



Established by the European Commission

#### **GRANT AGREEMENT**

#### NUMBER — 679092 — Sense of Commitment

This **Agreement** ('the Agreement') is **between** the following parties: **on the one part,** 

the **European Research Council Executive Agency (ERCEA)** ('the Agency'), under the power delegated by the European Commission ('the Commission'),

represented for the purposes of signature of this Agreement by Head of Unit, European Research Council Executive Agency (ERCEA), Grant Management Department, Starting Grant, Niki ATZOULATOU,

#### and

#### on the other part.

1. 'the principal beneficiary':

**THE UNIVERSITY OF WARWICK (WARWICK)**, N/A, established in Kirby Corner Road - University House, COVENTRY CV4 8UW, United Kingdom, GB545270058 represented for the purposes of signing the Agreement by Head of Research Support, Funding & Contracts, Navdeep BAINS, hosting and engaging the following 'principal investigator':

- Michael John Andrew, 02/08/1978, United States

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

2. **KOZEP-EUROPAI EGYETEM (CEU)** HU13, FI27861/2314, established in Nador utca 9, BUDAPEST 1051, Hungary, HU18118463

Unless otherwise specified, references to 'beneficiary' or 'beneficiaries' include the principal beneficiary.

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	Model for the certificate on the methodology

# **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 'An Integrative Framework for Modeling the Sense of Commitment — Sense of Commitment' ('action'), as described in Annex 1.

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

The duration of the action will be 60 months as of 1 July 2016 ('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.

#### **CHAPTER 3 GRANT**

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

#### 5.1 Maximum grant amount

The 'maximum grant amount' is EUR 1,483,575.00 (one million four hundred and eighty three thousand five hundred and seventy five EURO).

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

The grant reimburses 100% of the beneficiaries' eligible costs for the action (see Article 6) ('reimbursement of eligible costs grant') (see Annex 2).

The estimated eligible costs of the action are EUR **1,483,575.00** (one million four hundred and eighty three thousand five hundred and seventy five EURO).

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

#### (a) for direct personnel costs

- as actually incurred costs ('actual costs') or
- on the basis of an amount per unit calculated by the beneficiary in accordance with its usual cost accounting practices ('unit 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) for 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 Agency — when the payment of the balance is made (see Article 21.4) — in the following steps:

- Step 1 Application of the reimbursement rates 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 rates to the eligible costs

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 Agency (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 Agency.

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; if the income is generated from selling equipment or other assets purchased under the Agreement, the receipt is up to the amount declared as eligible under the Agreement;
- (b) financial contributions given by third parties to the beneficiary specifically to be used for the action, and
- (c) in-kind contributions provided by third parties free of charge and specifically to be used for the action, if they have been declared as eligible costs.

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 Agency 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 Agency 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 Agency 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 Agency 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 or calculated by the beneficiary in accordance with its usual cost accounting practices (see Article 6.2, Point A)

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.

#### 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;
- 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

## 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).

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Beneficiaries that are non-profit legal entities<sup>1</sup> may also declare as personnel costs **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.

Additional remuneration for personnel assigned to the action is eligible up to the following amount:

- (a) if the person works full time and exclusively on the action during the full year: up to EUR 8 000;
- (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
- (c) if the person does not work exclusively on the action: up to a pro-rata amount calculated as follows:

```
{{EUR 8 000 divided by the number of annual productive hours (see below)}, multiplied by the number of hours that the person has worked on the action during the year}.
```

- 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 the conditions in Article 11.1 are met.

<sup>&</sup>lt;sup>1</sup> For the definition, see Article 2.1(14) of the Rules for Participation Regulation No 1290/2013: 'non-profit legal entity' means a legal entity which by its legal form is non-profit-making or which has a legal or statutory obligation not to distribute profits to its shareholders or individual members.

- 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}, plus for non-profit legal entities: additional remuneration to personnel assigned to the action under the conditions set out above (Point A.1)}.
```

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 (excluding additional remuneration) 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 prorata 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 declared on the basis of **unit costs**: the hourly rate is one of the following:
  - (i) for SME owners or beneficiaries that are natural persons: the hourly rate set out in Annex 2 (see Points A.4 and A.5 above), or
  - (ii) for personnel costs declared on the basis of the beneficiary's usual cost accounting practices: the hourly rate calculated by the beneficiary in accordance with its usual cost accounting practices, if:
    - the cost accounting practices used are applied in a consistent manner, based on objective criteria, regardless of the source of funding;
    - the hourly rate is calculated using the actual personnel costs recorded in the beneficiary's accounts, excluding any ineligible cost or costs included in other budget categories.

The actual personnel costs may be adjusted by the beneficiary on the basis of budgeted or estimated elements. Those elements must be relevant for calculating

the personnel costs, reasonable and correspond to objective and verifiable information;

and

- the hourly rate is calculated using the number of annual productive hours (see 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** (including related duties, taxes and charges such as non-deductible value added tax (VAT) paid by the beneficiary) are eligible if they are in line with the beneficiary's usual practices on travel.
- 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 costs of equipment, infrastructure or other assets contributed in-kind against payment are eligible, if they do not exceed the depreciation costs of similar equipment, infrastructure or assets, do not include any financing fees and if the conditions in Article 11.1 are met.

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 Costs of other goods and services (including related duties, taxes and charges such as non-deductible value added tax (VAT) paid by the beneficiary) are eligible, if they are:
  - (a) purchased specifically for the action and in accordance with Article 10.1.1 or
  - (b) contributed in kind against payment and in accordance with Article 11.1.

Such goods and services include, for instance, consumables and supplies, dissemination (including open access), protection of results, certificates on the financial statements (if they are required by the Agreement), certificates on the methodology, translations and publications.

# D.4 Capitalised and operating costs of 'large research infrastructure', directly used for the action are eligible, if:

- (a) the value of the large research infrastructure represents at least 75% of the total fixed assets (at historical value in its last closed balance sheet before the date of the signature of the Agreement or as determined on the basis of the rental and leasing costs of the research infrastructure<sup>3</sup>);
- (b) the beneficiary's methodology for declaring the costs for large research infrastructure has been positively assessed by the Commission ('ex-ante assessment');
- (c) the beneficiary declares as direct eligible costs only the portion which corresponds to the duration of the action and the rate of actual use for the purposes of the action, and
- (d) they comply with the conditions as further detailed in the annotations to the H2020 grant agreements.

#### E. Indirect costs

**Indirect costs** are eligible if they are declared on the basis of the flat-rate of 25% of the eligible direct costs (see Article 5.2 and Points A to D above), from which are excluded:

- (a) costs of subcontracting and
- (b) costs of in-kind contributions provided by third parties which are not used on the beneficiary's premises;
- (c) not applicable;
- (d) not applicable.

Beneficiaries receiving an operating grant<sup>4</sup> financed by the EU or Euratom budget cannot declare indirect costs for the period covered by the operating grant.

<sup>&</sup>lt;sup>2</sup> 'Large research infrastructure' means research infrastructure of a total value of at least EUR 20 million, for a beneficiary, calculated as the sum of historical asset values of each individual research infrastructure of that beneficiary, as they appear in its last closed balance sheet before the date of the signature of the Agreement or as determined on the basis of the rental and leasing costs of the research infrastructure.

For the definition, see Article 2(6) of Regulation (EU) No 1291/2013 of the European Parliament and of the Council of 11 December 2013 establishing Horizon 2020 - the Framework Programme for Research and Innovation (2014-2020) (OJ L 347, 20.12.2013 p.104)-('Horizon 2020 Framework Programme Regulation No 1291/2013'): 'Research infrastructure' are facilities, resources and services that are used by the research communities to conduct research and foster innovation in their fields. Where relevant, they may be used beyond research, e.g. for education or public services. They include: major scientific equipment (or sets of instruments); knowledge-based resources such as collections, archives or scientific data; e-infrastructures such as data and computing systems and communication networks; and any other infrastructure of a unique nature essential to achieve excellence in research and innovation. Such infrastructures may be 'single-sited', 'virtual' or 'distributed'.

<sup>&</sup>lt;sup>4</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.

## 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

**In-kind contributions provided free of charge** are eligible direct costs (for the beneficiary), if the costs incurred by the third party fulfil — *mutatis mutandis* — the general and specific conditions for eligibility set out in this Article (Article 6.1 and 6.2) and Article 12.1.

#### 6.5 Ineligible costs

#### 'Ineligible costs' are:

- (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 Agency;
  - (viii) excessive or reckless expenditure;
  - (ix) deductible VAT;
  - (x) costs incurred during suspension of the implementation of the action (see Article 49);
- (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 Agency 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.

The beneficiaries must ensure that the action tasks described in Annex 1 are performed under the guidance of the principal investigator.

#### 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);
- use in-kind contributions provided by third parties against payment (see Article 11);
- use in-kind contributions provided by third parties free of charge (see Article 12);
- 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 Agency 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 Agency, 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>5</sup> or 'contracting entities' within the meaning of Directive 2004/17/EC<sup>6</sup> must comply with the applicable national law on public procurement.

### 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

### 11.1 Rules for the use of in-kind contributions against payment

If necessary to implement the action, the beneficiaries may use in-kind contributions provided by third parties against payment.

The beneficiaries may declare costs related to the payment of in-kind contributions as eligible (see Article 6.1 and 6.2), up to the third parties' costs for the seconded persons, contributed equipment, infrastructure or other assets or other contributed goods and services. The costs will appear in the accounts of the beneficiaries and will be considered as costs incurred by them (see Article 6.1 and 6.2).

The third parties and their contributions must be set out in Annex 1. The Agency may however approve in-kind contributions not set out in Annex 1 without amendment (see Article 55), if:

- they are specifically justified in the periodic financial report and

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>&</sup>lt;sup>6</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).

- their use does 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 Agency, 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 the third parties.

### 11.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the costs related to the payment of the in-kind contribution 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 12 — USE OF IN-KIND CONTRIBUTIONS PROVIDED BY THIRD PARTIES FREE OF CHARGE

#### 12.1 Rules for the use of in-kind contributions free of charge

If necessary to implement the action, the beneficiaries may use in-kind contributions provided by third parties free of charge.

The beneficiaries may declare costs incurred by the third parties for the seconded persons, contributed equipment, infrastructure or other assets or other contributed goods and services as eligible in accordance with Article 6.4.

The third parties and their contributions must be set out in Annex 1. The Agency may however approve in-kind contributions not set out in Annex 1 without amendment (see Article 55), if:

- they are specifically justified in the periodic financial report and
- their use does 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 Agency, 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 the third parties.

### 12.2 Consequences of non-compliance

If a beneficiary breaches any of its obligations under this Article, the costs incurred by the third parties related to the in-kind contribution 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 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 Agency 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 financial 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 Agency, 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 Agency 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 Agency 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.

In addition, for direct personnel costs declared as unit costs calculated in accordance with the beneficiary's usual cost accounting practices, the beneficiaries must keep adequate records and documentation to prove that the cost accounting practices used comply with the conditions set out in Article 6.2, Point A.

The beneficiaries may submit to the Commission, for approval, a certificate (drawn up in accordance with Annex 6) stating that their usual cost accounting practices comply with these conditions ('certificate on the methodology'). If the certificate is approved, costs declared in line with this methodology will not be challenged subsequently, unless the beneficiaries have concealed information for the purpose of the approval.

(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 Agency 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 Agency may apply any of the measures described in Chapter 6.

#### ARTICLE 20 — REPORTING — PAYMENT REQUESTS

### 20.1 General obligation to submit reports

The principal beneficiary must submit to the Agency (see Article 52) the scientific and financial reports set out in this Article. The financial report includes the requests for payments.

The reports must be drawn up using the forms and templates provided in the electronic exchange system (see Article 52).

#### 20.2 Scientific reporting — Reporting periods

The action is divided into the following 'scientific reporting periods':

- SRP1: from month 1 to month 30
- final SRP: from month 31 to 60.

The principal beneficiary must submit to the Agency a:

- 'periodic scientific report' within 60 days after the end of each period (except the last one) and
- 'final scientific report' within 60 days after the end of the last reporting period.

#### The **periodic scientific report** must include:

- (a) information about the **scientific progress** of the work;
- (b) **achievements and results** of the action, such as publications and a declaration of any major change of scientific strategy;
- (c) information on whether and how open access has been provided to these results (see Article 29);
- (d) a summary of the achievements of the action for publication by the Agency.

### The final scientific report must:

- (a) present the **final results, achievements and conclusions** of the action, and how they have been disseminated (including via scientific publications) (see Article 29);
- (b) contain a summary of the achievements of the action, for publication by the Agency.

## 20.3 Financial reporting — Payment requests — Reporting periods

The action is divided into the following 'financial reporting periods':

- FRP1: from month 1 to month 18
- FRP2: from month 19 to month 36
- FRP3: from month 37 to month 54
- final FRP: from month 55 to 60.

The principal beneficiary must — within 60 days after the end of each period — submit to the Agency a 'financial report' for each reporting period.

#### The **financial report** must contain:

- (a) information on the eligible costs, including a 'breakdown of direct costs table' and a 'budget follow-up table';
- (b) 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 flatrate costs — they exceed the amounts indicated in the estimated budget (see Annex 2). Amounts which are not declared in a financial statement will not be taken into account by the Agency.

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 final financial statements 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, audits and investigations (see Article 22), and
- for the last reporting period: that all the receipts have been declared (see Article 5.3.3);

#### (c) not applicable;

- (d) a 'summary financial statement' (see Annex 4), created automatically by the electronic exchange system, consolidating the individual financial statements for the reporting period concerned and including the request for interim payment (or for the last financial reporting period the request for payment of the balance);
- (e) for the last financial reporting period only: a 'certificate on the financial statements' (see Annex 5) for each beneficiary, if it requests a total contribution of EUR 325 000 or more, as reimbursement of actual costs and unit costs calculated on the basis of its usual cost accounting practices (see Article 5.2 and Article 6.2, Point A).

#### 20.4 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.

# 20.5 Language of reports

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

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

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

If the principal beneficiary 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 Agency, 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 principal beneficiary:

- 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 — Amount retained for the Guarantee Fund

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 **482,161.88** (four hundred and eighty two thousand one hundred and sixty one EURO and eighty eight eurocents).

The Agency will — except if Article 48 applies — make the pre-financing payment to the principal beneficiary 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.

An amount of EUR **74,178.75** (seventy four thousand one hundred and seventy eight EURO and seventy five eurocents), corresponding to the 5% of the maximum grant amount (see Article 5.1), is retained by the Agency from the pre-financing payment and transferred into the '**Guarantee Fund**'.

# 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 Agency will pay to the principal beneficiary the amount due as interim payment within 90 days from receiving the financial report (see Article 20.3), except if Articles 47 or 48 apply.

Payment is subject to the approval of the financial 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 Agency in the following steps:

Step 1 – Application of the reimbursement rate

Step 2 – Limit to 90% of the maximum grant amount

#### 21.3.1 Step 1 — Application of the reimbursement rate

The reimbursement rate (see Article 5.2) is 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 Agency (see above) for the concerned reporting period.

### 21.3.2 Step 2 — Limit to 90% of the maximum grant amount

The total amount of pre-financing and interim payments must not exceed 90% of the maximum grant amount specified in Article 5.1. The maximum amount for the interim payment will be calculated as follows:

```
{90% of the maximum grant amount (see Article 5.1) minus {pre-financing and previous interim payments}}.
```

# 21.4 Payment of the balance — Amount — Calculation — Release of the amount retained for the Guarantee Fund

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 Agency will pay the balance within 90 days from receiving the financial report and the final scientific report (see Article 20), except if Articles 47 or 48 apply.

Payment is subject to the approval of the financial and final scientific reports. Their approval does not imply recognition of the compliance, authenticity, completeness or correctness of their content.

The **amount due as the balance** is calculated by the Agency by deducting the total amount of prefinancing 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, the amount retained for the Guarantee Fund (see above) will be released and:

- if the balance is positive: the amount released will be paid in full to the principal beneficiary, together with the amount due as the balance;
- if the balance is negative (payment of the balance taking the form of recovery): it will be deducted from the amount released (see Article 44.1.2). If the resulting amount:
  - is positive, it will be paid to the principal beneficiary,
  - is negative, 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*other* 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 Agency will formally notify to the principal beneficiary 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 Agency will make all payments in euro.

# 21.7 Payments to the principal beneficiary — Distribution to the beneficiaries

Payments will be made to the principal beneficiary.

Payments to the principal beneficiary will discharge the Agency from its payment obligation.

The principal beneficiary 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: BARCLAYS BANK PLC

Address of branch: 25, HIGH STREET COVENTRY, United Kingdom

Full name of the account holder: UNIVERSITY OF WARWICK

Full account number (including bank codes): IBAN code: GB03BARC20235543487977

#### 21.9 Costs of payment transfers

The cost of the payment transfers is borne as follows:

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

Such breaches may also lead to 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 Agency and the Commission

### 22.1.1 Right to carry out checks

The Agency or 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 Agency or the Commission may be assisted by external persons or bodies.

The Agency or the Commission may also request additional information in accordance with Article 17. The Agency or 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 Agency or 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 two years after the payment of the balance**. They will be formally notified to the principal beneficiary 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 Agency or 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 principal beneficiary 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 principal beneficiary 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 Agency or the Commission may request beneficiaries to provide such information to it directly.

The principal beneficiary 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 Agency or the Commission will formally notify the review report to the principal beneficiary 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 Agency or 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 two years after the payment of the balance**. They will be formally notified to the principal beneficiary 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 Agency or 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 principal beneficiary 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 principal beneficiary 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 Agency or 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 Agency or the Commission will formally notify the draft audit report to the principal beneficiary or beneficiary concerned, which has 30 days to formally notify observations ('**contradictory audit procedure**'). This period may be extended by the Agency or the Commission in justified cases.

The 'final audit report' will take into account observations by the principal beneficiary or beneficiary concerned. The report will be formally notified to it.

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

The Agency or 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>9</sup> and No 2185/96<sup>10</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>11</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.

<sup>&</sup>lt;sup>9</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).

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>&</sup>lt;sup>11</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).

### 22.4 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.

# 22.5.2 Findings in other grants

The Agency or 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 two 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 Agency or 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 Agency or 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 Agency or 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 Agency or 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 Agency or 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 Agency or 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 Agency or 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 Agency or 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 Agency or the Commission may carry out interim and final evaluations of the impact of the action measured against the objective of the EU 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 principal beneficiary or beneficiaries.

The Agency or 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 principal beneficiary 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 Agency 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>12</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 Agency may apply any of the measures described in Chapter 6.

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

<sup>&</sup>lt;sup>12</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.

#### 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

# 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 internal arrangements, 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>13</sup> established in an EU Member State or 'associated country' 14, if this is needed to exploit the results generated by the beneficiaries to which they are affiliated.

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.

<sup>&</sup>lt;sup>13</sup> 13 For the definition, see Article 2.1(2) of the Rules for Participation Regulation No 1290/2013: '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 that is directly or indirectly controlling a participant.

<sup>&#</sup>x27;Control' may take any of the following forms:

<sup>(</sup>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;

<sup>(</sup>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:

<sup>(</sup>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;

<sup>(</sup>b) the legal entities concerned are owned or supervised by the same public body.

<sup>&</sup>lt;sup>14</sup> For the definition, see Article 2.1(3) of the Rules for Participation Regulation No 1290/2013: 'associated country' means a third country which is party to an international agreement with the Union, as identified in Article 7 of Horizon 2020 Framework Programme Regulation No 1291/2013. Article 7 sets out the conditions for association of non-EU countries to Horizon 2020.

#### 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
  - (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 and the principal investigator)

If third parties (including personnel and the principal investigator) 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 for a beneficiary, 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 Agency ownership, to protect results

26.4.1 The Agency 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 or associated country, 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 Agency 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 Agency 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 Agency takes a positive decision, until it has taken the necessary steps to protect the results.

26.4.2 The Agency 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 Agency 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 Agency 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 Agency 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 Agency 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 Agency requests or agrees otherwise or unless it is impossible — include the following:

"The project leading to this application has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (grant agreement No [number])".

# 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.

This does not change the security obligations in Article 37, which still apply.

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

If results are incorporated in a standard, the beneficiaries concerned must — unless the Agency 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 have received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (grant agreement No [number])".

## 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, the security obligations in Article 37 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 Agency 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, which must include 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 and the ERC logo

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

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

"This project has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (grant agreement No [number])".

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

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

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

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

### 29.5 Disclaimer excluding Agency responsibility

Any dissemination of results must indicate that it reflects only the author's view and that the Agency 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.

This does not change the security obligations in Article 37, which still apply.

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:

- (a) this does not impede the rights under Article 31 and
- (b) not applicable.

In addition to Points (a) and (b), 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 or security obligations in Article 37, which still apply.

# 30.3 Agency right to object to transfers or licensing

The Agency 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 not associated with Horizon 2020 and

(b) the Agency 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 Agency 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 Agency may request additional information.

If the Agency 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 Agency decision, within the period set out above;
- if the Agency objects;
- until the conditions are complied with, if the Agency 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.

The obligations set out in this Article do not change the security obligations in Article 37, which still 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 internal arrangements, access to results must also be given — under fair and reasonable conditions (see Article 25.3) — to affiliated entities established in an EU Member State or associated country, 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 principal investigators

The beneficiaries must — on a royalty-free basis — give access to the principal investigator to results needed for *his/her* activities under the action.

#### 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 — WORKING CONDITIONS FOR THE PRINCIPAL INVESTIGATOR AND HIS/HER TEAM

# 32.1 Obligations towards the principal investigator and his/her team

The beneficiaries must respect the following working conditions for the principal investigator and *his/her* team:

(a) 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>15</sup> — in particular regarding working conditions, transparent recruitment processes based on merit and career development — and ensure that the principal investigator, researchers and third parties involved in the action are aware of them;

- (b) enter before signature of the Agreement into a '**supplementary agreement**' with the principal investigator, that specifies:
  - (i) the obligation of the beneficiary to meet its obligations under the Agreement;
  - (ii) the obligation of the principal investigator to supervise the scientific and technological implementation of the action;
  - (iii) the obligation of the principal investigator to assume the responsibility for the scientific reporting for the beneficiary and contribute to the financial reporting;
  - (iv) the obligation of the principal investigator to meet the time commitments for implementing the action as described in Annex 1;
  - (v) the obligation of the principal investigator to apply the beneficiary's usual management practices;
  - (vi) the obligation of the principal investigator to inform the principal beneficiary immediately of any events or circumstances likely to affect the Agreement (see Article 17), such as:
    - a planned transfer of the action (or part of it) to a new beneficiary (see Article 56a);
    - any personal grounds affecting the implementation of the action;
    - any changes in the information that was used as a basis for signing the supplementary agreement;
    - any changes in the information that was used as a basis for awarding the grant;
  - (vii) the obligation of the principal investigator to ensure the visibility of EU funding in communications or publications and in applications for the protection of results (see Articles 27, 28, 29 and 38);
  - (viii) the obligation of the principal investigator to uphold the intellectual property rights of the beneficiary during the implementation of the action and afterwards;
  - (ix) the obligation of the principal investigator to maintain confidentiality (see Article 36);
  - (x) for a transfer of the action (or part of it) to a new beneficiary (see Article 56a): the obligation of the principal investigator to:

<sup>&</sup>lt;sup>15</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).

- propose to the principal beneficiary (in writing) to what extent the action will be transferred and the details of the transfer arrangement;
- provide a statement to the principal beneficiary with the detailed results of the research up to the time of transfer;
- (xi) the right of the Commission and the Agency, the European Court of Auditors (ECA) and the European Anti-fraud Office (OLAF) to exercise their rights under Articles 22 and 23 also towards the principal investigator;
- (xii) the applicable law and the country in which disputes must be settled;
- (c) provide the principal investigator with a copy of the signed Agreement;
- (d) guarantee the principal investigator scientific independence, in particular for the:
  - (i) use of the budget to achieve the scientific objectives;
  - (ii) authority to publish as senior author and invite as co-authors those who have contributed substantially to the work;
  - (iii) preparation of scientific reports for the action;
  - (iv) selection and supervision of the other team members (hosted *and engaged* by the beneficiary or other legal entities), in line with the profiles needed to conduct the research and in accordance with the beneficiary's usual management practices;
  - (v) possibility to apply independently for funding;
  - (vi) access to appropriate space and facilities for conducting the research;
- (e) provide during the implementation of the action research support to the principal investigator and the team members (regarding infrastructure, equipment, access rights, products and other services necessary for conducting the research);
- (f) support the principal investigator and provide administrative assistance, in particular for the:
  - (i) general management of the work and his/her team
  - (ii) scientific reporting, especially ensuring that the team members send their scientific results to the principal investigator;
  - (iii) financial reporting, especially providing timely and clear financial information;
  - (iv) application of the beneficiary's usual management practices;
  - (v) general logistics of the action;
  - (vi) access to the electronic exchange system (see Article 52);

- (g) inform the principal investigator immediately (in writing) of any events or circumstances likely to affect the Agreement (see Article 17);
- (h) ensure that the principal investigator enjoys adequate:
  - (i) conditions for annual, sickness and parental leave;
  - (ii) occupational health and safety standards;
  - (iii) insurance under the general social security scheme, such as pension rights;
- (i) allow the transfer of the Agreement to a new beneficiary ('portability'; see Article 56a)

# 32.2 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 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 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 Agency 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 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.

<sup>&</sup>lt;sup>16</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

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 Agency 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.

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

Activities involving research on human embryos or human embryonic stem cells may be carried out only if:

- they are set out in Annex 1 or
- the coordinator has obtained explicit approval (in writing) from the Agency (see Article 52).

# 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 Agency 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 Agency 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 Agency 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.

This does not change the security obligations in Article 37, which still apply.

The Agency 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.

Under the conditions set out in Article 4 of the Rules for Participation Regulation No 1290/2013<sup>17</sup>, the Commission must moreover make available information on the results to other EU institutions, bodies, offices or agencies as well as Member States or associated countries.

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

#### 37.1 Results with a security recommendation

Not applicable

# 37.2 Classified results

*Not applicable* 

#### 37.3 Activities involving dual-use goods or dangerous materials and substances

Not applicable

### 37.4 Consequences of non-compliance

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

<sup>&</sup>lt;sup>17</sup> Regulation (EU) No 1290/2013 of the European Parliament and of the Council of 11 December 2013 laying down the rules for participation and dissemination in "Horizon 2020 - the Framework Programme for Research and Innovation (2014-2020)" (OJ L 347, 20.12.2013 p.81).

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, the confidentiality obligations in Article 36 or the security obligations in Article 37, all of which still apply.

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

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

Unless the Agency 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 the ERC Logo and
- (b) include the following text:

For communication activities: "This project has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (grant agreement No [number])".

For infrastructure, equipment and major results: "This [infrastructure][equipment][insert type of result] is part of a project that has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (grant agreement No [number])".

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

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

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

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

# 38.1.3 Disclaimer excluding Agency responsibility

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

#### 38.2 Communication activities by the Agency

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

The Agency may use, for its own 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 or principal investigator (including in electronic form).

This does not change the confidentiality obligations in Article 36 and the security obligations in Article 37, all of which still apply.

However, if the Agency's use of these materials, documents or information would risk compromising legitimate interests, the beneficiary concerned may request the Agency not to use it (see Article 52).

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

- (a) **use for its own purposes** (in particular, making them available to persons working for the Agency 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 (EC) No 1049/2001<sup>18</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 exploitation set out in points (b),(c),(d) and (f) to third parties if needed for the communication and publicising activities of the Agency.

If the right of use is subject to rights of a third party (including personnel of the beneficiary and the principal investigator), 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 or the principal investigator), the Agency will insert the following information:

"© – [year] – [name of the copyright owner]. All rights reserved. Licensed to the European Research Council Executive Agency (ERCEA) under conditions."

<sup>&</sup>lt;sup>18</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.

### 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.

#### ARTICLE 39 — PROCESSING OF PERSONAL DATA

# 39.1 Processing of personal data by the Agency and the Commission

Any personal data under the Agreement will be processed by the Agency or the Commission under Regulation No 45/2001<sup>19</sup> and according to the 'notifications of the processing operations' to the Data Protection Officer (DPO) of the Agency or the Commission (publicly accessible in the DPO register).

Such data will be processed by the 'data controller' of the Agency or 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 'service specific privacy statement(s) (SSPS)' that are published on the Agency and 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 Agency or the Commission. For this purpose, they must provide them with the service specific privacy statement (SSPS) (see above), before transmitting their data to the Agency or the Commission.

#### 39.3 Consequences of non-compliance

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

<sup>&</sup>lt;sup>19</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).

#### ARTICLE 40 — ASSIGNMENTS OF CLAIMS FOR PAYMENT AGAINST THE AGENCY

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

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

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

# <u>CHAPTER 5 DIVISION OF BENEFICIARIES' ROLES AND RESPONSIBILITIES—</u> <u>RELATIONSHIP WITH COMPLEMENTARY BENEFICIARIES — RELATIONSHIP</u> WITH PARTNERS OF A JOINT ACTION

# ARTICLE 41 — DIVISION OF BENEFICIARIES' ROLES AND RESPONSIBILITIES — RELATIONSHIP WITH COMPLEMENTARY BENEFICIARIES — RELATIONSHIP WITH PARTNERS OF A JOINT ACTION

### 41.1 Roles and responsibilities towards the Agency

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 Agency 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 (in the electronic exchange system) up to date (see Article 17);
- (ii) inform the principal beneficiary immediately of any events or circumstances likely to affect significantly or delay the implementation of the action (see Article 17);
- (iii) submit to the principal beneficiary 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 scientific 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 Agency or the Commission under the Agreement, unless the Agreement requires the beneficiary to submit this information directly to the Agency or the Commission.

# (b) The principal beneficiary 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 Agency (in particular, providing the Agency with the information described in Article 17), unless the Agreement specifies otherwise;
- (iii) request and review any documents or information required by the Agency and verify their completeness and correctness before passing them on to the Agency;
- (iv) submit the deliverables and reports to the Agency (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 Agency of the amounts paid to each beneficiary, when required under the Agreement (see Articles 44 and 50) or requested by the Agency.

The principal beneficiary 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

The beneficiaries must have 'internal arrangements' regarding their operation and co-ordination, covering all aspects of their cooperation and implementation of the action, to ensure the action is implemented properly (including decision making procedures for scientific and grant management issues, the distribution of the EU contribution, internal dispute settlement and division of responsibilities for cases of rejection of costs or reduction of the grant).

The internal arrangements must not contain any provision contrary to this Agreement.

41.4 Relationship with complementary beneficiaries — Collaboration agreement

Not applicable

41.5 Relationship with partners of a joint action — Coordination agreement

Not applicable

# <u>CHAPTER 6 REJECTION OF COSTS — REDUCTION OF THE GRANT — RECOVERY — PENALTIES — DAMAGES — SUSPENSION — TERMINATION — FORCE MAJEURE</u>

# <u>SECTION 1 REJECTION OF COSTS — REDUCTION OF THE GRANT — RECOVERY — PENALTIES</u>

#### ARTICLE 42 — REJECTION OF INELIGIBLE COSTS

#### 42.1 Conditions

- 42.1.1 The Agency 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 Agency rejects costs without reduction of the grant (see Article 43) or recovery of undue amounts (see Article 44), it will formally notify the principal beneficiary 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 principal beneficiary or beneficiary concerned may — within 30 days of receiving notification — formally notify the Agency of its disagreement and the reasons why.

If the Agency 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 Agency 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 Agency — 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 Agency 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 Agency 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 Agency 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 Agency will formally notify a 'pre-information letter' to the principal beneficiary 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 Agency 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 Agency 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 Agency 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 Agency will recover the difference (see Article 44).

#### ARTICLE 44 — RECOVERY OF UNDUE AMOUNTS

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

The Agency will — after termination of the participation of a beneficiary, at the payment of the balance or afterwards — claim back any amount that was paid but is not due under the Agreement.

Each beneficiary's financial responsibility in case of recovery is limited to its own debt, except for the amount retained for the Guarantee Fund (see Article 21.4).

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

If recovery takes place after termination of a beneficiary's participation (including the principal beneficiary), the Agency will claim back the undue amount from the beneficiary concerned, by formally notifying it a debit note (see Article 50.2 and 50.3). This note will specify 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 Agency or 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 Agency, the Commission or another executive agency (from the EU or Euratom budget).

In exceptional circumstances, to safeguard the EU's financial interests, the Agency 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 specified 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 Agency or 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<sup>20</sup> applies.

### 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 Agency will formally notify a 'pre-information letter' to the principal beneficiary:

- informing it of its intention to recover, the amount due as the balance and the reasons why;
- specifying that it intends to deduct the amount to be recovered from the amount retained for the Guarantee Fund;
- requesting the principal beneficiary to submit a report on the distribution of payments to the beneficiaries within 30 days of receiving notification, and
- inviting the principal beneficiary to submit observations within 30 days of receiving notification.

<sup>&</sup>lt;sup>20</sup> Directive 2007/64/EC of the European Parliament and of the Council of 13 November 2007 on payment services in the internal market amending Directives 97/7/EC, 2002/65/EC, 2005/60/EC and 2006/48/EC and repealing Directive 97/5/EC (OJ L 319, 05.12.2007, p. 1).

If no observations are submitted or the Agency 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:

- pay the difference between the amount to be recovered and the amount retained for the Guarantee Fund, **if the difference is positive** or
- formally notify to the principal beneficiary a **debit note** for the difference between the amount to be recovered and the amount retained for the Guarantee Fund, **if the difference is negative**. This note will also specify the terms and the date for payment.

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

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

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

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{{{beneficiary's costs declared in the final summary financial statement and approved by the Agency multiplied by the reimbursement rate set out in Article 5.2 for the beneficiary concerned} divided by

the EU contribution for the action calculated according to Article 5.3.1}

multiplied by

the final grant amount (see Article 5.3)},

minus

{pre-financing and interim payments received by the beneficiary}}.
```

(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:

```
{ {amount calculated according to point (a) for the beneficiary concerned divided by the sum of the amounts calculated according to point (a) for all the beneficiaries identified according to point (a)} multiplied by the amount set out in the debit note formally notified to the principal beneficiary}.
```

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

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

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

- (b) by **drawing on the Guarantee Fund**. The Agency or the Commission will formally notify the beneficiary concerned the debit note on behalf of the Guarantee Fund and recover the amount:
  - (i) not applicable;
  - (ii) 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 Agency or 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 Agency.

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

```
{{beneficiary's costs declared in the final summary financial statement and approved by the Agency multiplied by the reimbursement rate set out in Article 5.2 for the beneficiary concerned} divided by the EU contribution for the action calculated according to Article 5.3.1} multiplied by the final grant amount (see Article 5.3)}.
```

If the principal beneficiary has not distributed amounts received (see Article 21.7), the Agency will also recover these amounts.

The Agency 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 Agency 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 Agency will **recover** the amount:

- (a) by 'offsetting' it without the beneficiary's consent against any amounts owed to the beneficiary concerned by the Agency, the Commission or another executive agency (from the EU or Euratom budget).
  - In exceptional circumstances, to safeguard the EU's financial interests, the Agency may offset before the payment date specified in the debit note;
- (b) by **drawing on the Guarantee Fund**. The Agency or the Commission will formally notify the beneficiary concerned the debit note on behalf of the Guarantee Fund and recover the amount:
  - (i) not applicable;
  - (ii) 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 Agency or 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 Agency 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 Agency or 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 Agency.

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

#### 45.3 Procedure

Before applying a penalty, the Agency 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 Agency 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 Agency or 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 Agency, the Commission or another executive agency (from the EU or Euratom budget).
  - In exceptional circumstances, to safeguard the EU's financial interests, the Agency 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 Agency or the Commission receives full payment of the amount.

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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 Agency

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

#### 46.2.3 Procedure

Before claiming damages, the Agency 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 Agency 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 Agency or 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 Agency, the Commission or another executive agency (from the EU or Euratom budget).

In exceptional circumstances, to safeguard the EU's financial interests, the Agency 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 Agency or 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 Agency 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 Agency will formally notify the principal beneficiary of the suspension and the reasons why.

The suspension will take effect the day notification is sent by the Agency (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 principal beneficiary may request the Agency if the suspension will continue.

If the payment deadline has been suspended due to the non-compliance of the scientific or financial reports (see Article 20) and the revised report or statement is not submitted or was submitted but is

also rejected, the Agency may also terminate the Agreement or the participation of the beneficiary (see Article 50.3.1(1)).

#### ARTICLE 48 — SUSPENSION OF PAYMENTS

#### 48.1 Conditions

The Agency 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 Agency will formally notify the principal beneficiary:

- 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 Agency 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 Agency.

If the conditions for resuming payments are met, the suspension will be **lifted**. The Agency will formally notify the principal beneficiary.

During the suspension, the periodic report(s) (see Article 20.3) must not contain any individual financial statements from the beneficiary concerned. When the Agency resumes payments, the principal beneficiary 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 principal beneficiary must immediately formally notify to the Agency 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 Agency.

Once circumstances allow for implementation to resume, the principal beneficiary must immediately formally notify the Agency 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 Agency

#### 49.2.1 Conditions

The Agency 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 Agency will formally notify the principal beneficiary:

- 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 Agency 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 principal beneficiary (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 principal beneficiary 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 Agency (see Article 46).

Suspension of the action implementation does not affect the Agency'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 — with the agreement of the principal investigator — terminate the Agreement

The principal beneficiary must formally notify termination to the Agency (see Article 52), stating:

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

If no reasons are given or if the Agency 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 principal beneficiary must — within 60 days from when termination takes effect — submit:

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

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

The Agency 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. 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 and 40) 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 principal beneficiary, on request of the beneficiary concerned or on behalf of the other beneficiaries.

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

If the principal beneficiary'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 principal beneficiary In this case, the request for amendment must propose a new principal beneficiary.

If this information is not given or if the Agency 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 principal beneficiary must — within 30 days from when termination takes effect — submit:

- a report on the distribution of payments to the beneficiary concerned and
- if termination takes effect during the period set out in Article 3, a 'termination report' from the beneficiary concerned, for the open reporting period until termination, containing an overview

of the progress of the work, information on the eligible costs (including a breakdown of direct costs table), the individual financial statement and, if applicable, the certificate on the financial statement (see Article 20).

The information in the termination report must also be included in the periodic report for the next reporting period (see Article 20.3).

If the request for amendment is rejected by the Agency (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 Agency, the Agreement will be **amended** to introduce the necessary changes (see Article 55).

The Agency will **calculate** — on the basis of the periodic reports, the termination report and the report on the distribution of payments — if the (pre-financing and interim) payments received by the beneficiary concerned exceed the beneficiary's EU contribution (calculated by applying the reimbursement rate to the eligible costs declared by the beneficiary and approved by the Agency). Only costs incurred by the beneficiary concerned until termination takes effect are eligible (see Article 6). Costs relating to contracts due for execution only after termination are not eligible.

- If the payments received exceed the amounts due:
  - if termination takes effect during the period set out in Article 3 and the request for amendment is accepted, the beneficiary concerned must repay to the principal beneficiary the amount unduly received. The Agency will formally notify the amount unduly received and request the beneficiary concerned to repay it to the principal beneficiary within 30 days of receiving notification. If it does not repay the principal beneficiary, the Agency will draw upon the Guarantee Fund to pay the principal beneficiary and then notify a debit note on behalf of the Guarantee Fund to the beneficiary concerned (see Article 44).
  - in all other cases (in particular if termination takes effect after the period set out in Article 3), the Agency will formally notify a **debit note** to the beneficiary concerned. If payment is not made by the date in the debit note, the Guarantee Fund will pay to the Agency the amount due and the Agency will notify a debit note on behalf of the Guarantee Fund to the beneficiary concerned (see Article 44);
  - if the beneficiary concerned is the former principal beneficiary, it must repay the new principal beneficiary according to the procedure above, unless:
    - termination is after an interim payment and
    - the former principal beneficiary has not distributed amounts received as prefinancing or interim payments (see Article 21.7).

In this case, the Agency will formally notify a **debit note** to the former principal beneficiary If payment is not made by the date in the debit note, the Guarantee Fund will pay to the Agency the amount due. The Agency will then pay the new principal beneficiary and notify a debit note on behalf of the Guarantee Fund to the former principal beneficiary (see Article 44).

• If the payments received **do not exceed the amounts due**: amounts owed to the beneficiary concerned will be included in the next interim or final payment.

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

If the Agency does not receive the report on the distribution of payments within the deadline (see above), it will consider that:

- the principal beneficiary did not distribute any payment to the beneficiary concerned and that
- the beneficiary concerned must not repay any amount to the principal beneficiary.

Improper termination may lead to a reduction of the grant (see Article 43) 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 and 40) continue to apply.

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

# **50.3.1 Conditions**

The Agency 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, scientific 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 with respect to the state of the art is no longer of scientific or technological relevance or no longer has any breakthrough potential;
- (i) not applicable;
- (i) 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').
- (n) the principal investigator is no longer in a position to continue working under the action.

## 50.3.2 Procedure

Before terminating the Agreement or participation of one or more beneficiaries, the Agency will formally notify the principal beneficiary (with copy to the principal investigator):

- **informing** 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 Agency of the measures to ensure compliance with the obligations under the Agreement.

If the Agency does not receive observations or decides to pursue the procedure despite the observations it has received, it will formally notify to the principal beneficiary (with copy to the principal investigator) **confirmation** of the termination and the date it will take effect. Otherwise, it will formally notify the principal beneficiary (with copy to the principal investigator) that the procedure is not continued.

## The termination will **take effect**:

- for terminations under Points (b), (c), (e), (g), (h), (j), (l.ii) and (n) 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 principal beneficiary.

## **50.3.3 Effects**

# (a) for termination of the Agreement:

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

- (i) a periodic financial report (for the last open reporting period until termination) (see Article 20.3) and
- (ii) a final scientific report (see Article 20.2).

If the Agreement is terminated for breach of the obligation to submit the reports (see Articles 20.6 and 50.3.1(l)), the principal beneficiary may not submit any reports after termination.

If the Agency 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 Agency 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 Agency'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 Agency (see Article 46).

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

# (b) for termination of the participation of one or more beneficiaries:

The principal beneficiary must, within 60 days from when termination takes effect, submit:

- (i) a report on the distribution of payments to the beneficiary concerned;
- (ii) a request for amendment (see Article 55), with a proposal for reallocation of the tasks and 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 is notified after the period set out in Article 3, no request for amendment must be submitted unless the beneficiary concerned is the principal beneficiary. In this case the request for amendment must propose a new principal beneficiary, and
- (iii) if termination takes effect during the period set out in Article 3, a **termination report** from the beneficiary concerned, for the open reporting period until termination, containing an overview of the progress of the work, information on the eligible costs

(including a breakdown of direct costs table), the individual financial statement and, if applicable, the certificate on the financial statement (see Article 20).

The information in the termination report must also be included in the periodic report for the next reporting period (see Article 20.3).

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

The Agency will **calculate** — on the basis of the periodic reports, the termination report and the report on the distribution of payments — if the (pre-financing and interim) payments received by the beneficiary concerned exceed the beneficiary's EU contribution (calculated by applying the reimbursement rate to the eligible costs declared by the beneficiary and approved by the Agency). Only costs incurred by the beneficiary concerned until termination takes effect are eligible (see Article 6). Costs relating to contracts due for execution only after termination are not eligible.

- If the payments received exceed the amounts due:
  - if termination takes effect during the period set out in Article 3 and the request for amendment is accepted, the beneficiary concerned must repay to the principal beneficiary the amount unduly received. The Agency will formally notify the amount unduly received and request the beneficiary concerned to repay it to the principal beneficiary within 30 days of receiving notification. If it does not repay the principal beneficiary, the Agency will draw upon the Guarantee Fund to pay the principal beneficiary and then notify a debit note on behalf of the Guarantee Fund to the beneficiary concerned (see Article 44).
  - in all other cases, in particular if termination takes effect after the period set out in Article 3, the Agency will formally notify a **debit note** to the beneficiary concerned. If payment is not made by the date in the debit note, the Guarantee Fund will pay to the Agency the amount due and the Agency will notify a debit note on behalf of the Guarantee Fund to the beneficiary concerned (see Article 44);
  - if the beneficiary concerned is the former principal beneficiary, it must repay the new principal beneficiary the amount unduly received, unless:
    - termination takes effect after an interim payment, and
    - the former principal beneficiary has not distributed amounts received as pre-financing or interim payments (see Article 21.7)

In this case, the Agency will formally notify a **debit note** to the former principal beneficiary If payment is not made by the date in the debit note, the Guarantee Fund will pay to the Agency the amount due. The Agency will then pay the new

principal beneficiary and notify a debit note on behalf of the Guarantee Fund to the former principal beneficiary (see Article 44).

• If the payments received **do not exceed the amounts due**: amounts owed to the beneficiary concerned will be included in the next interim or final payment.

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

If the Agency does not receive the report on the distribution of payments within the deadline (see above), it will consider that:

- the principal beneficiary did not distribute any payment to the beneficiary concerned, and that
- the beneficiary concerned must not repay any amount to the principal beneficiary.

After termination, the concerned beneficiary's obligations (in particular Articles 20, 22, 23, Section 3 of Chapter 4, 36, 37, 38 and 40) 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 Agency and Commission websites.

## 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 Agency will formally notify the principal beneficiary and beneficiaries in advance any changes to this URL.

**Formal notifications on paper** (only after the payment of the balance) addressed **to the Agency** must be sent to the following address:

European Research Council Executive Agency (ERCEA) Starting Grant Rue de la Loi 200 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>21</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.

<sup>&</sup>lt;sup>21</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).

## 55.2 Procedure

The party requesting an amendment must submit a request for amendment signed in the electronic exchange system (see Article 52).

The principal beneficiary submits and receives requests for amendment on behalf of the beneficiaries (see Annex 3).

If a change of principal beneficiary 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 principal beneficiary without its agreement: the opinion of the principal beneficiary (or proof that this opinion has been requested in writing).

The Agency 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 Agency 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.

# 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 principal beneficiary must — within 30 days — request an amendment to make any changes necessary to ensure proper implementation of the action. This does not affect the Agency'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 principal beneficiary 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 56a — TRANSFER OF THE AGREEMENT TO A NEW BENEFICIARY — PORTABILITY OF THE GRANT

#### 56a.1 Conditions

The principal investigator may request the transfer of the action (or his/her part of it) to a new beneficiary, provided that the objectives of the action remain achievable.

The principal beneficiary may object only on the basis that the transfer is not possible under national law.

#### 56a.2 Procedure

The principal beneficiary must formally notify a **request for amendment** to the Agency (see Article 55).

#### 56a.3 Effects

The former beneficiary must agree with the principal investigator and the new beneficiary on a plan to transfer the intellectual property rights under the Agreement to the new beneficiary.

The Agency will request the former beneficiary to transfer to the new beneficiary any part of the prefinancing (see Article 21) not covered by an approved financial report.

If requested by the principal investigator, the Agency may require the former beneficiary to transfer to the new beneficiary the equipment purchased and used exclusively for the action (against reimbursement of the costs that have not yet been depreciated). The former beneficiary may object only on the basis that the transfer is not possible under national law.

# 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. Actions against enforceable decisions must be brought against the Commission (not against the Agency).

# ARTICLE 58 — ENTRY INTO FORCE OF THE AGREEMENT

The Agreement will enter into force on the day of signature by the Agency or the principal beneficiary, depending on which is later.

**SIGNATURES** 

For the principal beneficiary

For the Agency





Established by the European Commission

# ANNEX 1 (part A)

**Starting Grant** 

NUMBER — 679092 — Sense of Commitment

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# 1.1. The project summary

Project Number <sup>1</sup>	679092	Project Acronym <sup>2</sup>	Sense of Commitment	
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One form per project					
	General information				
Project title <sup>3</sup>	An Integrative Framework for Modeling the Sense of Commitment				
Starting date <sup>4</sup> 01/07/2016					
Duration in months 5	60				
Call (part) identifier <sup>6</sup>	ERC-2015-STG				
Торіс	ERC-StG-2015 ERC Starting Grant				
Philosophy of mind, philosophy of language, Attention, perception, action, consciousness, Human development and its disorders; comparative cognition, Personality and social cognition; emotion					
Free keywords joint action, trust, commitment, social interaction, embodied cognition, social robotics					
Abstract <sup>7</sup>					

The phenomenon of commitment is a cornerstone of human social life. Commitments make individuals' behavior predictable in the face of fluctuations in their desires and interests, thereby facilitating the planning and coordination of joint actions involving multiple agents. Moreover, commitments make people willing to perform actions that they would not otherwise perform. For example, an investor may be willing to purchase government bonds because a central banker has made a commitment to maintaining that country's currency. In general, social objects and institutions such as jobs, money, government and marriage depend for their origin and stability upon the credibility of commitments. Despite the crucial importance of commitment for characteristically human forms of sociality, it is not well understood how people identify and assess the level of their own and others' commitments. The SENSE OF COMMITMENT will develop a theoretical framework for research on commitment, and create a suite of experimental paradigms for testing predictions generated by the theoretical framework. By focusing on joint actions involving pairs

of agents, it will illuminate the fundamental mechanisms underlying large-scale human social phenomena. The SENSE OF COMMITMENT will generate basic scientific knowledge that will be relevant to many disciplines in the social sciences, cognitive sciences, and humanities. The insights gained will create a new perspective for:

- 1) social robotics, by specifying factors that will be useful in designing robots (e.g. for senior citizens' homes and rescue operations) that participate in commitments with humans;
- 2) research on pathological conditions such as borderline personality disorder, in which individuals find it difficult to commit to or to rely upon others;
- 3) identifying factors relevant in sustaining people's commitment to beneficial long-term programs (skills training for workers, exercise or rehabilitation programs for patients, etc.).

# 1.2. List of Beneficiaries

Project Number <sup>1</sup> 679092 Project Acronym <sup>2</sup> Sense of Commitment	Project Number <sup>1</sup>	679092	Project Acronym <sup>2</sup>	Sense of Commitment
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# List of Beneficiaries

No	Name	Short name	Country	Project entry month <sup>8</sup>	Project exit month
1	THE UNIVERSITY OF WARWICK	WARWICK	United Kingdom	1	60
2	KOZEP-EUROPAI EGYETEM	CEU	Hungary	1	60

# 1.3. Workplan Tables - Detailed implementation

# 1.3.1. WT1 List of work packages

WP Number 9	WP Title	Lead beneficiary 10	Start month	End month
WP1	Ethics requirements	1 - WARWICK	1	60

# 1.3.2. WT2 list of deliverables

Deliverable Number <sup>14</sup>	Deliverable Title	WP number <sup>9</sup>	Lead beneficiary	Type 15	Dissemination level <sup>16</sup>	Due Date (in months) 17
D1.1	OEI - Requirement No. 4	WP1	1 - WARWICK	Ethics	Confidential, only for members of the consortium (including the Commission Services)	16
D1.2	GEN - Requirement No. 10	WP1	1 - WARWICK	Ethics	Confidential, only for members of the consortium (including the Commission Services)	16
D1.3	GEN - Requirement No. 11	WP1	1 - WARWICK	Ethics	Confidential, only for members of the consortium (including the Commission Services)	16
D1.4	GEN - Requirement No. 9	WP1	1 - WARWICK	Ethics	Confidential, only for members of the consortium (including the Commission Services)	16

# 1.3.3. WT3 Work package descriptions

Work package number 9	WP1	Lead beneficiary 10	1 - WARWICK		
Work package title	Ethics requirements				
Start month	1	End month	60		

# Objectives

The objective is to ensure compliance with the 'ethics requirements' set out in this work package.

# Description of work and role of partners

WP1 - Ethics requirements [Months: 1-60]

WARWICK

This work package sets out the 'ethics requirements' that the project must comply with.

# List of deliverables

Deliverable Number <sup>14</sup>	Deliverable Title	Lead beneficiary	Type 15	Dissemination level	Due Date (in months) 17
D1.1	OEI - Requirement No. 4	1 - WARWICK	Ethics	Confidential, only for members of the consortium (including the Commission Services)	16
D1.2	GEN - Requirement No. 10	1 - WARWICK	Ethics	Confidential, only for members of the consortium (including the Commission Services)	16
D1.3	GEN - Requirement No.	1 - WARWICK	Ethics	Confidential, only for members of the consortium (including the Commission Services)	16
D1.4	GEN - Requirement No. 9	1 - WARWICK	Ethics	Confidential, only for members of the consortium (including the Commission Services)	16

# Description of deliverables

The 'ethics requirements' that the project must comply with are included as deliverables in this work package.

D1.1: OEI - Requirement No. 4 [16]

Copies of approvals/notification for the collection of personal data by the competent University Data Protection Officer / National Data Protection authority must be submitted to the ERCEA.

# D1.2 : GEN - Requirement No. 10 [16]

An external independent Ethics Advisor must be appointed to oversee the ethical concerns involved in this research. A report by an ethics Advisor must be submitted to the ERCEA with the financial reports

# D1.3: GEN - Requirement No. 11 [16]

Templates must be provided for Informed Consent Forms and Information Sheets (in language and terms understandable to participants).

## D1.4: GEN - Requirement No. 9 [16]

Copies of ethical approvals by the competent authorities must be submitted to the ERCEA.

#### 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 fillings, videos, etc.

**OTHER** 

ETHICS Ethics requirement

#### 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.



# **ERC Starting Grant 2015**

# Annex 1 to the Grant Agreement (Description of the Action) Part B

**Action Acronym: Sense of Commitment** 

**Action number: 679092** 

**Action Title: An Integrative Framework for Modeling the** 

**Sense of Commitment** 

**Principal Investigator: John Andrew Michael** 

**Host Institution: University of Warwick** 

Additional Beneficiaries: Central European University

# **Table of Contents**

1 Curriculum vitae	3
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#### **Curriculum Vitae**

#### **EDUCATION**

2010

Department of Philosophy, University of Vienna, Austria

Master 2006

Department of Philosophy, University of Tübingen, Germany

2000 B.A.

Department of Philosophy, Wesleyan University (CT), USA

# PROFESSIONAL APPOINTMENTS

**ERC Starting Grant Principal Investigator** 2016 -

Department of Philosophy, University of Warwick, UK

1<sup>st</sup> April 2014 Marie Curie Research Fellow (Proposal received a score of 98.7 out of 100). - 31<sup>st</sup> March Department of Cognitive Science, Central European University, Hungary

2016

2012

2013 - 2014Post-doctoral Researcher

Center for Subjectivity Research, University of Copenhagen, Denmark

2009 - 2013Post-doctoral Researcher, Mindlab and Gnosis Research Center, Aarhus University,

Denmark

#### HONORARY APPOINTMENTS

2013 -Affiliated Researcher

Interacting Minds Centre, Aarhus University

Fall 2012 Visiting Fellow

Center for Cognitive Studies, Tufts University (hosted by Daniel Dennett)

Spring 2011 Guest Researcher

Italian Institute of Technology, Genoa, Italy (hosted by Luciano Fadiga)

Spring 2007 Guest Researcher

MPI for Evolutionary Anthropology, Leipzig, Germany (hosted by Michael Tomasello)

#### • GRANTS AWARDED

2014 -Marie Curie Fellowship awarded by the European Commission (hosted by Günther Knoblich and Natalie Sebanz, Central European University, Budapest). Proposal received a score of 98.7 out of 100 (PI). Total Value: €138,475.20

Möbius Syndrome Foundation Research Grant for the project 'A Social Skills Workshop for 2014 Teens with Möbius' (CO-PI). Total Value: \$13,710 ~ €12,149.

Seed Funding Grant from the Interacting Minds Centre, Aarhus University, to carry out the 2013 project 'Gestural Coupling and Social Cognition: Möbius Syndrome as a Case Study' (PI). Total Value: 30,000 DKK ~ €4,027.

'Short-Term Scientific Mission' Grant from ESF: COST (European Cooperation in Science and Technology), for training in transcranial magnetic stimulation at the Italian Institute of Technology, Genoa (PI). Total Value: €2,000

# **COMMISSIONS OF TRUST**

- Ad hoc reviewer for:
  - Mind and Language, Mind, Journal of Experimental Psychology: Human Perception and Performance, Psychological Science, Frontiers in Human Neuroscience, Experimental Brain Research, Journal of Consciousness Studies, Philosophical Psychology, Review of Philosophy and Psychology, Philosophical Explorations, Phenomenology and the Cognitive Sciences, European Journal for Philosophy of Science, Topoi, PLoS One, New Ideas in Psychology, Behavioral Brain Research, Cognitive Semiotics, Robotics: Science and Systems 2015
- Evaluator for:
  - o Fernand Braudel-IFER Incoming Program Fellowship
  - o Research Foundation Flounders (Fonds Wetenschappelijk Onderzoek Vlaanderen,

FWO)

# • ORGANISATION OF SCIENTIFIC MEETINGS

- 2014 Symposium Organizer: Social Expertise Australasian Society for Cognitive Science, Melbourne.
- 2014 Conference Organizer: Thinking (About) Groups University of Copenhagen.
- 2014 Workshop Organizer: Social Expertise ESF Networking Meeting funded by the DRUST project (Digging for the Roots of Social Understanding), Lisbon.
- 2013 Conference Organizer: The Scope and Limits of Direct (Social) Perception Copenhagen University
- 2013 Workshop Organizer: Theoretical and Empirical Issues Arising From Recent Research on Pain and Pain Empathy Interacting Minds Centre, Aarhus, Denmark.
- 2013 Conference Organizer: Minds in Common (Second in the Paris-Aarhus Series organized together with Mattia Gallotti to develop collaboration between the Institut Jean Nicod in Paris and the Interacting Minds Centre in Aarhus) Paris.
- 2013 Conference Organizer: Cooperation Why, How and with Whom? (Third in the Bochum-Aarhus series organized with Andreas Roepstorff, Anika Fiebich and Albert Newen) Aarhus, Denmark.
- 2012 Conference Organizer: Objects in Mind: Social Cognition and the Constitution of Social Facts, MindLab, Aarhus.
- 2011 Workshop Organizer: Möbius Syndrome and Social Cognition, London.
- 2011 Conference Organizer: Understanding Other Minds: Embodied Interaction and Higher-Order Reasoning Bochum, Germany.
- 2010 Conference Organizer: Shared Emotions, Joint Attention, Joint Action Center of Functionally Integrative Neuroscience, Aarhus, Denmark.
- 2010 Workshop Organizer: Folk Concepts and the Brain, Center of Functionally Integrative Neuroscience Aarhus, Denmark.

# • EDITOR OF SPECIAL ISSUES AND EDITED VOLUMES

Guest Editor of *Review of Philosophy and Psychology* Special Issue: Mental Actions and Mental Agency, Target Publication Date: March 2015.

Guest Editor of *Consciousness and Cognition* Special Issue: How Direct is Social Perception? Target Publication Date: April 2015.

Co-editor of edited volume: Gallotti, M. & Michael, J. (2014) *Perspectives on Social Ontology and Social Cognition*, Studies in the Philosophy of Sociality 4, DOI 10.1007/978-94-017-9147-2\_1. Springer:

Guest Editor, *Journal of Consciousness Studies*, Special Issue: Putting the Plastic Brain into Context, Volume 18, No. 7-8, 2011.

# • MEDIA COVERAGE

- A piece in the *The New Scientist* about my TMS study on action understanding: <a href="http://www.newscientist.com/article/dn25002-brain-zapping-makes-role-of-mirror-neurons-clearer.html#.UyRkgdwVfGA">http://www.newscientist.com/article/dn25002-brain-zapping-makes-role-of-mirror-neurons-clearer.html#.UyRkgdwVfGA</a>
- A piece about my study on social interactions involving people with Möbius Syndrome is in preparation and will be published in *Politikken*, a respected Danish newspaper.

# • MAJOR COLLABORATIONS

One factor that has been instrumental for me in building up an extensive and multidisciplinary network has been the fact that I have lived and worked in the US, Germany, Austria, Denmark and Hungary. Beyond this, I have also spent significant time during extended research visits to the MPI for Evolutionary Anthropology in Leipzig as a guest of **Mike Tomasello**, at Tufts University as a guest of **Dan Dennett**, at the Italian Institute of Technology in Genoa as a guest of **Luciano Fadiga**, and at Macquarie University as a guest of **John Sutton**. A second crucial factor has been my dual expertise in philosophy and in the cognitive sciences, which has enabled me to take on leadership roles in several multi-disciplinary collaborations, such as an ongoing conference series bringing together **Andreas Roepstorff's** Interacting Minds Centre (where I am an affiliated researcher) in Aarhus with **Albert Newen's** group in Bochum.

I am an active member of *The Research Network for Transdisciplinary Studies in Social Robotics* (TRANSOR) in Aarhus, which is a platform for research in social robotics. My fellowship at the CEU in Budapest has also allowed me to cultivate close working relationships not only with my immediate collaborators (**Günther Knoblich & Natalie Sebanz**) but also with other elite researchers working there

(e.g. **Dan Sperber, Agnes Kovacs, Gergely Csibra**) whose expertise I will continue to draw upon in the coming years.

The list of co-authors with whom I have written papers that are either published or under review includes Günther Knoblich, Nathalie Sebanz, Élisabeth Pacherie, Dan Zahavi, Jakob Hohwy, and Chris Frith.

# Appendix: All on-going and submitted grants and funding of the PI (Funding ID) <u>Mandatory information</u> (does not count towards page limits)

The costs charged to this ERC Starting Grant are not already covered by another EU funding source or non-EU funding source so that there is no funding overlap.

**On-going Grants** 

on going ordin					
Project Title	Funding source	Amount (Euros)	Period	Role of the PI	Relation to current ERC proposal <sup>l</sup>

**Grant applications** 

Projec	ct Title	Funding source	Amount (Euros)	Period	Role of the PI	Relation to current ERC proposal <sup>2</sup>

## Early achievements track-record

#### OVERALL SUMMARY OF EARLY ACHIEVEMENTS

While my doctoral training was in philosophy (in particular philosophy of mind and philosophy of science), my commitment to interdisciplinary research has led me to reach out to other disciplines and incorporate their methods, concepts and bodies of knowledge according to the internal logic of the problems being investigated. This commitment has led me to initiate and coordinate empirical research projects, and to learn new skills in order to carry out these projects. For example, on the basis of my interest in embodied cognition, I designed and conducted a TMS (transcranial magnetic stimulation) study (Cf. my paper in Psychological Science) in collaboration with Chris Frith and a group of researchers in Denmark investigating the contribution of somatotopically organized areas of premotor cortex to the interpretation of observed actions. The project was supported by a grant from the European Science Foundation, which enabled me to spend a month at the Italian Institute of Technology learning TMS skills. Secondly, together with an international group of researchers, I have developed a project examining social interactions involving individuals with Möbius Syndrome (a form of bilateral facial paralysis) as a case study on the relationship between bodily responses and top-down coordination within social interactions. Although these individuals lack one particularly important resource for implicit bodily communication and bodily synchronization, our results (under review) show that they are able to compensate with hand gestures and prosody and thereby achieve greater rapport in interactions. On the basis of these findings, we received funding from the Möbius Foundation to conduct a follow-up in the US, the data from which is currently being analyzed.

As a philosopher, my commitment to multidisciplinary research has enhanced my ability to understand and to reflect critically upon, as well as to contribute to, the cognitive sciences; taught me to conduct philosophy in a manner that is constrained by and builds upon empirical research, and to use philosophy to generate useful inputs for empirical research (e.g. testable hypotheses, assistance in theory construction, etc.); helped me to learn how to develop research projects that are socially valuable and that are interesting beyond the boundaries of my discipline (and thus are worthy of third-party funding); enabled me to build up a large, diverse and distinguished international network of collaborators; and enabled me to develop the leadership skills required for orchestrating large-scale projects involving multiple researchers in

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<sup>&</sup>lt;sup>1</sup> Describe clearly any scientific overlap between your ERC application and the current research grant or on-going grant application.

various countries. Over the past few years, the fruitfulness of this multidisciplinary approach has been confirmed by my success in publishing my research in top journals in philosophy (e.g. *Synthese*, *Philosophy of Science*) as well as the cognitive sciences (e.g. *Psychological Science*, *Consciousness and Cognition*), and in leading interdisciplinary journals (*Review of Philosophy and Psychology*)

Finally, my potential to build upon this early-career success and develop into a research leader at the European and global level is evinced in the exceptional score (98.7) that I received for my Marie Curie Fellowship application.

#### PUBLICATION RECORD

Citations: Overall=106, h-index=7

#### PUBLICATIONS IN PEER-REVIEWED INTERNATIONAL JOURNALS

Michael, J, & Christensen, W. (In Press) Flexible goal attribution in early mindreading, *Psychological Review* 

- Michael, J. (In Press) Putting unicepts to work: A teleosemantic perspective on the infant mindreading puzzle, *Synthese*, DOI: 10.1007/s11229-015-0850-x
- Michael, J., Bogart, K., Tylen, K., Østergaard, J.R., Krueger, J., & Fusaroli, R. (2015) Training in compensatory strategies enhance rapport in interactions involving people with Möbius Syndrome, *Frontiers in Endovascular and Interventional Neurology*. Volume 6, article 213, DOI: 10.3389/fneur.2015.00213
- Michael, J. & Salice, A. (Under Review) Implementing commitment in human-robot interaction.
- Christensen, W. & Michael, J. (In Press) From two systems to a multi-systems architecture for mindreading. *New Ideas in Psychology*, doi:10.1016/j.newideapsych.2015.01.003
- Steglich-Petersen, A. & Michael, J. (In Press) Why Desire Reasoning is Developmentally Prior to Belief Reasoning, *Mind and Language*
- Michael, J and D'Ausilio, A (In Press). Domain-Specific and Domain-General Processes in Social Cognition A Complementary Approach. *Consciousness and Cognition*
- Michael, J., Sandberg, K., Skewes, J., Wolf, T., Blicher, J., Overgaard, M., & Frith, C.D. (2014). Continuous theta burst demonstrates a causal role of premotor homunculus in action interpretation, *Psychological Science* 25: 963-972. DOI: 10.1177/0956797613520608
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## SELECTED PEER-REVIEWED BOOK CHAPTERS AND CONFERENCE PROCEEDINGS

Michael, J. (In Press) Cultural learning and the reliability of the intentional stance, in: Munoz-Suárez, C. (Ed.) *Content and Consciousness 2.0: Four Decades After (Studies in Brain and Mind Series*: Springer), with a response by Daniel Dennett

Michael, J. & Salice, A. (2014) (How) Can robots makes commitments? A pragmatic approach. In: Seibt, J. et al. (Eds.), Social Robots and the Future of Social Relations, IOS Press 2014. DOI: 10.3233/978-1-61499-480-0-125

# INVITED TALKS SINCE 2012 (> 70 TALKS AT CONFERENCES & COLLOQUIA)

- 2015 Workshop: TRANSOR: Methodological problems in social robotics, Aarhus University
- 2014 Tokyo University Forum for Analytic Philosophy
- 2014 Kyoto University Philosophy Departmental Colloquium
- 2014 Berlin School of Mind and Brain Current Issues Series
- 2014 Workshop: Minimal Mindreading, Magdeburg University
- 2014 Edinburgh Philosophy Society Lecture Series
- 2014 Möbius Syndrome Foundation, Scientific Symposium, Washington, D.C.
- 2014 Finnish Centre of Excellence in the Philosophy of the Social Sciences, Helsinki.
- 2013 Varieties of Collective Intentionality (ESF Networking meeting), London.
- 2013 Berlin Center for Mind and Brain Current Issues Series
- 2013 Workshop on Concept Acquisition and the Role of Language, Durham University
- 2012 University of Pittsburgh Center for Philosophy of Science Departmental Colloquium
- 2012 Institut Jean Nicod Departmental Colloquium, Paris
- 2012 International Conference: Personal and Shared Intentions, MPI for Human Development, Berlin.
- Invited Commentary on 'Time to Act: the Dynamics of Agentive Experience', by Élisabeth Pacherie. Consciousness Online Conference, organized by CUNY Graduate Center.

## **State-of-the-art and objectives**

#### 1. General aims

The phenomenon of *commitment* is a cornerstone of human social life. Commitments make individuals' behavior predictable in the face of fluctuations in their desires and interests, thereby facilitating the planning and coordination of joint actions involving multiple agents. Moreover, commitments make people willing to perform actions that they would not otherwise perform. For example, an employee performs her job every day because her employer has made a credible commitment to pay her at the end of the month. Indeed, she is willing to accept money as payment only because a network of other agents (notably the central bank) is committed to taking various measures to sustain the currency in question. Thus, social objects and institutions such as jobs, money, government, scientific collaborations and marriage depend for their origin and stability upon the credibility of commitments.

Indeed, the importance of commitments for human social life may run deeper still – namely by virtue of their link to *joint action*. Joint action is a characteristically human form of interaction in which multiple agents act together to realize a *shared goal*, such as painting a house together (Bratman 1992), carrying a table upstairs (Tuomela 2005) or taking a walk together (Gilbert 1990). Joint action is of fundamental importance to human cognition and culture since joint actions in early childhood facilitate the development of everyday psychological concepts such as 'belief', 'desire', 'intention' and 'perception' (Tomasello 2014), and foster language learning as well as the development of higher forms of cognition in general (Tomasello 1999; Butterfill 2012). It has even been suggested that one reason why cumulative culture is uniquely human is that only humans are intrinsically motivated to engage in joint actions (Tomasello 2014). Thus, insofar as a commitment to realizing a shared goal is crucial for joint action, the capacity for commitment may play a fundamental role in the phylogeny and ontogeny of uniquely human forms of cognition and culture

that underpin social objects and institutions.

Despite the crucial importance of commitment for characteristically human forms of sociality, it is not well understood how people identify and assess the level of their own and others' commitments. The current project aims to establish the theoretical need to articulate the notion of a **SENSE OF COMMITMENT** in order to account for this. The project will specify the functions that the sense of commitment should be able to fulfill and the cognitive demands that can be placed upon the sense of commitment. In developing a theoretical framework for modeling the sense of commitment, and in creating a suite of experimental paradigms for testing hypotheses generated by the framework, the project focuses on emotions and action-related cues as constitutive components of the sense of commitment. By investigating commitment within the context of joint action, it will illuminate basic mechanisms underlying large-scale human social phenomena.

# 2. State-of-the-art and specific aims

According to a conception of commitment that is standard within the philosophical literature, a commitment is a relation among a committed agent, a second agent to whom the commitment has been made, and an action which the committed agent is obligated to perform. The committed agent is obligated to performing the action because she has given an assurance to the second agent that she will do so, and the second agent has acknowledged this under conditions of common knowledge (Gilbert 2009; Searle 1969). While this standard conception presents a clear characterization of paradigm cases of *commitment in the strict sense* (i.e. commitments arising through promises or other explicit verbal assurances), it fails to illuminate three important puzzles, which the current project proposal is designed to address:

**Motivation:** The first puzzle arises from the fact that commitments foreclose options that may maximize an agent's interests. It appears irrational to follow through on commitments when alternative options arise that may be more attractive than the action to which one is committed. Thus, if one makes a commitment to perform a particular action, and one's interests or desires subsequently change, it is not clear why one should remain motivated to fulfill the commitment. Indeed, this issue is even more serious than it appears at first glance, insofar as the flipside of motivation is credibility: why should one agent expect a second agent to remain committed to a particular action if that second agent's desires or interests change? In some cases, this problem is solved by externalizing commitments, as when alternative options are removed (e.g. when a general burns her bridges behind her) or when the payoff values of options are altered (e.g. by signing a contract that entails penalties for reneging). In many other cases, however, people engage in and follow through on commitments without such externalized motivational support. Why do they do so? Often, they are motivated by *emotions*, in particular moral emotions such as guilt, shame, pride or moral disgust. Other times, it is likely that people act as though committed out of habit, responding to and reproducing interaction patterns without considering whether their actions conflict with their interests. In addition, people may utilize various cognitive heuristics in assessing commitment, such as the amount of effort or resources already invested in a joint action. The core of the project is the working hypothesis that emotions, habitual interaction patterns and cognitive heuristics constitute the basis of a sense of commitment, which may help to account for people's

Objective 1: To account for people's robust tendency to follow through on commitments, and to rely on other people to do so as well.

robust tendency to commit irrespective of their interests.

**Implicit Commitment:** Many commitments work not only without contracts but also without explicit agreements or promises - i.e., they are implicit. But in the absence of an explicit agreement or promise, or even any expression of one's willingness to pursue a shared goal, it is unclear how people determine when commitments are in place, and how they assess the appropriate degree of

commitment. Consider the following example: Roger often volunteers as an assistant at a local retirement community. One of the residents, Patricia, is celebrating her birthday today. Roger was not explicitly invited, but he knows that Patricia would be delighted if he dropped by, and that the other people involved could use his help setting up for the party, ensuring that it runs smoothly, and cleaning up afterward. He is not explicitly committed to anyone, but he may nevertheless have a sense that he is implicitly committed, either to Patricia, or to the other people involved, and this may motivate him to attend the party and to help out anyway. Such cases are very common in everyday life. But what factors are relevant in eliciting a sense of commitment?

It must be emphasized that the question that is of primary importance for the current project is not whether or when implicit commitments should be counted as genuine commitments. Rather, the main concern is what factors people normally take to be decisive, and how they (consciously or unconsciously) evaluate, communicate about, and respond to, these factors. Many instances where people sense that they are committed and act accordingly (or sense that others are committed and expect them to act accordingly) do not involve any obligation to act accordingly according to philosophical or lay definitions. Nevertheless, it is a striking feature of human sociality that people often sense that they are committed and act as though committed – like Roger in the example above.

Objective 2: To illuminate the situational factors to which people are sensitive in assessing the level of their own and others' commitments, and also the cognitive and affective mechanisms that underpin their sense of commitment in such cases – irrespective of whether they explicitly judge that commitments are in place.

Development: The third puzzle pertains to the onto- and phylogenetic origins of commitment. Specifically, if one adopts the standard philosophical conception of commitment, it is questionable whether commitment is applicable to young children or to non-human animals. This is because the standard conception of commitment presupposes an understanding of common knowledge: an agent only undertakes a commitment if she expresses her willingness to do so to some other agent, who acknowledges that expression under conditions of common knowledge. Although one should be wary about ascribing the requisite cognitive sophistication to understand these kinds of conceptual relations to very young children (Brownell 2006; Butterfill 2012), there is evidence that very young children identify and respond to commitments in some sense (Warneken et al. 2006; Gräfenhein et al. 2009; Hamann et al. 2012). The SENSE OF COMMITMENT is based upon the working hypothesis that young children identify and respond to commitments prior to understanding commitment in the strict sense, and that they progressively become sensitive to more nuanced features of situations which bear upon the level of commitment which they can expect from others and which others expect from them.

Objective 3: To articulate the general structure of situations that elicit a sense of commitment in agents, such as young children, who lack an understanding of common knowledge and of the speech act of promising.

This minimalist approach resonates with the view of many theorists that a simplified conception of joint action is needed in order to account for young children's engagement in joint actions (Brownell, 2006; Butterfill 2012). This approach has at least three advantages: 1) It helps to explain how an understanding of commitments emerges through engagement in joint actions rather than arguing that it is present as soon as children engage in joint actions; 2) it helps to identify analogues and/or homologues of commitment in non-human animals, and thus to shed light on the phylogenetic origins of commitment; 3) identifying precursors to commitment provides benchmarks for roboticists aiming to design interactive robots by spelling out how robots could convincingly enter into commitments with humans and appear to expect commitment from humans.

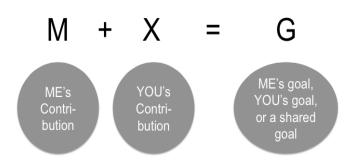
Summary: The SENSE OF COMMITMENT will limit its focus to the investigation of commitment within joint action, i.e. within a context that is both fundamental and paradigmatic for human sociality in general. The project consists of five subprojects, each with its own objective. Subproject I aims to specify the most general structure of situations that elicit a sense of commitment, and to articulate a theoretical understanding of the notion of a sense of commitment. In doing so, it establishes the theoretical foundation for Subprojects II-V. Subproject II investigates situational factors modulating the sense of commitment (e.g. degree of coordination, conventionalization, costs invested and signaling (cf. Objective 2: 'Implicit Commitment'). Subproject III develops a theoretical account of how emotions, which are intrinsically motivational (cf. Objective 1: 'Motivation'), serve as a common currency integrating various heterogeneous factors in a unified sense of commitment, and tests a battery of predictions generated by this account. Subproject IV investigates the emergence of the sense of commitment in childhood, exploring the central hypothesis that the sense of commitment is more fundamental than an understanding of commitment in the strict sense (cf. Objective 3: 'Development'). It therefore investigates young children's responsiveness to the situational factors which are the focus of SPII, and tests a battery of hypotheses about the mechanisms underlying that responsiveness. Subproject V investigates the extent to which the sense of commitment operates independently of explicit beliefs about commitment, i.e. it aims to identify what factors modulate the sense of commitment in the context of human-robot interactions, and to investigate the effects that these factors have upon people's explicit beliefs about commitments (cf. Objectives 1&2&3).

# Methodology

The project endorses a complementary conception of the relationship between philosophy and empirical research. While philosophical analyses are in general not directly testable, they can provide assistance in the construction of scientific theories, helping to maximize theoretical virtues such as coherency and scope. Thus, although empirical methods are distinct from the practice of philosophy, the proposed project is predicated upon the view that the social and intellectual value of philosophy is enhanced by maximizing its indirect links to empirical investigation. Subproject I is purely conceptual, and will therefore be pursued with the tools of philosophical analysis, while integrating findings from social cognition research and other empirical research areas (e.g. behavioral economics and anthropology). Subprojects II-V are both conceptual and experimental, i.e. each incorporates an experimental component to test hypotheses generated on the basis of theoretical analysis.

# SUBPROJECT I (SPI): SPECIFYING THE STRUCTURE OF COMMITMENT

FIGURE A:



SPI will articulate the most general (i.e. minimal) structure of situations that can elicit a sense of commitment. As *FIGURE A* to the left illustrates, this structure can be expressed as follows: There is a goal, G, which requires crucial contributions (M) and (X) from two agents, ME and YOU. This minimal structure provides a basis for conceptualizing instances in which an agent senses that a second agent is committed to her goal, as well as instances

in which an agent senses that she is committed to the goal of a second agent, and instances in which

both agents are committed to a shared goal. In the first instance, G is ME's goal: for ME to sense that YOU is committed to performing X is for ME to expect that YOU will perform X in part because ME is doing M (YOU-to-ME commitment). In the second instance, G is YOU's goal: for ME to sense that ME is committed to performing M is for ME to be motivated to perform M in part because YOU is performing X (ME-to-YOU commitment). The third instance, where G is a shared goal, is the conjunction of the first two instances (JOINT COMMITMENT).

A primary aim of SPI will be to explore the hypothesis that an understanding of commitment in the strict sense builds upon the more basic sense of commitment which tracks and responds to this minimal structure. In this respect, the project engages with dual processing accounts of cognition, and more generally with research on the relationship between high-level (conscious, controlled, slow) and low-level (unconscious, automatic, fast) processes for making decisions and judgments (e.g. about commitments and the attendant obligations and entitlements). Some of this research suggests that the latter sort of process is often autonomous, and that explicit reasoning often has the subsidiary pragmatic function of justifying one's decision post hoc in order persuade others (e.g. Mercier & Sperber 2010). This project extends this research to commitments, the proposal being that decisions about whether to engage or remain engaged in joint actions, and/or whether one's potential partner will do so, are resolved by appealing to the more basic sense of commitment, and that explicit reasoning about commitments, and discourse about commitments, often serve to persuade others of the resulting decisions and judgments. Of course, this does not rule out the (very likely) possibility that explicit commitments in the strict sense, although built upon the sense of commitment, can exist independently of it. The project also addresses potential shortcomings of such approaches by exploring the integration of higher- and lower-level processes in the case of commitments.

The results of this analysis will structure subprojects II-V, which investigate the sense of commitment, i.e. the subjective experience which tracks and responds to situations instantiating the minimal structure of commitment and to the situational factors that modulate the level of commitment. In turn, it will also be refined in light of the findings of SPII-V. In particular, the findings from SPII and SPIII will be drawn upon in pursuing the further aim of identifying parameters of the sense of commitment that may vary among cultures. On this basis, published findings from anthropological field research (e.g. pertaining to social mobility, interdependency and forms of cooperation), will be used to formulate and evaluate specific hypotheses about what cultural factors are likely to influence those parameters.

# SUBPROJECT II (SPII): FACTORS MODULATING THE SENSE OF COMMITMENT

# **Theoretical Analysis**

The minimal framework articulated in SPI specifies a *graded concept* of commitment: while commitment in the strict sense is a binary phenomenon, commitment in the minimal sense comes in degrees. In order to exploit the potential of this graded concept, SPII will develop a systematic characterization of specific factors serving to modulate the sense of commitment in healthy human adults (Cf. Objective 2: 'Implicit Commitment'). In general, the sense of YOU-to-ME commitment is increased by any factor that raises ME's expectation that if ME does M, X will co-occur with M. The sense of ME-to-YOU commitment is increased by any factor that raises ME's motivation to perform M because YOU is performing X. More specifically, SPII will pursue the central hypothesis that ME-to-YOU commitment and YOU-to-ME commitment are often mutually reinforcing: both are often modulated by low-level cues which raise *expectations as well as motivation* – i.e., people often engage in and follow through on commitments unreflectively, by responding to and reproducing interaction patterns which manifest low-level cues to commitment. SPII will focus on the following four factors:

- 1. Costs: If one agent has invested significant costs (e.g. effort) in a joint action, she may be reluctant to abandon the joint action before the goal is achieved. In other words, costs invested may function as a cue to remain engaged. In such cases, agents may not even notice that they are foreclosing options which would maximize their expected benefits, so they do not need externalized or emotional motivation in order to commit. This may also occur in individual actions, and could indeed be an instance of the 'sunk costs effect' (Kahneman & Tversky 1979). But in the case of joint action, one agent's investment of effort may also signal to the other agent that she is likely to remain engaged, and thereby motivate that other agent. Insofar as two or more people could in this way mutually influence each other, commitment could be self-reinforcing in social contexts. Thus, SPII will test the hypothesis that the costs that have been invested in a joint action enhance the sense of commitment on the part of all of the agents involved.
- 2. Signaling: There has been a surge of interest in recent years in the role(s) played by various kinds of signaling within joint actions. For example, Pezzulo & Dindo (2011) found evidence that participants tended to sacrifice efficiency by exaggerating their movements in order to make them more easily and quickly intelligible for their partners (see also Sartori et al. 2009; Vesper et al. 2010). Insofar as this type of signaling constitutes an investment in a joint action, and demonstrates a willingness to coordinate with one's partner, it may serve to reinforce the expectation that the agent doing the signaling will remain engaged until the goal is reached. In other words, signaling may not only facilitate coordination but also function as a cue of commitment, which could thereby elicit commitment from another person, who may then increase her use of signaling, etc. In view of research suggesting that pre-linguistic children are sensitive to such ostensive signals (Csibra and Gergely 2009), such effects could be important for understanding the processes underpinning joint action in early childhood.
- **3.** Coordination: Coordination may be an especially powerful cue to commitment because when one agent performs a subtask which depends upon a second agent performing her subtask (as when two or more agents form a chain to clean up a pile of dirt, with one agent filling a bucket and passing it to the next agent in the chain, etc.) she expresses her expectation that the second agent will perform her subtask, and thereby generates pressure upon the second agent.
- **4.** Repetition: Mere repetition of a contribution to a joint action reinforces the expectation that the contribution will be made again, and may in some cases lead the agents involved to rely upon that expectation. As a result, repetition can spill over into commitment through a process of conventionalization.

#### **Experiments**

The basic experimental logic of experiments II.1-4 is as follows. We will implement a scenario in which two agents perform a joint action which manifests the minimal structure of commitment insofar as contributions from both agents are required in order to achieve a goal (e.g. building a tower together out of blocks of different colors). We will then create a tempting outside option – in some cases a concurrent individual task which yields higher rewards, in some cases an exit option which is tempting when the joint action requires high effort (e.g. by increasing the distance that the participant must move in order to retrieve the next block). ME-to-YOU commitment can then be operationalized as a participant's resistance to an outside option (the amount they contribute to the joint tower compared to the individual tower, or the distance they are willing to cover to maintain the joint action and the speed at which they move). YOU-to-ME commitment can be operationalized as a participant's expectation that their partner will resist an outside option (measured by stopping the experiment at random timepoints and asking them to predict how much their partner will contribute to the joint tower), in their willingness to rely on that expectation, and in their arousal if that expectation is disappointed (by measuring skin conductance).

Predictions: The framework predicts that signaling, coordination, costs invested and repetition

can: (i) motivate one to commit/ remain committed; (ii) provide a heuristic for determining whether someone *else* is committed; and (iii) communicate one's level of commitment.

*Procedure:* The basic structure of the paradigm (which will be modified slightly for each experiment, as described below). The task is based loosely upon Pezzulo & Dindo (2011)'s towerbuilding game. Participants will perform in pairs (one member of which will sometimes be a confederate). Each member of the dyad will have three stacks of blocks (one red, one blue and one green). The dyad will be instructed to build a joint tower out of blue and red blocks. In addition, each player will also have the opportunity to build their own tower individually, using green blocks, thereby creating a potential conflict between the joint and the individual actions (see *FIGURE B*).

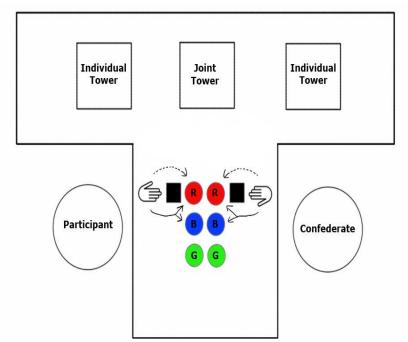


FIGURE B depicts the workspace in the tower-building game. The two players sit face to face with the stacks of blocks in between them, while the towers are next to them. When grasping a red block, each player must reach around an obstacle, either along the solid (lower) line or along the dotted (upper) line. When they grasp along the solid line, it remains unclear to the other player which block they are choosing until the last second, whereas grasping along the dotted line provides an immediate signal of their choice. Their movements will be videotaped and recorded with a motion capture device.

As noted above, there are two separate versions of the tempting outside option, which will be implemented in separate experiments. *Experiments II.1, II.2A, II.3A* and *II.4A* will implement *tempting outside option A*, while *Experiments II.2B, II.3B* and *II.4B* will implement *tempting outside option B*.

Tempting outside option A: Each experimental block will consist of distinct rounds. To start a round, both players rest their hand over the starting field, and a timer counts down three seconds before issuing a go signal. The two players then simultaneously choose one block each. They may play as many rounds as possible within each three-minute experimental block. For each round, in order to add to the joint tower, it is necessary for one player to use a red block and the other to use a blue block. After a practice phase in which they alternate between the joint and the individual task, the payoff scheme for the first experimental block will be announced. Rewards will be allocated on the basis of the height of the towers they have built. In some experimental blocks, both will receive a greater reward for the joint tower than for the individual towers. For some other experimental blocks, one player will be confronted with a tempting outside option insofar as she will receive a greater reward for the individual tower whereas the other player will receive a greater reward for the joint tower. The joint tower height is an indirect measure of the degree of (ME-to-YOU) commitment of the player faced with the tempting outside option. To measure the extent to which the other player senses that a commitment is owed to her (i.e. their sense of YOU-to-ME commitment), we will interrupt the experiment at random times and ask the other player to predict the tower height at the end of the experimental block.

Tempting outside option B: In this modified version of the paradigm, the tempting outside option is more implicit, and thus less likely to engage deliberate and conscious calculation. The payoff in this

version will be unrelated to performance of the task, and there will only be one tower to contribute to, namely the joint tower. After each experimental block, pairs will be shuffled, and participants will play as many blocks with as many different partners as they have time for in the 40 minutes of the experiment. Before each trial, each player must take several steps across the room to retrieve a new block. During experimental blocks, the distance will progressively increase for one or both of the players, entailing a greater cost (in effort) which must be paid in order to sustain the joint action. Participants will be informed that they can stop each block if they like, and continue with a different partner. The speed of the participants' movements, and the number of trials over which they sustain the joint action will be an indirect measure of their level of ME-to-YOU commitment. To measure the extent to which participants sense that a commitment is owed to them (i.e. their sense of YOU-to-ME commitment), we will stop the experiment at random times and ask them to predict the tower height at the end of the experimental block.

Experiment II.1 will test the hypothesis that **signaling** can motivate agents to remain committed. In the test condition, confederates will alter their kinematics in order to make it easier for their partner to identify which block they are choosing. Specifically, they will reach along the dotted line, as depicted in *Figure B* (see above), when selecting red blocks. This will help to make the movement more intelligible, and may therefore function as a signal of commitment. Thus, the prediction is that this manipulation will lead participants to contribute more to the joint tower (prediction i), and to expect confederates to do so as well (predictions ii and iii).

Experiment II.2A tests the prediction that the degree of **coordination** within a joint action modulates the sense of commitment. The experiment will manipulate the interdependency of the confederate's and the participant's actions by adapting the paradigm such that in a high-coordination-condition they must each grasp a block and pass it to the other before the blocks can be placed on the joint tower. The theoretical framework generates the prediction that a higher degree of coordination will lead to a higher level of commitment. Thus, in the high-coordination-condition, participants should contribute more to the joint tower in the test phase (prediction i), to expect the confederate to do so as well, and to predict higher joint tower heights (predictions ii and iii).

Experiment II.2B The prediction is that participants will walk faster and remain engaged over a greater number of trials during experimental blocks with a high degree of coordination than during experimental blocks with a lower degree of coordination (prediction i), and that they will expect their partners to as well (prediction ii and iii).

Experiment II.3A tests the prediction that mere **repetition** enhances the sense of commitment. The setup is the same as in *Exp. II.1* and *Exp. II.2A*, but the duration of the practice phase will be increased, i.e. the interaction will continue for a longer time prior to the announcement of payoff structures. The prediction is that this manipulation will lead participants to contribute more to the joint tower (prediction i), and to expect the confederate to as well (prediction ii).

Experiment II.3B also tests the prediction that mere **repetition** enhances the sense of commitment. It adapts Exp. II.2B by adding to the number of trials during which the participants only have to take 1-2 steps in order to retrieve the new block, i.e. before the distance begins to increase. The prediction is that this manipulation will lead participants to walk faster and to remain engaged over a greater number of trials (prediction i), and to expect the confederate to as well (prediction ii).

Experiment II.4A will test the prediction that the investment of **costs** enhances the sense of commitment. In some conditions, participants or confederates will be offered an outside option (i.e. a payoff for abandoning the game). When a confederate refuses an outside offer, this makes it salient that she expects a greater reward within the game. The theoretical framework generates the prediction that this will raise the level of ME-to-YOU commitment on the part of the participant, leading participants to contribute more to the joint tower (prediction i), and — when probed at

random times – to predict higher joint tower heights (predictions ii and iii).

Experiments II.4B also tests the prediction that **cost** invested enhances the sense of commitment. To this end, the setup in Exp. II.2B and Exp. II.3B will be adapted as follows. For each block, the distance to walk in order to retrieve a block at the start of each trial will increase for only one player. The prediction is that the greater the effort invested by this player (walking speed and distance covered), the greater the sense of ME-to-YOU commitment on the part of the other player, who will therefore remain engaged for a longer time and contribute more to the joint tower.

## SPIII: EMOTION AS THE COMMON CURRENCY OF THE SENSE OF COMMITMENT

# **Theoretical Analysis**

Given the heterogeneity of factors that may modulate the sense of commitment, it is important to consider how these factors may be integrated and weighted when assessing the degree of commitment that is appropriate. SPIII will elaborate on the working hypothesis that emotions, which are intrinsically motivational (Cf. Objective 1: 'Motivation'), serve as the common currency integrating the various factors which modulate the sense of commitment. This hypothesis can be supported by the results from experiments using economic games (Rand & Nowak, 2013), which provide evidence that emotional, intuitive processes support cooperation in one-shot games, while reflection and deliberation lead to selfish behavior. For example, introducing time pressure in Public Goods Games increases cooperative behavior (Rand et al., 2012). Similarly, increasing the role of intuition through cognitive load enhances generosity in the Dictator Game and similar settings (Schulz et al., 2014). Cornelissen and colleagues (2011) found that perceived interpersonal closeness and perceived similarity correlated with generosity – especially when participants did not reflect on their decision. More generally, the hypothesis that emotions underlie the sense of commitment can be motivated by appealing to neo-sentimentalist approaches suggesting that emotions influence moral judgments and may be necessary for moral concepts (Prinz 2006; Nichols 2002). In order to further articulate and test this working hypothesis, SPIII will test a series of predictions generated by the theoretical framework:

*Predictions*: The framework predicts that emotions (iv) emotions motivate people to remain committed, (v) underlie their assessment of others' commitment; (vi) and underlie people's responsiveness to the factors manipulated in SPII. A series of experiments will be implemented to test these predictions.

## **Experiments**

*Procedure*: The experiments in SPIII will implement modified versions of the same tower-building game as in SPII. In all experiments of SPIII, skin conductance will be measured as a proxy for emotional arousal at key moments in the experiment – i.e. when a participant is tempted by an outside option (prediction iv), and when their partner takes a tempting outside option (prediction v). In addition, participants will sometimes be asked after a block to fill out a brief questionnaire to assess how fairly they believe they /their partner acted, and to assess rapport. In *Experiment III.1* and *Experiment III.2*, emotional states will be induced and their effects upon behavior measured. To this end, participants will be asked to recall and write about an episode in which they experienced specific emotions (i.e. guilt, moral disgust or a control emotion). This procedure has been found to work well with the emotions in question (e.g. in Schnall et al. 2008).

Experiment III.1A will implement the version of the tower-building game used in experiment II.1 in order to test prediction (iv), i.e. that emotions *motivate* people to remain committed. Specifically, since it has been found that inducing guilt/shame leads people to act as though 'atoning' for their guilt (Zhong, C. & Liljenquist, K. 2006), participants experiencing guilt/shame will be compared with participants experiencing no specific emotion or experiencing control emotions. The

theoretical framework predicts that participants induced to feel guilt/shame will be more resistant to tempting outside options (e.g. investing more in the joint tower-building during experimental blocks in which their reward for the individual tower is greater than for the joint tower), resulting in higher joint-towers (cf. prediction (iv)). Secondly, we predict they will alter their kinematics (signaling) in order to make it easier for their partner to identify which block they are choosing (in a manner analogous to that observed in Pezzulo et al. 2011; see *Figure B* above). This is a further indirect measure of their degree of ME-to-YOU commitment (cf. prediction (iv)). Thirdly, the game will occasionally be interrupted just after the announcement of the payoff scheme for an experimental block in which the participant is confronted with a tempting outside option), and participants will be asked to predict the heights of the three towers for that experimental block. The theoretical framework generates the prediction that participants in the guilt/shame group will predict higher levels for the joint tower in experimental blocks of this type, since their emotions will motivate them to remain committed, which will lead them to expect to invest more effort on the joint towers.

Experiment III.1B will implement a version of the tower-building game as in Exp. II.2B, Exp. II.3B and Exp. II.4B, i.e. in which the tempting outside option is presented as an exit option which becomes increasingly attractive as the distance increases which the participant must walk in order to retrieve a block for each trial. The prediction is that participants induced to feel guilt will remain engaged longer and walk faster (prediction (iv)).

Experiment III.2A will test prediction (v), i.e. that emotions (in this case moral disgust and anger) increase *judgments* that a commitment has been violated (and thus that another person was committed). The procedure will be the same as in *Exp. III.1* but with the following modifications. Disgust will be induced with brief videos, which has been shown to work well with this emotion (Kuhbandner et al. 2010). The framework predicts that their assessment of their partner's actions and of the level of rapport will be highly negative after blocks in which the confederate acts in a selfish manner, neglecting the joint tower to maximize the individual tower, and that this effect will be greater for the participants induced to experience disgust. This is an indirect measure of their belief that the confederate was committed, but reneged on the commitment (cf. prediction (v)).

Experiment III.3 will test predictions (iv) and (vi), i.e. that emotions underlie people's responsiveness to the factors manipulated in SPII. In order to do so, it will implement the version of the tower-building game with tempting outside option A, but will introduce time pressure as a further variable: for low-time-pressure blocks, participants will have no time constraints between trials, and the countdown to the go signal once they have placed their hands over the starting field will take five seconds between trials; for high-time-pressure blocks, they will have two seconds to return their hands to the starting field and the countdown will take only two seconds. The prediction is that they will be more resistant to the tempting outside option that arises when their reward for the individual tower is greater than for the joint tower, i.e. they will contribute more to the joint tower (prediction (iv)). In addition, Exp. III.3 will compare a high-coordination condition with a low-coordination condition, as in Exp. III.2A. We predict an interaction between time-pressure and coordination, such that high time pressure will magnify the effect of coordination upon the sense of commitment.

## SUBPROJECT IV (SPIV): THE DEVELOPMENT OF A SENSE OF COMMITMENT

# **Theoretical Analysis**

As noted above, it is common to analyze commitment to joint action in terms of the obligations and entitlements which arise by virtue of assurances which have been given and acknowledged under conditions of common knowledge. But if commitments require participants to draw inferences using sophisticated concepts such as 'obligation,' 'entitlement', and 'common knowledge,' it is doubtful whether pre-linguistic children are capable of commitment. And indeed one study has

found that 24 month-olds are not sensitive to verbal expressions of commitment (Gräfenhain et al. 2009). And yet, by 18 months, children are able to solve joint problem-solving tasks in which two agents must perform complementary actions at the same time in order to achieve a joint goal, such as pulling at opposite ends of a tube in order to open it up and retrieve the stickers hidden inside, (Warneken et al., 2006). And indeed, the 18 month-olds in this study protested in a condition in which the adult experimenter with whom they were interacting abruptly abandoned the joint action. The authors suggested that this finding is evidence that the children understood *in some sense* that the experimenter was committed to the joint action and therefore obligated to continue until it was completed to both parties' satisfaction. Taken together, the findings from these studies indicate that it is theoretically desirable to articulate the notion of a sense of commitment that is present in young children, and which could be a stepping stone in the development of an understanding of explicit commitment.

SPIV therefore rejects the intuitive view that one must be able to understand explicit commitments in order to identify and respond to commitments. Rather, the project endorses the working hypothesis that the sense of commitment is more basic than an explicit understanding of commitment, and that the latter builds upon and extends the former. In order to investigate the basic mechanisms underpinning the sense of commitment, SPIV will home in on social interactions at two stages of early childhood (i.e. at 24 and 36 months). It will investigate young children's sensitivity to the factors identified in SPII, and aim to develop a systematic characterization of the mechanisms underlying sensitivity to those factors (Cf. Objective 3: 'Development').

## **Experiments**

Procedure: The paradigm to be implemented in SPIV is based on Gräfenhain et al. (2009)'s study on explicit commitment in 2 and 3 year-old children. In that study, an experimenter and a child perform a joint action together. In one condition, the experimenter explicitly proposes that they do so (commitment condition), while in a separate condition the experimenter simply engages in the joint action without saying anything (no commitment condition). The finding was that 3 year-old children were more upset when the experimenter abruptly abandoned the joint action in the commitment condition compared to the no commitment condition, whereas 2 year-olds did not differentiate between the two conditions. While the authors interpret these results as evidence that 3 year-olds understand commitment in the strict sense, it is noteworthy that the experimenter also made eye contact with the children in the commitment condition but not in the no commitment condition. Thus, it is possible that the 3 year-olds' differential responses to the two conditions was due at least in part to differences in implicit factors like the ones identified in SPII.

Predictions: The framework predicts (vii) that children will exhibit sensitivity to the factors identified in SPII at 24 months in a scenario modeled after Gräfenhain et al. (2009)'s paradigm, and (viii) that their sensitivity to explicit commitments at 36 months depends upon their sensitivity to these implicit factors. A further prediction that is generated by the framework is (ix) that 24 and 36 month-olds will exhibit a preferential tendency to fulfill others' expectations, and expect the same of others. This latter prediction is motivated by observation that the factors identified in SPII increase expectations and make those expectations salient, and that a preferential tendency to fulfill others' expectations may constitute a general mechanism underlying sensitivity to those factors.

For *Experiments IV.1-4*, the children's level of protest when an experimenter abandons the joint action will provide a measure of their degree of YOU-to-ME commitment (as in Gräfenhain 2009). Their resistance to a tempting outside option (a new game that they are invited to play by a different experimenter) will provide a measure of their ME-to-YOU commitment (as in Gräfenhain 2009).

In *Experiment IV.1*, we will attempt to influence 24- and 36-month-olds' tendency to remain engaged and to expect engagement by modulating ostensive *signaling*, such as eye contact (Csibra & Gergely 2009). We predict that eye contact will modulate both YOU-to-ME and YOU-to-ME

commitment for both age groups (prediction vii). As a second factor in the experiment, we will contrast one condition in which the experimenter and child explicitly agree to play the game (commitment condition) and a condition in which they start playing without an explicit agreement (no commitment) condition. We predict an interaction between the two factors for the 36 month-olds: they will differentiate between the commitment condition and the no commitment condition only when there is eye contact in the commitment condition and no eye contact in the no commitment condition (prediction viii).

Experiment IV.2 will test the prediction that the degree of *coordination* between experimenter and child will modulate children's sense of ME-to-YOU and YOU-to-ME commitment at 24 and 36 months (prediction vii). To this end, we will contrast a high coordination condition (in which the tasks performed by experimenter and child are temporally coordinated) and a low coordination condition (in which they are not). As in *Exp IV.1*, we will contrast a commitment condition and a no commitment condition. Again we predict an interaction between the two factors for the 36 montholds: they will differentiate between the commitment condition and the no commitment condition only when there is high coordination in the commitment condition and low coordination in the no commitment condition (prediction viii).

Experiment IV.3 tests the prediction that the number of **repetitions** within a joint game will increase children's sense of ME-to-YOU and YOU-to-ME commitment at 24 and 36 months (prediction vii). As in *Exp. IV.1* and *Exp. IV.2*, we contrast a commitment condition and a no commitment condition, and again predict the equivalent interaction (prediction viii).

Experiment IV.4 will test the hypothesis that children's sense of commitment is constituted in part by a preference to fulfill others' expectations and to expect the same of others. As in the previous experiments, there will be a commitment condition and a no commitment condition. In addition, there will be two assymetric conditions. In one of them, rather than making an explicit commitment, the experimenter will announce her intentions to a third-party (a puppet). We predict that 24- and 36-month-olds will exhibit an equally high degree of YOU-to-ME commitment in this condition as in the explicit commitment condition (prediction ix). In the other assymetric condition, the child will be asked by a puppet about her intentions regarding a game to be played with the experimenter. We predict that in this condition, 24 and 36-month-olds will exhibit an equally high degree of ME-to-YOU commitment as in the explicit commitment condition (prediction ix).

## SP V: IMPLEMENTING COMMITMENT IN HUMAN-ROBOT INTERACTION

## **Theoretical Analysis**

Given the proposal being developed here that the sense of commitment is more basic than, and functions independently of, an understanding of commitment in the strict sense, the factors identified in SPII may modulate the sense of commitment independently of people's beliefs about whether commitments are in place. This hypothesis can also be supported by considering the so-called 'Eliza effect,' in which people act and feel as though they attributed understanding and/or genuine feelings to a machine despite explicitly disavowing any such attribution (Weizenbaum 1966). Thus, while people may be skeptical about explicit commitments involving robots, they may nevertheless be responsive to subtle factors generating implicit commitments (Cf. Objectives 1&2&3). As a strict test of this hypothesis, SPV will manipulate a subset of the factors identified in SPII in the context of *human-robot interaction*, i.e. in a context in which participants do not explicitly believe that commitments are in place because their partner is a robot.

*Predictions:* The framework predicts (x) that if a robot appeared to be responsive to these factors in a joint action with a human, the human could be led to sense a commitment to the robot and to sense (xi) that the robot were committed to her. It also predicts (xii) that human participants will exhibit a greater resistance to the more implicit *tempting outside option B* than to the more explicit

tempting outside option A, since the latter is more likely to engage a conscious and rational decision procedure.

# **Experiments**

*Procedure:* The experiments in SPV will implement an adapted version of the same tower-building game as in SPII using a customized telenoid robot. The tempting outside option for the robot (tempting outside option C) will be introduced in the following manner. The human will be informed that the robot is programmed to conserve its battery power and may therefore end its participation in the joint action prior to completion of an experimental block.

Experiment V.1 will test the prediction that the degree of **coordination** between the human and the robot will modulate the human's sense of ME-to-YOU and YOU-to-ME commitment. The experiment implements the version of the tower-building game with tempting outside option B for the human and tempting outside option C for the robot. In order to manipulate the degree of coordination, we introduce a high-coordination condition in which a block has to be passed from one agent to the other before being placed on the tower (analogously to forming a chain). The prediction is that that the human will be more resistant to the outside option in the high-coordination condition (remaining engaged for longer, walking faster to retrieve blocks) and will expect the robot to remain engaged longer in the high-coordination condition (i.e. the experiment will be interrupted at random times and the human will be asked to predict the end height of the tower) (prediction (x) and (xi)).

Experiment V.2 will test the prediction that the *costs* invested in the joint action will modulate the human's sense of ME-to-YOU and YOU-to-ME commitment. To test this, we will alternate blocks where the human must invest a high cost (walking further and faster) and the robot must invest a high cost (the blocks are heavier, which costs the robot more battery power). Prediction (x) is that the human will invest more during an experimental block which follows an experimental block in which the robot has invested high costs (i.e. the human will exhibit a higher degree of ME-to-YOU commitment). Prediction (xi) is that the human will expect the robot to invest more if the human has invested more on the previous experimental block (YOU-to-ME commitment).

Experiment V.3 will test prediction (xii). It will implement two versions of the tower-building game, one with tempting outside option A and one with tempting outside option B. The degree of coordination will be manipulated as in Exp. V.1 The prediction is that human participants will be more resistant to tempting outside option B than to tempting outside option A, since the latter is more likely to engage a conscious and rational decision procedure (prediction (xii).

## **TIMEPLAN**

	2016 (Starting July 1)	2017	2018	2019	2020	<b>2021</b> (Finishing June 30)
PI	General conceptual framework (SPI); Piloting for SPII	Experiments & analysis for SP II; Piloting for SP III	Writing up results for SPII; Experiments and analysis for SPIII; supporting SPIV	Writing up Results for SPIII; Supporting SPIV & SPV	Supporting SP V; Refining conceptual framework (SPI); Monograph	Monograph
Postdoc 1 Psychology	X		Experiments and analysis	Writing up results for	X	X

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			for SPIII	SPIII		
Postdoc 2 Dev. Psychology	X	Experiments and analysis SPIV	Experiments and analysis SPIV	Writing up results for SPIV	X	X
Postdoc 3 Social Robotics	X	X	X	Experiments & analysis for SPV	Writing up results for SPV	X
Postdoc 4 Philosophy	Conceptual Framework, i.e. SPI	Conceptual Framework, i.e. SPI				
Postdoc 5 Psychology 0.5 FTE @CEU, Budapest	Experiments and analysis for SPII	Experiments and analysis for SPII	Experiments and analysis for SPII	Write-Up Results for SPII	Write-Up Results for SPII	
PhD Student 1 Philosophy	X	X	Coursework and work on SPI and on theoretical aspects of other SPs	Work on thesis and on SPI as well as theoretical aspects of other SPs	Completing thesis	X
PhD Student 2 Developmental Psychology		Coursework and work on SPIV	Work on thesis and work on SPIV	Completing thesis		
RA Psychology @CEU, Budapest	Supporting SP II	Supporting SP II	Supporting SP II	Supporting SP II	Supporting SP II	

#### **BREAKTHROUGHS AND IMPACT**

The project will illuminate how and when people are willing to make and honor commitments, and to rely on others' commitments. By specifying the basic mechanisms underlying commitment, and developing experimental paradigms for operationalizing commitment, it will open up a new field of research for behavioral and neuroeconomics, and provide new concepts and insights for the social sciences, cognitive sciences and humanities. In addition, it will create a new perspective for:

- social robotics, by specifying factors that will be useful in designing autonomous robots that participate in commitments with humans (e.g. for senior citizens' homes, factory work and rescue operations);
- research on pathological conditions such as borderline personality disorder, in which individuals find it difficult to commit to or to rely upon others;
- identifying factors relevant in sustaining people's commitment to beneficial long-term programs (skills training for workers, exercise or rehabilitation programs for patients, etc.).

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## Resources

## **University of Warwick**

Personnel costs (€905,243)

All personnel will be employed by the University of Warwick. No additional remuneration is foreseen nor is any included in the budget.

The PI will be hosted and employed by the University of Warwick for the duration of the grant, and will spend a minimum of 50% of his total working time in an EU Member State or Associated Country (over the whole duration of the action). The percentage of the total working time committed to the project by the PI (85%) remains unchanged and is compatible with his other ongoing activities/grants.

The team at Warwick will consist of the PI (0.85 FTE, 5 years, €387,675), 4 post-doctoral researchers for 2 years each (€332,084), and 1 post-doctoral researcher for 3 years (€175,987) The PI will oversee all research activities and supervise the research team.

One post.doc (a psychologist) will support the implementation of SPIII. A second post.doc (a developmental psychologist) will work on SPIV. The third post.doc (a roboticist with a background in human-robot interaction) will work on SPV. A fourth postdoc will (philosophy) will support SPI.

The University of Warwick will contribute two PhD students. One of these PhD students will focus on SPI and provide support for the other projects according to her/his specific research topic. The other will support the implementation of SPIV. The costs of these studentships will not be charged to the project.

An Administrator (€9,497 under other in Annex 2) will assist with arrangements for travel and other project related activities. It is to be noted that:

The time spent on the project will be directly identifiable as such in the accounting system of the University and their time can be proportionally allocated to the ERC project. In addition this practice is in line with the HI's usual accounting and management practices (i.e. applied to other national/international projects).

# <u>Travel for team members</u> (€37,500)

Travel funds will be used exclusively to cover travel for project team members. The PI and the post-docs will attend European and overseas conferences in each year of participation in the project; the PhD students will also attend European conferences or overseas conferences each year (European: €750, Overseas: €1500).

The project team will travel to laboratories in order to access Telenoid robot equipment, and the budget includes funds for these trips.

# Travel for external experts or collaborators

There will be no costs charged to the project for travel of external experts or external collaborators.

# <u>Equipment</u> (€34,395)

The implementation of the projects requires the following equipment: 1) an XSens wireless motion tracking system providing high flexibility for tracking whole body movements of two participants in SPII, SPIII and SPV, 2) a physiological measurement kit for measuring arousal in terms of heart rate and skin conductance (ca.  $\[ \in \]$ 5,000), 3) Tobii Eyetracker ( $\[ \in \]$ 3,000)

This equipment will be used solely for the research project. The usual accounting practice of the Host Institution is to only depreciate equipment costing in excess of £25,000 (which is approximately €32000) so no depreciation will be applicable to the equipment budgeted, the cost of which is therefore charged in Period 1.

# Consumables (€35,634)

Consumables include reimbursement for the participants (€14 per hour for participants), costs for securing data and data backup (Cubby and Dropbox), and miscellaneous items for maintaining the lab:

Recruitment of children for SPIV, including fees for renting tables at baby fairs ( $\in$ 1500 each time, 3 times= $\in$ 4500). These fees will allow us to hire space at established baby fairs where we can sign up participants to the study.

Apparatus (€5,000) includes purchase of materials such as wood and plastic that will be used to construct the apparatus to be used by participants in the research (e.g. contraptions where participants can pull levers that move the objects within)and other non-equipment items required for experiments such as electrodes.

Apparatus transport (€3,000) will allow us to move the constructed set-ups between different locations.

#### **Other Goods and Services**

Funds are requested in order to cover temporary contracts for programmers (€10,000) who will be sourced from a temporary work agency.

#### Publication costs (€5,000).

This includes costs for publication in open access journals and costs for colour figures.

<u>Auditing</u> (€5,000)Costs are included to satisfy the auditing requirements as outlined in the Grant Agreement.

# **Central European University (€154,088)**

All personnel will be employed by the Central European University.

A post-doc in psychology (0.5 FTE) will be employed at CEU in order to implement SPII. A research assistant in psychology (0.2 FTE, under other in Annex 2) will be employed at CEU in order to support the implementation of SPII.

Their time spent on the project will be directly identifiable as such in the accounting system of the University and their time can be proportionally allocated to the ERC project.

# PART A: BUDGET TABLE FOR BENEFICIARY WARWICK

Please enter duration in months 1 60

Please indicate the % of working time the PI dedicates to the project over the period of the grant 85.00

Please indicate the % of working time the P1 dedicates to the project over the period of the	85.00				
			•	<u> </u>	
Estimated eligible costs (per budget category)	month 1 to 18	month 19 to 36	month 37 to 54	month 55 to 60	Total
				ļ	<u> </u>
A. Direct Personnel costs:					
P.I.	112,348.00	115,558.00	119,433.00	40,336.00	387,675.00
Senior Staff	0.00	0.00	0.00	0.00	0.00
Post docs	160,956.00	110,601.00	175,234.00	61,280.00	508,071.00
Students	0.00	0.00	0.00	0.00	0.00
Other	2,626.00	2,794.00	3,031.00	1,046.00	9,497.00
Total Personnel:	275,930.00	228,953.00	297,698.00	102,662.00	905,243.00
D. Other Direct Costs:					
D.1 Travel	11,251.00	11,251.00	11,251.00	3,747.00	37,500.00
D.2 Equipment	34,395.00	0.00	0.00	0.00	34,395.00
D.3 Other goods and services (i.e. consumables, publications)	15,211.00	15,211.00	15,212.00	10,000.00	55,634.00
D.4 Costs of large research infrastructure	0.00	0.00	0.00	0.00	0.00
Total Other Direct Costs:	60,857.00	26,462.00	26,463.00	13,747.00	127,529.00
			i	i	i
Total Direct Costs:					
E. Indirect Costs (25% of Direct Costs)	84,196.75	63,853.75	81,040.25	29,102.25	258,193.00
B.Subcontracting Costs (No indirect costs)	0.00	0.00	0.00	0.00	0.00
Costs of in-kind contributions not used on premises (No indirect costs)	0.00	0.00	0.00	0.00	0.00
Total Estimated Budget (by reporting period and total):	420,983.75	319,268.75	405,201.25	145,511.25	1,290,965.00

# PART A: BUDGET TABLE FOR BENEFICIARY CEU

57,782.50

57,782.50

19,262.50

192,610.00

Please enter duration in months <sup>1</sup>	60				
Please indicate the % of working time the PI dedicates to the project over the period		85.00			
			•		
Estimated eligible costs (per budget category)	month 1 to 18	month 19 to 36	month 37 to 54	month 55 to 60	Total
A. Direct Personnel costs:					
P.I.	0.00	0.00	0.00	0.00	0.00
Senior Staff	0.00	0.00	0.00	0.00	0.00
Post docs	40,530.00	40,530.00	40,530.00	13,510.00	135,100.00
Students	0.00	0.00	0.00	0.00	0.00
Other	5,696.00	5,696.00	5,696.00	1,900.00	18,988.00
Total Personnel:	46,226.00	46,226.00	46,226.00	15,410.00	154,088.00
D. Other Direct Costs:					
D.1 Travel	0.00	0.00	0.00	0.00	0.00
D.2 Equipment	0.00	0.00	0.00	0.00	0.00
D.3 Other goods and services (i.e. consumables, publications)	0.00	0.00	0.00	0.00	0.00
D.4 Costs of large research infrastructure	0.00	0.00	0.00	0.00	0.00
Total Other Direct Costs:	0.00	0.00	0.00	0.00	0.00
Total Direct Costs:					
E. Indirect Costs (25% of Direct Costs)	11,556.50	11,556.50	11,556.50	3,852.50	38,522.00
B.Subcontracting Costs (No indirect costs)	0.00	0.00	0.00	0.00	0.00
Costs of in-kind contributions not used on premises (No indirect costs)	0.00	0.00	0.00	0.00	0.00

57,782.50

Total Estimated Budget (by reporting period and total):

<sup>&</sup>lt;sup>1</sup> Duration of the action (see Article 3)

# PART B: ESTIMATED BUDGET FOR THE ACTION

	Estimated eligible 1 costs				s (per budget category)				EU contribution			
	A. Direct personnel costs		B. Direct costs of subcontractin	D. Other direct costs	E. Indirect costs <sup>2</sup>	Total costs	Reimbursemerate %	Maximum EU contribution <sup>3</sup>	Maximum grant amount <sup>4</sup>			
	A.1 Employees (or equivalent) A.2 Natural persons under direct contract A.3 Seconded persons [A.6 Personnel for providing access to research infrastructure]		A.4 SME owners without salary A.5 Beneficiaries that are natural persons without salary			D.1 Travel D.2 Equipment D.3 Other goods and services D.4 Costs of large research infrastructure						
Form of costs <sup>5</sup>	Actual	Unit <sup>6</sup>	Unit <sup>7</sup> EUR/hour		Actual	Actual	Flat-rate <sup>8</sup>					
	a	Total b	No hours	Total c	d	e	(f)=0,25x (a+b+ c+e-k)	(g)= a+b+c + d+e+f+	h	i	j	
1. WARWIO	905,243.00	0.00			0.00	127,529.00	258,193.00	1,290,965.00		1,290,965.00	1,290,965.00	
2. CEU	154,088.00	0.00			0.00	0.00	38,522.00	192,610.00		192,610.00	192,610.00	
Total Consortium	1,059,331.00	0.00			0.00	127,529.00	296,715.00	1,483,575.00		1,483,575.00	1,483,575.00	

	ation
Information	Other
for	information:
auditors:	
Declaration	Estimated
of costs	costs of
under	beneficiaries
Point D.4	linked
	third
	parties not
	receiving
	EU
	funding
Yes/No	
2001210	
No	
No	
	for auditors:  Declaration of costs under Point D.4  Yes/No

2. CEU

- 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 See Article 5 for the forms of costs
- 6 Unit: hours worked on the action; costs per unit (hourly rate): calculated according to beneficiary's usual accounting practice
- 7 See Annex 2a 'Additional information on the estimated budget' for the details (costs per hour (hourly rate)).
- 8 Flat rate: 25% of eligible direct costs, from which are excluded: direct costs of subcontracting and costs of in-kind contributions not used on premises (see Article 6.2.E)
- 9 See Article 9 for beneficiaries not receiving EU funding
- 10 Only for linked third parties that receive EU funding

ANNEX 3

#### ACCESSION FORM FOR BENEFICIARIES

**KOZEP-EUROPAI EGYETEM (CEU)** HU13, FI27861/2314, established in Nador utca 9, BUDAPEST 1051, Hungary, HU18118463 ('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 679092 ('the Agreement')

**between** THE UNIVERSITY OF WARWICK **and** the European Research Council Executive Agency (ERCEA) ('the Agency'), under the power delegated by the European Commission ('the Commission'),

**for the action entitled** 'An Integrative Framework for Modeling the Sense of Commitment (Sense of Commitment)'.

#### and mandates

the *principal beneficiary* 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

i print format A4 landscape

# MODEL ANNEX 4 FOR H2020 ERC MGA — MULTI

# FINANCIAL STATEMENT FOR BENEFICIARY [name]/ LINKED THIRD PARTY [name] FOR REPORTING PERIOD [reporting period]

	Eligible costs (per budget category)									Receipts EU contribution			1	Additional information
	A. Direct personnel costs				B. Direct costs of subcontract ing	D. Other d	irect costs	E. Indirect	Total costs	Receipts	Reimburseme nt rate %	Maximum EU contribution	Requested EU contribution	
	A.1 Employees (or of A.2 Natural persons contract A.3 Seconded persons		A.4 SME ov without sala A.5 Benefici are natural i without sala	ary aries that persons		D.1 Travel  D.2 Equipment  D.3 Other goods and services	[D.4 Costs of large research infrastructure]			Receipts of the action, to be reported in the last reporting period, according to Article 5.3.3				Costs of in-kind contributions not used on premises
Form of costs <sup>4</sup>	Actual	Unit	Ur	nit	Actual	Actual	Actual	Flat-rate 5 25%						
	a	Total b	No hours	Total c	d	е	[f]	g=0,25x(a+b+c+ [f] -m)	h = a+b+c+d+e+[f] +g	i	j	k	ı	m
[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).

① 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 lateron, in order to replace other costs that are found to be ineligible.

<sup>&</sup>lt;sup>1</sup> See Article 6 for the eligibility conditions

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.

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 90% limit (see Article 21) is reached, etc).

<sup>&</sup>lt;sup>4</sup> See Article 5 for the forms of costs

Flat rate: 25% of eligible direct costs, from which are excluded: direct costs of subcontracting and costs of in-kind contributions not used on premises (see Article 6.2.E)

#### **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

#### **TABLE OF CONTENTS**

1

Terms of Reference for an Independent Report of Factual Findings on costs declared under a Grant Agreement financed under the Horizon 2020 Research and Innovation Framework 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')]

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)¹ drawn up by the [Beneficiary] [Linked Third Party] for the Horizon 2020 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 20.4 of the Agreement based on the compulsory reporting template stipulated by the Commission.

The Agreement has been concluded under the Horizon 2020 Research and Innovation Framework Programme (H2020) between the Beneficiary and [OPTION 1: the European Union, represented by the European Commission ('the Commission')][OPTION 2: the European Atomic Energy Community (Euratom,) represented by the European Commission ('the Commission')][OPTION 3: the [Research Executive Agency (REA)] [European Research Council Executive Agency (ERCEA)] [Innovation and Networks Executive Agency (INEA)] [Executive Agency for Small and Medium-sized Enterprises (EASME)] ('the Agency'), under the powers delegated by the European Commission ('the Commission').]

By which costs under the Agreement are declared (see template 'Model Financial Statements' in Annex 4 to the Grant Agreement).

The [Commission] [Agency] is mentioned as a signatory of the Agreement with the Beneficiary only. The [European Union][Euratom][Agency] is not a party to this engagement.

## 1.1 Subject of the engagement

The coordinator must submit to the [Commission][Agency] the final report within 60 days following the end of the last 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 325 000 or more, as reimbursement of\_actual costs and unit costs calculated on the basis of its usual cost accounting practices (see Article 20.4 of the Agreement). The CFS must cover all reporting periods of the beneficiary or linked third party indicated above.

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 final report according to Article 20.4 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.

If the CFS must be included in the final report according to Article 20.4 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,][ Agency,] 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>2</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][Agency] 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] [Agency], 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] [Agency], 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].

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.

#### 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] [legal name of the [Beneficiary][Linked Third Party]]

[name & function of authorised representative] [name & function of authorised representative]

[dd Month yyyy] [dd Month yyyy]

Signature of the Auditor Signature of the [Beneficiary][Linked Third Party]

# Independent Report of Factual Findings on costs declared under Horizon 2020 Research and Innovation Framework Programme

(To be printed on the Auditor's letterhead)
То
[ 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>3</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 and 'direct personnel costs declared as unit costs calculated in accordance with the [Beneficiary's] [Linked Third Party's] usual cost accounting practices' declared of

[sum of total actual costs and total direct personnel costs declared as unit costs calculated in accordance with the [Beneficiary's] [Linked Third Party's] usual cost accounting practices] 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] [Agency] in evaluating whether the [Beneficiary's] [Linked Third Party's] costs in the accompanying Financial Statement(s) were declared in accordance with the Agreement. The [Commission] [Agency] draws its own conclusions from the Report and any additional information it may require.

<sup>&</sup>lt;sup>3</sup> By which the Beneficiary declares costs under the Agreement (see template 'Model Financial Statement' in Annex 4 to the Agreement).

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. Finding number 30 was not fulfilled because the methodology used by the Beneficiary to calculate unit costs was different from the one approved by the Commission. The differences were as follows: ...
- 3. 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] [Agency], and only to be submitted to the [Commission] [Agency] in connection with the requirements set out in Article 20.4 of the Agreement. The Report may not be used by the [Beneficiary] [Linked Third Party] or by the [Commission] [Agency] for any other purpose, nor may it

be distributed to any other parties. The [Commission] [Agency] 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] [Agency] 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>4</sup> between the Auditor and the Beneficiary [and Linked Third Party] i	n
establishing this Repo	rt. 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

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:

<sup>-</sup> was involved in the preparation of the Financial Statements;

<sup>-</sup> stands to benefit directly should the certificate be accepted;

<sup>-</sup> has a close relationship with any person representing the beneficiary;

<sup>-</sup> is a director, trustee or partner of the beneficiary; or

<sup>-</sup> is in any other situation that compromises his or her independence or ability to establish the certificate impartially.

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#### Agreed-upon procedures to be performed and standard factual findings to be confirmed by the Auditor

The European 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 (C / E / N.A.)
Α	ACTUAL PERSONNEL COSTS AND UNIT COSTS CALCULATED BY THE BENEFICIARY IN ACCORDANCE	E WITH ITS USUAL COST ACCOUNTING	G PRACTICE

Ref	Duggadungs	Chandard factural finding	Result
Ket	Procedures	Standard factual finding	(C / E / N.A.)
	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.		
	(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)		
	The Auditor sampled people out of the total of people.		
A.1	PERSONNEL COSTS  For the persons included in the sample and working under an employment contract or equivalent act (general procedures for individual actual personnel costs and personnel costs declared as unit costs)  To confirm standard factual findings 1-5 listed in the next column, the Auditor reviewed following information/documents provided by the Beneficiary:  o 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;	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.	
	<ul> <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> </ul>	2) Personnel costs were recorded in the Beneficiary's accounts/payroll system.      3) Costs were adequately supported and reconciled with the accounts and payroll	

Ref	Procedures	Standard factual finding	Result (C / E / N.A.)
	<ul> <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> The Auditor also verified the eligibility of all components of the retribution (see Article 6 GA) and recalculated the personnel costs for employees included in the sample.	records.  4) Personnel costs did not contain any ineligible elements.  5) There were no discrepancies between the personnel costs charged to the action and the costs recalculated by the Auditor.	
	<ul> <li>Further procedures if 'additional remuneration' is paid</li> <li>To confirm standard factual findings 6-9 listed in the next column, the Auditor:         <ul> <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> </li> </ul>	6) The Beneficiary paying "additional remuneration" was a non-profit legal entity.  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.	

Ref	Procedures	Standard factual finding	Result (C / E / N.A.)
	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:  (A) IF THE PERSON WORKS FULL TIME AND EXCLUSIVELY ON THE ACTION DURING THE FULL YEAR: UP TO EUR 8 000/YEAR;  (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  (C) IF THE PERSON DOES NOT WORK EXCLUSIVELY ON THE ACTION: UP TO A PRO-RATA AMOUNT CALCULATED IN ACCORDANCE TO ARTICLE 6.2.A.1.	<ul> <li>8) The criteria used to calculate the additional remuneration were objective and generally applied by the Beneficiary regardless of the source of funding used.</li> <li>9) The amount of additional remuneration included in the personnel costs charged to the action was capped at EUR 8,000 per FTE/year (up to the equivalent pro-rata amount if the person did not work on the action full-time during the year or did not work exclusively on the action).</li> </ul>	
	Additional procedures in case "unit costs calculated by the Beneficiary in accordance with its usual cost accounting practices" is applied:  Apart from carrying out the procedures indicated above to confirm standard factual findings 1-5 and, if applicable, also 6-9, the Auditor carried out following procedures to confirm standard factual findings 10-13 listed in the next column:	10) The personnel costs included in the Financial Statement were calculated in accordance with the Beneficiary's usual cost accounting practice. This methodology was consistently used in all H2020 actions.	

Ref	Procedures	Standard factual finding	Result (C / E / N.A.)
	<ul> <li>obtained a description of the Beneficiary's usual cost accounting practice to calculate unit costs;.</li> </ul>	11) The employees were charged under the correct category.	
	<ul> <li>reviewed whether the Beneficiary's usual cost accounting practice was applied for the Financial Statements subject of the present CFS;</li> </ul>	12) Total personnel costs used in calculating the unit costs were	
	<ul> <li>verified the employees included in the sample were charged under the correct category (in accordance with the criteria used by the Beneficiary to establish personnel categories) by reviewing the contract/HR-record or analytical accounting records;</li> </ul>	consistent with the expenses recorded in the statutory accounts.	
	<ul> <li>verified that there is no difference between the total amount of personnel costs used in calculating the cost per unit and the total amount of personnel costs recorded in the statutory accounts;</li> </ul>	13) Any estimated or budgeted element used by the Beneficiary in its unit-cost	
	<ul> <li>verified whether actual personnel costs were adjusted on the basis of budgeted or estimated elements and, if so, verified whether those elements used are actually relevant for the calculation, objective and supported by documents.</li> </ul>	calculation were relevant for calculating personnel costs and corresponded to objective and verifiable information.	
	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).	14) The natural persons reported to the Beneficiary (worked under the Beneficiary's instructions).	
	To confirm standard factual findings 14-18 listed in the next column the Auditor reviewed	,	
	following information/documents provided by the Beneficiary:  o the contracts, especially the cost, contract duration, work description, place of work, ownership of the results and reporting obligations to the Beneficiary;	15) They worked on the Beneficiary's premises (unless otherwise agreed with the Beneficiary).	

Ref	Procedures	Standard factual finding	Result (C / E / N.A.)
	<ul> <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>	16) The results of work carried out belong to the Beneficiary.	
	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.	
	For personnel seconded by a third party and included in the sample (not subcontractors)  To confirm standard factual findings 19-22 listed in the next column, the Auditor reviewed following information/documents provided by the Beneficiary:  o their secondment contract(s) notably regarding costs, duration, work description, place	19) Seconded personnel reported to the Beneficiary and worked on the Beneficiary's premises (unless otherwise agreed with the Beneficiary).	
	of work and ownership of the results;  o if there is reimbursement by the Beneficiary to the third party for the resource made available_(in-kind contribution against payment): any documentation that supports the	The results of work carried out belong to the Beneficiary.  If personnel is seconded against	
	costs declared (e.g. contract, invoice, bank payment, and proof of registration in its accounting/payroll, etc.) and reconciliation of the Financial Statement(s) with the accounting system (project accounting and general ledger) as well as any proof that the amount invoiced by the third party did not include any profit;	payment:  21) The costs declared were supported with documentation and recorded in the	

Ref	Procedures	Standard factual finding	Result (C / E / N.A.)
	<ul> <li>if there is no reimbursement by the Beneficiary to the third party for the resource made available (in-kind contribution free of charge): a proof of the actual cost borne by the Third Party for the resource made available free of charge to the Beneficiary such as a statement of costs incurred by the Third Party and proof of the registration in the Third Party's accounting/payroll;</li> <li>any other document that supports the costs declared (e.g. invoices, etc.).</li> </ul>	Beneficiary's accounts. The third party did not include any profit.  If personnel is seconded free of charge:  22) The costs declared did not exceed the third party's cost as recorded in the accounts of the third party and were supported with documentation.	
A.2	PRODUCTIVE HOURS  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:  o the annual productive hours applied were calculated in accordance with one of the methods described below,  the full-time equivalent (FTEs) ratios for employees not working full-time were correctly calculated.	23) The Beneficiary applied method [choose one option and delete the others]  [A: 1720 hours]  [B: the 'total number of hours worked']  [C: 'annual productive hours' used correspond to usual accounting practices]	

Ref	Procedures	Standard factual finding	Result (C / E / N.A.)
	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	24) Productive hours were calculated annually.	
	hours.  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,	25) For employees not working full-time the full-time equivalent (FTE) ratio was correctly applied.  If the Beneficiary applied method B.	
	and contracts.  BENEFICIARY'S PRODUCTIVE HOURS' FOR PERSONS WORKING FULL TIME SHALL BE ONE OF THE FOLLOWING METHODS:	26) The calculation of the number of 'annual workable hours', overtime and absences was verifiable based on the	
	A. 1720 ANNUAL PRODUCTIVE HOURS (PRO-RATA FOR PERSONS NOT WORKING FULL-TIME)	documents provided by the Beneficiary.	
	B. THE TOTAL NUMBER OF HOURS WORKED BY THE PERSON FOR THE BENEFICIARY IN THE YEAR (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).	If the Beneficiary applied method C.  27) The calculation of the number of 'standard annual workable hours' was verifiable based on the documents provided by the Beneficiary.	

Ref	Procedures	Standard factual finding	Result (C / E / N.A.)
	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.  '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.	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'.	
A.3	I) For unit costs calculated in accordance to the Beneficiary's usual cost accounting practice (unit costs):  If the Beneficiary has a "Certificate on Methodology to calculate unit costs" (CoMUC) approved by the Commission, the Beneficiary provides the Auditor with a description of the approved methodology and the Commission's letter of acceptance. The Auditor verified that the Beneficiary has indeed used the methodology approved. If so, no further verification is necessary.  If the Beneficiary does not have a "Certificate on Methodology" (CoMUC) approved by the	29) The Beneficiary applied [choose one option and delete the other]:  [Option I: "Unit costs (hourly rates) were calculated in accordance with the Beneficiary's usual cost accounting practices"]  [Option II: Individual hourly rates were applied]	

Dof	Duggaduwas	Chandard factural finding	Result
Ref	Procedures	Standard factual finding	(C / E / N.A.)
	Commission, or if the methodology approved was not applied, then the Auditor:	For option I concerning unit costs	
	<ul> <li>reviewed the documentation provided by the Beneficiary, including manuals and internal guidelines that explain how to calculate hourly rates;</li> </ul>	and if the Beneficiary applies the methodology approved by the	
	<ul> <li>recalculated the unit costs (hourly rates) of staff included in the sample following the results of the procedures carried out in A.1 and A.2.</li> </ul>	Commission (CoMUC):  30) The Beneficiary used the Commission-approved metho-	
	II) For individual hourly rates:	dology to calculate hourly rates. It corresponded to the	
	The Auditor:	organisation's usual cost	
	<ul> <li>reviewed the documentation provided by the Beneficiary, including manuals and internal guidelines that explain how to calculate hourly rates;</li> </ul>	accounting practices and was applied consistently for all	
	<ul> <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>	activities irrespective of the source of funding.	
		For option I concerning unit costs and if the Beneficiary applies a	
	"Unit costs calculated by the Beneficiary in accordance with its usual cost accounting practices":	methodology not approved by the	
	It is calculated By dividing the total amount of personnel costs of the category to which the	Commission:	
	EMPLOYEE BELONGS VERIFIED IN LINE WITH PROCEDURE $A.1$ BY THE NUMBER OF $FTE$ AND THE ANNUAL TOTAL	31) The unit costs re-calculated by	
	PRODUCTIVE HOURS OF THE SAME CATEGORY CALCULATED BY THE BENEFICIARY IN ACCORDANCE WITH PROCEDURE	the Auditor were the same as the rates applied by the	
	A.2.	Beneficiary.	
	HOURLY RATE FOR INDIVIDUAL ACTUAL PERSONAL COSTS:	For option II concerning individual	
	IT IS CALCULATED BY DIVIDING THE TOTAL AMOUNT OF PERSONNEL COSTS OF AN EMPLOYEE VERIFIED IN LINE WITH	hourly rates:	

Ref	Procedures	Standard factual finding	Result (C / E / N.A.)
	PROCEDURE A.1 BY THE NUMBER OF ANNUAL PRODUCTIVE HOURS VERIFIED IN LINE WITH PROCEDURE A.2.	32) The individual rates recalculated by the Auditor were the same as the rates applied by the Beneficiary.	
A.4	TIME RECORDING SYSTEM  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:  o description of the time recording system provided by the Beneficiary (registration,	33) All persons recorded their time dedicated to the action on a daily/ weekly/ monthly basis using a paper/computer-based system. (delete the answers that are not applicable)	
	<ul> <li>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> </ul>	34) Their time-records were authorised at least monthly by the project manager or other superior.	
	<ul> <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> </ul>	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
	Standard ractain mains		(C / E / N.A.)
	<ul> <li>the hours charged to the action matched those in the time recording system.</li> </ul>	26) The second discount of	
	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).	36) There were no discrepancies between the number of hours charged to the action and the number of hours recorded.	
	If the persons are working exclusively for the action and without time records  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.	37) The exclusive dedication is supported by a declaration signed by the Beneficiary's and by any other evidence gathered.	
В	COSTS OF SUBCONTRACTING		
B.1	The Auditor obtained the detail/breakdown of subcontracting costs and sampled 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).  To confirm standard factual findings 38-42 listed in the next column, the Auditor reviewed the	38) The use of claimed subcontracting costs was foreseen in Annex 1 and costs were declared in the Financial Statements under the subcontracting category.	

Ref	Procedures	Standard factual finding	Result
Itel	roccuares	Standard ractual infamig	(C / E / N.A.)
	following for the items included in the sample:	39) There were documents of	
	o the use of subcontractors was foreseen in Annex 1;	requests to different providers, different offers and	
	<ul> <li>subcontracting costs were declared in the subcontracting category of the Financial Statement;</li> </ul>	assessment of the offers before selection of the	
	o supporting documents on the selection and award procedure were followed;	provider in line with internal procedures and procurement	
	o 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 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).	rules. Subcontracts were awarded in accordance with the principle of best value for money.  (When different offers were	
	In particular,	not collected the Auditor explains the reasons provided	
	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.	by the Beneficiary under the caption "Exceptions" of the Report. The Commission will analyse this information to	
	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	evaluate whether these costs might be accepted as eligible)	
	For the items included in the sample the Auditor also verified that:	40) The subcontracts were not awarded to other Beneficiaries	
	<ul> <li>the subcontracts were not awarded to other Beneficiaries in the consortium;</li> </ul>	of the consortium.	

Ref	Procedures	Standard factual finding	Result (C / E / N.A.)
	<ul> <li>there were signed agreements between the Beneficiary and the subcontractor;</li> <li>there was evidence that the services were provided by subcontractor;</li> </ul>	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.	
С	COSTS OF PROVIDING FINANCIAL SUPPORT TO THIRD PARTIES		
C.1	The Auditor obtained the detail/breakdown of the costs of providing financial support to third parties and sampled 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).		
	The Auditor verified that the following minimum conditions were met:  a) the maximum amount of financial support for each third party did not exceed EUR 60 000, unless explicitly mentioned in Annex 1;	43) All minimum conditions were met	
	b) the financial support to third parties was agreed in Annex 1 of the Agreement and the other provisions on financial support to third parties included in Annex 1 were		

Ref	Procedures	Standard factual finding	Result (C / E / N.A.)
	respected.		

D	OTHER ACTUAL DIRECT COSTS	
D.1	COSTS OF TRAVEL AND RELATED SUBSISTENCE ALLOWANCES  The Auditor sampled 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 the highest).	44) Costs were incurred, approved and reimbursed in line with the Beneficiary's usual policy for travels.
	The Auditor inspected the sample and verified that:	45) There was a link between the trip and the action.
	<ul> <li>travel and subsistence costs were consistent with the Beneficiary's usual policy for travel. In this context, the Beneficiary provided evidence of its normal policy for travel costs (e.g. use of first class tickets, reimbursement by the Beneficiary on the basis of actual costs, a lump sum or per diem) to enable the Auditor to compare the travel costs charged with this policy;</li> </ul>	46) The supporting documents were consistent with each other regarding subject of the trip, dates, duration and
	<ul> <li>travel costs are correctly identified and allocated to the action (e.g. trips are directly linked to the action) by reviewing relevant supporting documents such as minutes of meetings, workshops or conferences, their registration in the correct project account, their consistency with time records or with the dates/duration of the workshop/conference;</li> <li>no ineligible costs or excessive or reckless expenditure was declared.</li> </ul>	reconciled with time records and accounting.  47) No ineligible costs or excessive or reckless expenditure was declared.
D.2	DEPRECIATION COSTS FOR EQUIPMENT, INFRASTRUCTURE OR OTHER ASSETS  The Auditor sampled 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	48) Procurement rules, principles and guides were followed.
	total, whichever number is the highest).  For "equipment, infrastructure or other assets" [from now on called "asset(s)"] selected in the	49) There was a link between the grant agreement and the asset charged to the action.

	sample the Auditor verified that:	50) The asset charged to the
	<ul> <li>the assets were acquired in conformity with the Beneficiary's internal guidelines and procedures;</li> </ul>	action was traceable to the accounting records and the underlying documents.
	<ul> <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> </ul>	51) The depreciation method used to charge the asset to the
	<ul> <li>they were entered in the accounting system;</li> </ul>	action was in line with the
	<ul> <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>	applicable rules of the Beneficiary's country and the Beneficiary's usual accounting policy.
	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).	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.
D.3	COSTS OF OTHER GOODS AND SERVICES  The Auditor sampled 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	54) Contracts for works or services did not cover tasks described in Annex 1.
	total, whichever number is highest).	55) Costs were allocated to the correct action and the goods
	For the purchase of goods, works or services included in the sample the Auditor verified that:  o the contracts did not cover tasks described in Annex 1;	were not placed in the inventory of durable
	5	equipment.

- 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);
- the goods were not placed in the inventory of durable equipment;
- the costs charged to the action were accounted in line with the Beneficiary's usual accounting practices;
- o no ineligible costs or excessive or reckless expenditure were declared (see Article 6 GA).

In addition, the Auditor verified that these goods and services were acquired in conformity with the Beneficiary's internal guidelines and procedures, in particular:

- o 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.
- 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.

For the items included in the sample the Auditor also verified that:

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, 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);

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

- 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 accordance with the principle of best value for money.

(When different offers were not collected the Auditor explains the reasons provided by the Beneficiary under the

	AGREEMENT, CERTIFICATES ON THE FINANCIAL STATEMENTS IF THEY ARE REQUIRED BY THE AGREEMENT AND CERTIFICATES ON THE METHODOLOGY, TRANSLATIONS, REPRODUCTION.	caption "Exceptions" of the Report. The Commission will analyse this information to evaluate whether these costs might be accepted as eligible)
D.4	AGGREGATED CAPITALISED AND OPERATING COSTS OF RESEARCH INFRASTRUCTURE  The Auditor ensured the existence of a positive ex-ante assessment (issued by the EC Services) of the cost accounting methodology of the Beneficiary allowing it to apply the guidelines on direct costing for large research infrastructures in Horizon 2020.  In the cases that a positive ex-ante assessment has been issued (see the standard factual findings 59-60 on the next column),  The Auditor ensured that the beneficiary has applied consistently the methodology that is explained and approved in the positive ex ante assessment;	59) The costs declared as direct costs for Large Research Infrastructures (in the appropriate line of the Financial Statement) comply with the methodology described in the positive exante assessment report.  60) Any difference between the methodology applied and the one positively assessed was extensively described and adjusted accordingly.
	In the cases that a positive ex-ante assessment has NOT been issued (see the standard factual findings 61 on the next column),  The Auditor verified that no costs of Large Research Infrastructure have been charged as direct costs in any costs category;	61) The direct costs declared were free from any indirect costs items related to the Large Research Infrastructure.

	<ul> <li>In the cases that a draft ex-ante assessment report has been issued with recommendation for further changes (see the standard factual findings 61 on the next column),</li> <li>The Auditor followed the same procedure as above (when a positive ex-ante assessment has NOT yet been issued) and paid particular attention (testing reinforced) to the cost items for which the draft ex-ante assessment either rejected the inclusion as direct costs for Large Research Infrastructures or issued recommendations.</li> </ul>		
E	USE OF EXCHANGE RATES		
E.1	a) For Beneficiaries with accounts established in a currency other than euros  The Auditor sampled 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):  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 ( https://www.ecb.int/stats/exchange/eurofxref/html/index.en.html ), DETERMINED 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, CONVERSION SHALL BE MADE AT THE AVERAGE OF THE MONTHLY ACCOUNTING RATES ESTABLISHED BY THE COMMISSION AND PUBLISHED ON ITS WEBSITE ( http://ec.europa.eu/budget/contracts grants/info contracts/inforeuro/inforeuro en.cfm ),	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.	

DETERMINED OVER THE CORRESPONDING REPORTING PERIOD.		
b) For Beneficiaries with accounts established in euros		
The Auditor sampled 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):	63) The Beneficiary applied its usual accounting practices.	
COSTS INCURRED IN ANOTHER CURRENCY SHALL BE CONVERTED INTO EURO BY APPLYING THE BENEFICIARY'S USUAL ACCOUNTING PRACTICES.		

[legal name of the audit firm]

[name and function of an authorised representative]

[dd Month yyyy]

<Signature of the Auditor>

**ANNEX 6** 

#### MODEL FOR THE CERTIFICATE ON THE METHODOLOGY

- 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 audit engagement for a methodology certificate in connection with one or more grant agreements financed under the Horizon 2020 Research and Innovation **Framework 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 [Beneficiary's] [Linked Third Party's] usual accounting practices for calculating and claiming direct personnel costs declared as unit costs ('the Methodology') in connection with grant agreements financed under the Horizon 2020 Research and Innovation Framework Programme.

The procedures to be carried out for the assessment of the methodology will be based on the grant agreement(s) detailed below:

[title and number of the grant agreement(s)] ('the Agreement(s)')

The Agreement(s) has(have) been concluded between the Beneficiary and [OPTION 1: the European Union, represented by the European Commission ('the Commission')][ OPTION 2: the European Atomic Energy Community (Euratom,) represented by the European Commission ('the Commission')][OPTION 3: the [Research Executive Agency (REA)] [European Research Council Executive Agency (ERCEA)] [Innovation and Networks Executive Agency (INEA)] [Executive Agency for Small and Medium-sized Enterprises (EASME)] ('the Agency'), under the powers delegated by the European Commission ('the Commission').].

The [Commission] [Agency] is mentioned as a signatory of the Agreement with the Beneficiary only. The [European Union] [Euratom] [Agency] is not a party to this engagement.

#### 1.1 Subject of the engagement

According to Article 18.1.2 of the Agreement, beneficiaries [and linked third parties] that declare direct personnel costs as unit costs calculated in accordance with their usual cost accounting practices may submit to the [Commission] [Agency], for approval, a certificate on the methodology ('CoMUC') stating that there are adequate records and documentation to prove that their cost accounting practices used comply with the conditions set out in Point A of Article 6.2.

The subject of this engagement is the CoMUC which 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') issued on the Auditor's letterhead, dated, stamped and signed by the Auditor which includes; the standard statements ('the Statements') evaluated and signed by the [Beneficiary] [Linked Third Party], the agreed-upon procedures ('the Procedures') performed by the Auditor and the standard factual findings ('the Findings') assessed by the Auditor. The Statements, Procedures and Findings are summarised in the table that forms part of the Report.

The information provided through the Statements, the Procedures and the Findings will enable the Commission to draw conclusions regarding the existence of the [Beneficiary's] [Linked Third Party's] usual cost accounting practice and its suitability to ensure that direct personnel costs claimed on that basis comply with the provisions of the Agreement. The Commission draws its own conclusions from the Report and any additional information it may require.

#### 1.2 Responsibilities

The parties to this agreement are the [Beneficiary] [Linked Third Party] and the Auditor.

The [Beneficiary] [Linked Third Party]:

- is responsible for preparing financial statements for the Agreement(s) ('the Financial Statements') in compliance with those Agreements;
- is responsible for providing the Financial Statement(s) to the Auditor and enabling the Auditor to reconcile them with the [Beneficiary's] [Linked Third Party's] accounting and bookkeeping system and the underlying accounts and records. The Financial Statement(s) will be used as a basis for the procedures which the Auditor will carry out under this ToR;
- is responsible for its Methodology and liable for the accuracy of the Financial Statement(s);
- is responsible for endorsing or refuting the Statements indicated under the heading 'Statements to be made by the Beneficiary/ Linked Third Party' in the first column of the table that forms part of the Report;
- must provide the Auditor with a signed and dated representation letter;
- accepts that the ability of the Auditor to carry out the Procedures effectively depends upon the [Beneficiary] [Linked Third Party] providing full and free access to the [Beneficiary's] [Linked Third Party's] staff and to its accounting and other relevant records.

#### 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 [and 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 these 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 and the Findings to be endorsed 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>1</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 was no conflict of interests in establishing this Report between the Auditor and the Beneficiary [and the Linked Third Party] that could have a bearing on the Report, 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 of the Agreement).

Under Article 22 of the Agreement, the Commission, [the Agency], 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 claimed from [the European Union] [Euratom] budget. This includes work related to this engagement. The Auditor must provide access to all working papers related to this assignment if the Commission, [the Agency], 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].

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.

### 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] [legal name of the [Beneficiary] [Linked Third Party]]

[name & title of authorised representative] [name & title of authorised representative]

[dd Month yyyy] [dd Month yyyy]

Signature of the Auditor Signature Signature of the [Beneficiary] [Linked Third Party]

### Independent report of factual findings on the methodology concerning grant agreements financed under the Horizon 2020 Research and Innovation Framework Programme

(To be printed on letterhead paper of the auditor)
То
[ 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 agreed-upon procedures ('the Procedures') and provide hereby our Independent Report of Factual Findings ('the Report'), concerning the [Beneficiary's] [Linked Third Party's] usual accounting practices for calculating and declaring direct personnel costs declared as unit costs ('the Methodology').

You requested certain procedures to be carried out in connection with the grant(s)

[title and number of the grant agreement(s)] ('the Agreement(s)').

#### The Report

Our engagement was carried out in accordance with the terms of reference ('the ToR') appended to this Report. The Report includes: the standard statements ('the Statements') made by the [Beneficiary] [Linked Third Party], the agreed-upon procedures ('the Procedures') carried out and the standard factual findings ('the Findings') confirmed by us.

The engagement involved carrying out the Procedures and assessing the Findings and the documentation requested appended to this Report, the results of which the Commission uses to draw conclusions regarding the acceptability of the Methodology applied by the [Beneficiary] [Linked Third Party].

The Report covers the methodology used from [dd Month yyyy]. In the event that the [Beneficiary] [Linked Third Party] changes this methodology, the Report will not be applicable to any Financial Statement<sup>2</sup> submitted thereafter.

The scope of the Procedures and the definition of the standard statements and findings were determined solely 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, we do not

Financial Statement in this context refers solely to Annex 4 of the Agreement by which the Beneficiary declares costs under the Agreement.

give a statement of assurance on the costs declared on the basis of the [Beneficiary's] [Linked Third Party's] Methodology. Had we carried out additional procedures or had we performed an audit or review in accordance with these standards, other matters might have come to its attention and would have been included in the Report.

#### **Exceptions**

Apart from the exceptions listed below, the [Beneficiary] [Linked Third Party] agreed with the standard Statements and provided the Auditor all the documentation and accounting information needed by the Auditor to carry out the requested Procedures and corroborate the standard Findings.

List here any exception and add any information on the cause and possible consequences of each exception, if known. If the exception is quantifiable, also indicate the corresponding amount.

#### Explanation of possible exceptions in the form of examples (to be removed from the Report):

- i. the [Beneficiary] [Linked Third Party] did not agree with the standard Statement number ... because...;
- ii. the Auditor could not carry out the procedure ... established because .... (e.g. due to the inability to reconcile key information or the unavailability or inconsistency of data);
- iii. the Auditor could not confirm or corroborate the standard Finding number ... because ....

#### Remarks

We would like to add the following remarks relevant for the proper understanding of the Methodology applied by the [Beneficiary] [Linked Third Party] or the results reported:

#### Example (to be removed from the Report):

Regarding the methodology applied to calculate hourly rates ...

Regarding standard Finding 15 it has to be noted that ...

The [Beneficiary] [Linked Third Party] explained the deviation from the benchmark statement XXIV concerning time recording for personnel with no exclusive dedication to the action in the following manner:

### **Annexes**

Please provide the following documents to the auditor and annex them to the report when submitting this CoMUC to the Commission:

- 1. Brief description of the methodology for calculating personnel costs, productive hours and hourly rates;
- 2. Brief description of the time recording system in place;
- 3. An example of the time records used by the [Beneficiary] [Linked Third Party];
- 4. Description of any budgeted or estimated elements applied, together with an explanation as to why they are relevant for calculating the personnel costs and how they are based on objective and verifiable information;
- 5. A summary sheet with the hourly rate for direct personnel declared by the [Beneficiary] [Linked Third Party] and recalculated by the Auditor for each staff member included in the sample (the names do not need to be reported);
- 6. A comparative table summarising for each person selected in the sample a) the time claimed by the [Beneficiary] [Linked Third Party] in the Financial Statement(s) and b) the time according to the time record verified by the Auditor;
- 7. A copy of the letter of representation provided to the Auditor.

#### **Use of this Report**

This Report has been drawn up solely for the purpose given under Point 1.1 Reasons for the engagement.

#### The Report:

- is confidential and is intended to be submitted to the Commission by the [Beneficiary] [Linked Third Party] in connection with Article 18.1.2 of the Agreement;
- may not be used by the [Beneficiary] [Linked Third Party] or by the Commission for any other purpose, nor distributed to any other parties;
- may be disclosed by the Commission only to authorised parties, in particular the European Anti-Fraud Office (OLAF) and the European Court of Auditors.
- relates only to the usual cost accounting practices specified above and does not constitute a report on the Financial Statements of the [Beneficiary] [Linked Third Party].

No conflict of interest <sup>3</sup> exists between the Auditor and the Beneficiary [and the Linked Third Party]			
that could have a bearing on the Report. The total fee paid to the Auditor for producing the Repor			
was EUR (including EUR	of deductible VAT).		

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:

<sup>-</sup> was involved in the preparation of the Financial Statements;

We look forward to discussing our Report with you and would be pleased to provide any further information or assistance which may be required.

Yours sincerely

[legal name of the Auditor]

[name and title of the authorised representative]

[dd Month yyyy]

Signature of the Auditor

<sup>-</sup> stands to benefit directly should the certificate be accepted;

<sup>-</sup> has a close relationship with any person representing the beneficiary;

<sup>-</sup> is a director, trustee or partner of the beneficiary; or

<sup>-</sup> is in any other situation that compromises his or her independence or ability to establish the certificate impartially.

Statements to be made by the Beneficiary/Linked Third Party ('the Statements') and Procedures to be carried out by the Auditor ('the Procedures') and standard factual findings ('the Findings') to be confirmed by the Auditor

The Commission reserves the right to provide the auditor with guidance regarding the Statements to be made, the Procedures to be carried out or the Findings to be ascertained and the way in which to present them. The Commission reserves the right to vary the Statements, Procedures or Findings by written notification to the Beneficiary/Linked Third Party to adapt the procedures to changes in the grant agreement(s) or to any other circumstances.

If this methodology certificate relates to the Linked Third Party's usual accounting practices for calculating and claiming direct personnel costs declared as unit costs any reference here below to 'the Beneficiary' is to be considered as a reference to 'the Linked Third Party'.

Please explain any discrepancies in the body of the Report.		
Statements to be made by Beneficiary	Procedures to be carried out and Findings to be confirmed by the Auditor	
A. Use of the Methodology     I. The cost accounting practice described below has been in use since [dd Month yyyy].      II. The next planned alteration to the methodology used by the Beneficiary will be from [dd Month yyyy].	Procedure:  ✓ The Auditor checked these dates against the documentation the Beneficiary has provided.  Factual finding:  1. The dates provided by the Beneficiary were consistent with the documentation.	
B. Description of the Methodology  III. The methodology to calculate unit costs is being used in a consistent manner and is reflected in the relevant procedures.  [Please describe the methodology your entity uses to calculate personnel costs, productive hours and hourly rates, present your description to the Auditor and annex it to this certificate]	Procedure:  ✓ The Auditor reviewed the description, the relevant manuals and/or internal guidance documents describing the methodology.  Factual finding:  2. The brief description was consistent with the relevant manuals, internal guidance and/or other documentary evidence the Auditor has reviewed.	
[If the statement of section "B. Description of the methodology" cannot be endorsed by the Beneficiary or there is no written methodology to calculate unit costs it should be listed here below and reported as exception by the Auditor in the main Report of	<ol> <li>The methodology was generally applied by the Beneficiary as part of its usual costs accounting practices.</li> </ol>	

# Please explain any discrepancies in the body of the Report. Statements to be made by Beneficiary Procedures to be carried out and Findings to be confirmed by the Auditor Factual Findings:

#### C. Personnel costs

#### General

- IV. The unit costs (hourly rates) are limited to salaries including during parental leave, social security contributions, taxes and other costs included in the remuneration required under national law and the employment contract or equivalent appointing act;
- ٧. Employees are hired directly by the Beneficiary in accordance with national law, and work under its sole supervision and responsibility;
- VI. The Beneficiary remunerates its employees in accordance with its usual practices. This means that personnel costs are charged in line with the Beneficiary's usual payroll policy (e.g. salary policy, overtime policy, variable pay) and no special conditions exist for employees assigned to tasks relating to the European Union or Euratom, unless explicitly provided for in the grant agreement(s);
- VII. The Beneficiary allocates its employees to the relevant group/category/cost centre for the purpose of the unit cost calculation in line with the usual cost accounting practice;
- VIII. Personnel costs are based on the payroll system and accounting system.
- Any exceptional adjustments of actual IX. personnel costs resulted from relevant budgeted or estimated elements and were based on objective and verifiable information. [Please describe the 'budgeted or estimated elements' and their relevance to personnel costs, and explain how they were reasonable and based on objective and present verifiable information, your explanation to the Auditor and annex it to this certificate].
- X. Personnel costs claimed do not contain any of the following ineligible costs: costs related to return on capital; debt and debt service charges; provisions for future losses

#### Procedure:

The Auditor draws a sample of employees to carry out the procedures indicated in this section C and the following sections D to F.

[The Auditor has drawn a random sample of 10 fulltime equivalents made up of employees assigned to the action(s). If fewer than 10 full-time equivalents are assigned to the action(s), the Auditor has selected a sample of 10 full-time equivalents consisting of all employees assigned to the action(s), complemented by other employees irrespective of their assignments.]. For this sample:

- the Auditor reviewed all documents relating to personnel costs such as employment contracts, payslips, payroll policy (e.g. salary policy, overtime policy, variable pay policy), accounting and payroll records, applicable national tax , labour and social security law and any other documents corroborating the personnel costs claimed;
- in particular, the Auditor reviewed the employment contracts of the employees in the sample to verify that:
  - i. they were employed directly by the Beneficiary in accordance with applicable national legislation;
  - ii. they were working under the sole technical supervision and responsibility of the latter:
  - iii. they were remunerated in accordance with the Beneficiary's usual practices;
  - iv. they were allocated to the correct group/category/cost centre for the purposes of calculating the unit cost in line with the Beneficiary's usual cost accounting practices;
- the Auditor verified that any ineligible items or any costs claimed under other costs categories or costs covered by other types of grant or by other grants financed from the European Union budget have not been taken

#### Please explain any discrepancies in the body of the Report. Procedures to be carried out and Findings to be Statements to be made by Beneficiary confirmed by the Auditor or debts; interest owed; doubtful debts; into account when calculating the personnel currency exchange losses; bank costs charged by the Beneficiary's bank for the Auditor numerically reconciled the total transfers from the Commission/Agency; amount of personnel costs used to calculate excessive or reckless expenditure; the unit cost with the total amount of deductible VAT or costs incurred during personnel costs recorded in the statutory suspension of the implementation of the accounts and the payroll system. action. to the extent that actual personnel costs were XI. Personnel costs were not declared under adjusted on the basis of budgeted or another EU or Euratom grant (including estimated elements, the Auditor carefully grants awarded by a Member State and examined those elements and checked the financed by the EU budget and grants information source to confirm that they awarded by bodies other than the correspond to objective and verifiable Commission/Agency for the purpose of information; implementing the EU budget). if additional remuneration has been claimed, the Auditor verified that the Beneficiary was a non-profit legal entity, that the amount was If additional remuneration as referred to in the grant capped at EUR 8000 per full-time equivalent agreement(s) is paid and that it was reduced proportionately for employees not assigned exclusively to the XII. The Beneficiary is a non-profit legal entity; action(s). XIII. The additional remuneration is part of the the Auditor recalculated the personnel costs beneficiary's usual remuneration practices for the employees in the sample. and paid consistently whenever the relevant work or expertise is required; Factual finding: XIV. The criteria used to calculate the additional 4. All the components of the remuneration that remuneration are objective and generally have been claimed as personnel costs are applied regardless of the source of funding; supported by underlying documentation. XV. The additional remuneration included in the The employees in the sample were employed personnel costs used to calculate the hourly directly by the Beneficiary in accordance with rates for the grant agreement(s) is capped applicable national law and were working at EUR 8 000 per full-time equivalent under its sole supervision and responsibility. (reduced proportionately if the employee is 6. Their employment contracts were in line with not assigned exclusively to the action). the Beneficiary's usual policy; Personnel costs were duly documented and consisted solely of salaries, social security contributions (pension contributions, health insurance, unemployment fund contributions, etc.), taxes and other statutory costs included in the remuneration (holiday pay, thirteenth month's pay, etc.); 8. The totals used to calculate the personnel unit costs are consistent with those registered in [If certain statement(s) of section "C. Personnel the payroll and accounting records;

costs" cannot be endorsed by the Beneficiary they should be listed here below and reported as exception by the Auditor in the main Report of

To the extent that actual personnel costs were

adjusted on the basis of budgeted or

estimated elements, those elements were

Please explain any discrepancies in the body of the Report.		
Statements to be made by Beneficiary	Procedures to be carried out and Findings to be confirmed by the Auditor	
Factual Findings:]	relevant for calculating the personnel costs and correspond to objective and verifiable information. The budgeted or estimated elements used are: — (indicate the elements and their values).  10. Personnel costs contained no ineligible	
	elements;  11. Specific conditions for eligibility were fulfilled when additional remuneration was paid: a) the Beneficiary is registered in the grant agreements as a non-profit legal entity; b) it was paid according to objective criteria generally applied regardless of the source of funding used and c) remuneration was capped at EUR 8000 per full-time equivalent (or up to up to the equivalent pro-rata amount if the person did not work on the action full-time during the year or did not work exclusively on the action).	
D. Productive hours  XVI. The number of productive hours per full-		

- time employee applied is [delete as appropriate]:
  - A. 1720 productive hours per year for a person working full-time (corresponding pro-rata for persons not working full time).
  - B. the total number of hours worked in the year by a person for the Beneficiary
  - C. 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 method B is applied

XVII. 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 and special leave).

XVIII. 'Annual workable hours' are hours

- The Auditor verified that the number of productive hours applied is in accordance with method A, B or C.
- The Auditor checked that the number of productive hours per full-time employee is correct and that it is reduced proportionately for employees not exclusively assigned to the action(s).
- If method B is applied the Auditor verified i) the manner in which the total number of hours worked was done and ii) that the contract specified the annual workable hours by inspecting all the relevant documents, national legislation, labour agreements and contracts.
- If method C is applied the Auditor reviewed the manner in which the standard number of working hours per year has been calculated by inspecting all the relevant documents, national legislation, labour agreements and contracts and verified that the number of productive hours per year used for these calculations was at least 90% of the standard number of working hours per year.

#### Please explain any discrepancies in the body of the Report.

#### Statements to be made by Beneficiary

### Procedures to be carried out and Findings to be confirmed by the Auditor

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.

XIX. The contract (applicable collective labour agreement or national working time legislation) do specify the working time enabling to calculate the annual workable hours.

#### If method C is applied

- The standard number of productive hours XX. per year is that of a full-time equivalent; for employees not assigned exclusively to the action(s) this number is reduced proportionately.
- XXI. The number of productive hours per year on which the hourly rate is based i) corresponds to the Beneficiary's usual accounting practices; ii) is at least 90% of the standard number of workable (working) hours per year.
- Standard workable (working) hours are XXII. hours during which personnel are at the Beneficiary's disposal preforming the duties described in the relevant employment contract, collective labour agreement or national labour legislation. The number of standard annual workable (working) hours that the Beneficiary claims is supported by labour contracts, national legislation and other documentary evidence.

[If certain statement(s) of section "D. Productive hours" cannot be endorsed by the Beneficiary they should be listed here below and reported as exception by the Auditor:

## General

**Factual finding:** 

- 12. The Beneficiary applied a number of productive hours consistent with method A, B or C detailed in the left-hand column.
- 13. The number of productive hours per year per full-time employee was accurate and was proportionately reduced for employees not working full-time or exclusively for the action.

#### If method B is applied

- 14. The number of 'annual workable hours'. overtime and absences was verifiable based on the documents provided by the Beneficiary and the calculation of the total number of hours worked was accurate.
- 15. The contract specified the working time enabling to calculate the annual workable hours.

### If method C is applied

- 16. The calculation of the number of productive hours per year corresponded to the usual costs accounting practice of the Beneficiary.
- 17. The calculation of the standard number of workable (working) hours per year was corroborated by the documents presented by the Beneficiary.
- 18. The number of productive hours per year used for the calculation of the hourly rate was at least 90% of the number of workable (working) hours per year.

### E. Hourly rates

The hourly rates are correct because:

XXIII. Hourly rates are correctly calculated since they result from dividing annual personnel

#### **Procedure**

- The Auditor has obtained a list of all personnel rates calculated by the Beneficiary in accordance with the methodology used.
- The Auditor has obtained a list of all the relevant employees, based on which the

#### Please explain any discrepancies in the body of the Report. Procedures to be carried out and Findings to be Statements to be made by Beneficiary confirmed by the Auditor costs by the productive hours of a given personnel rate(s) are calculated. year and group (e.g. staff category or department or cost centre depending on the methodology applied) and they are in line For 10 full-time equivalent employees selected at with the statements made in section C. and random (same sample basis as Section C: Personnel D. above. costs): ✓ The Auditor recalculated the hourly rates. The Auditor verified that the methodology applied corresponds to the usual accounting practices of the organisation and is applied consistently for all activities of the [If the statement of section 'E. Hourly rates' cannot organisation on the basis of objective criteria be endorsed by the Beneficiary they should be listed irrespective of the source of funding. here below and reported as exception by the Auditor: **Factual finding:** 19. No differences arose from the recalculation of the hourly rate for the employees included in the sample. F. Time recording **Procedure** The Auditor reviewed the brief description, all XXIV. Time recording is in place for all persons relevant manuals and/or internal guidance with no exclusive dedication to one Horizon describing the methodology used to record 2020 action. At least all hours worked in time. connection with the grant agreement(s) are registered on a daily/weekly/monthly basis [delete as appropriate] using The Auditor reviewed the time records of the random paper/computer-based system [delete as sample of 10 full-time equivalents referred to under appropriate]; Section C: Personnel costs, and verified in particular: For persons exclusively assigned to one Horizon 2020 activity the Beneficiary has that time records were available for all either signed a declaration to that effect or persons with not exclusive assignment to the has put arrangements in place to record action; their working time; that time records were available for persons XXVI. Records of time worked have been signed working exclusively for a Horizon 2020 action, by the person concerned (on paper or or, alternatively, that a declaration signed by electronically) and approved by the action the Beneficiary was available for them manager or line manager at least monthly; certifying that they were working exclusively XXVII. Measures are in place to prevent staff from: for a Horizon 2020 action; i. recording the same hours twice, that time records were signed and approved working hours during ii. recording in due time and that all minimum absence periods (e.g. holidays, sick requirements were fulfilled; leave), that the persons worked for the action in the iii. recording more than the number of periods claimed; productive hours per year used to

calculate the hourly rates, and

that no more hours were claimed than the

productive hours used to calculate the hourly

Please explain any discrepancies in the body of the Report.		
Statements to be made by Beneficiary	Procedures to be carried out and Findings to be confirmed by the Auditor	
iv. recording hours worked outside the	personnel rates;	
action period.  XXVIII. No working time was recorded outside the action period;  XXIX. No more hours were claimed than the productive hours used to calculate the hourly personnel rates.	✓ that internal controls were in place to prevent that time is recorded twice, during absences for holidays or sick leave; that more hours are claimed per person per year for Horizon 2020 actions than the number of productive hours per year used to calculate the hourly rates; that working time is recorded outside the action period;	
[Please provide a brief description of the time recording system in place together with the measures applied to ensure its reliability to the Auditor and annex it to the present certificate <sup>4</sup> ].  [If certain statement(s) of section "F. Time	✓ the Auditor cross-checked the information with human-resources records to verify consistency and to ensure that the internal controls have been effective. In addition, the Auditor has verified that no more hours were charged to Horizon 2020 actions per person per year than the number of productive hours per year used to calculate the hourly rates, and verified that no time worked outside the action period was charged to the action.	
recording" cannot be endorsed by the Beneficiary	Factual finding:	
they should be listed here below and reported as exception by the Auditor: ]	20. The brief description, manuals and/or internal guidance on time recording provided by the Beneficiary were consistent with management reports/records and other documents reviewed and were generally applied by the Beneficiary to produce the financial statements.	
	<ol> <li>For the random sample time was recorded or, in the case of employees working exclusively for the action, either a signed declaration or time records were available;</li> </ol>	
	22. For the random sample the time records were signed by the employee and the action manager/line manager, at least monthly.	
	23. Working time claimed for the action occurred in the periods claimed;	
	24. No more hours were claimed than the number productive hours used to calculate the hourly	

The description of the time recording system must state among others information on the content of the time records, its coverage (full or action time-recording, for all personnel or only for personnel involved in H2020 actions), its degree of detail (whether there is a reference to the particular tasks accomplished), its form, periodicity of the time registration and authorisation (paper or a computer-based system; on a daily, weekly or monthly basis; signed and countersigned by whom), controls applied to prevent double-charging of time or ensure consistency with HR-records such as absences and travels as well as it information flow up to its use for the preparation of the Financial Statements.

Please explain any discrepancies in the body of the Report.		
Statements to be made by Beneficiary	Procedures to be carried out and Findings to be confirmed by the Auditor	
	personnel rates;	
	25. There is proof that the Beneficiary has checked that working time has not been claimed twice, that it is consistent with absence records and the number of productive hours per year, and that no working time has been claimed outside the action period.	
	26. Working time claimed is consistent with that on record at the human-resources department.	

[official name of the [Beneficiary] [Linked Third

[official name of the Auditor]

Party]

[name and title of authorised representative]

[name and title of authorised representative]

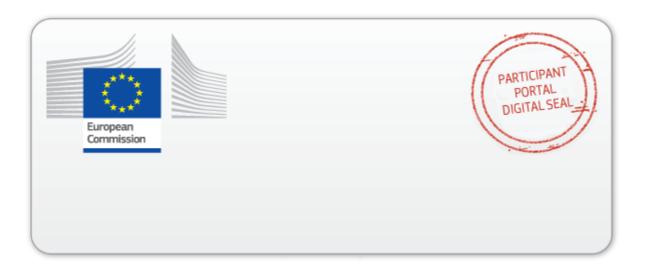
[dd Month yyyy]

[dd Month yyyy]

<Signature of the [Beneficiary] [Linked Third</pre>

<Signature of the Auditor>

Party]>



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