the action.  |  |

|            |   |  |  |
|------------|---|--|--|
|            | The Auditor verified that no ineligible costs such as deductible VAT, exchange rate losses, excessive or reckless expenditure were declared (see Article 6.5 GA).   | 53) No ineligible costs or excessive or reckless expenditure were declared.  |  |
| <b>D.3</b> | <p><b>OPERATING COSTS</b></p> <p><b>The Auditor sampled [redacted] cost items selected randomly</b> (<i>full coverage is required if there are fewer than 10 items, otherwise the sample should have a minimum of 10 item, or 10% of the total, whichever number is highest</i>).</p> <p>For the purchase of goods, works or services included in the sample the Auditor verified that:</p> <ul style="list-style-type: none"> <li>○ the contracts did not cover tasks described in Annex 1;</li> <li>○ they were correctly identified, allocated to the proper action, entered in the accounting system (traceable to underlying documents such as purchase orders, invoices and accounting);</li> <li>○ the goods were not placed in the inventory of durable equipment;</li> <li>○ the costs charged to the action were accounted in line with the Beneficiary's usual accounting practices;</li> <li>○ no ineligible costs or excessive or reckless expenditure were declared (see Article 6 GA).</li> </ul> <p>In addition, the Auditor verified that these goods and services were acquired in conformity with the Beneficiary's internal guidelines and procedures, in particular:</p> <ul style="list-style-type: none"> <li>○ if Beneficiary acted as a contracting authority within the meaning of Directive 2004/18/EC or of Directive 2004/17/EC, the Auditor verified that the applicable national law on public procurement was followed and that the procurement contract complied with the Terms and Conditions of the Agreement.</li> <li>○ if the Beneficiary did not fall into the category above, the Auditor verified that the Beneficiary followed their usual procurement rules and respected the Terms and Conditions of the Agreement.</li> </ul> <p>For the items included in the sample the Auditor also verified that:</p> <ul style="list-style-type: none"> <li>○ the Beneficiary ensured best value for money (key elements to appreciate the respect of this principle are the award of the contract to the bid offering best price-quality ratio,</li> </ul> | 54) Contracts for works or services did not cover tasks described in Annex 1.  |  |
|            |   | 55) Costs were allocated to the correct action and the goods were not placed in the inventory of durable equipment.  |  |
|            |   | 56) The costs were charged in line with the Beneficiary's accounting policy and were adequately supported.   |  |
|            |   | 57) No ineligible costs or excessive or reckless expenditure were declared. For internal invoices/charges only the cost element was charged, without any mark-ups.   |  |
|            |   | 58) Procurement rules, principles and guides were followed. There were documents of requests to different providers, different offers and assessment of the offers before selection of the provider in line with internal procedures and procurement rules. The purchases were made in |  |

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|            | <p>under conditions of transparency and equal treatment. In case an existing framework contract was used the Auditor also verified that the Beneficiary ensured it was established on the basis of the principle of best value for money under conditions of transparency and equal treatment);</p> <p><i>SUCH GOODS AND SERVICES INCLUDE, FOR INSTANCE, CONSUMABLES AND SUPPLIES, DISSEMINATION (INCLUDING OPEN ACCESS), PROTECTION OF RESULTS, SPECIFIC EVALUATION OF THE ACTION IF IT IS REQUIRED BY THE AGREEMENT, CERTIFICATES ON THE FINANCIAL STATEMENTS IF THEY ARE REQUIRED BY THE AGREEMENT AND CERTIFICATES ON THE METHODOLOGY, TRANSLATIONS, REPRODUCTION.</i></p> | <p>accordance with the principle of best value for money.</p> <p><i>(When different offers were not collected the Auditor explains the reasons provided by the Beneficiary under the caption "Exceptions" of the Report. The Commission will analyse this information to evaluate whether these costs might be accepted as eligible)</i></p> |  |
| <b>D.4</b> | <b>Not applicable</b>  | 59) N/A  |  |
|            |  | 60) N/A  |  |
|            |  | 61) N/A  |  |
| <b>E</b>   | <b>USE OF EXCHANGE RATES</b>   |  |  |
| <b>E.1</b> | <p>a) <u>For Beneficiaries with accounts established in a currency other than euros</u></p> <p><b>The Auditor sampled [redacted] cost items selected randomly and verified that the exchange rates used for converting other currencies into euros were in accordance with the following rules established in the Agreement ( full coverage is required if there are fewer than 10 items, otherwise the sample should have a minimum of 10 item, or 10% of the total, whichever number is highest):</b></p>  | 62) The exchange rates used to convert other currencies into Euros were in accordance with the rules established of the Grant Agreement and there was no difference in the final figures.  |  |

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|  | <p><i>COSTS INCURRED IN ANOTHER CURRENCY SHALL BE CONVERTED INTO EURO AT THE AVERAGE OF THE DAILY EXCHANGE RATES PUBLISHED IN THE C SERIES OF OFFICIAL JOURNAL OF THE EUROPEAN UNION (<a href="https://www.ecb.int/stats/exchange/eurofxref/html/index.en.html">https://www.ecb.int/stats/exchange/eurofxref/html/index.en.html</a>), DETERMINED OVER THE CORRESPONDING REPORTING PERIOD.</i></p> <p><i>IF NO DAILY EURO EXCHANGE RATE IS PUBLISHED IN THE OFFICIAL JOURNAL OF THE EUROPEAN UNION FOR THE CURRENCY IN QUESTION, CONVERSION SHALL BE MADE AT THE AVERAGE OF THE MONTHLY ACCOUNTING RATES ESTABLISHED BY THE COMMISSION AND PUBLISHED ON ITS WEBSITE (<a href="http://ec.europa.eu/budget/contracts_grants/info_contracts/inforeuro/inforeuro_en.cfm">http://ec.europa.eu/budget/contracts_grants/info_contracts/inforeuro/inforeuro_en.cfm</a>), DETERMINED OVER THE CORRESPONDING REPORTING PERIOD.</i></p> |  |  |
|  | <p><b>b) For Beneficiaries with accounts established in euros</b></p> <p><b>The Auditor sampled [redacted] cost items selected randomly and verified that the exchange rates used for converting other currencies into euros were in accordance with the following rules established in the Agreement ( full coverage is required if there are fewer than 10 items, otherwise the sample should have a minimum of 10 item, or 10% of the total, whichever number is highest):</b></p> <p><i>COSTS INCURRED IN ANOTHER CURRENCY SHALL BE CONVERTED INTO EURO BY APPLYING THE BENEFICIARY'S USUAL ACCOUNTING PRACTICES.</i></p>   | <p>63) The Beneficiary applied its usual accounting practices.</p> |  |

*[legal name of the audit firm]*

*[name and function of an authorised representative]*

*[dd Month yyyy]*

*<Signature of the Auditor*







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