

Managing VII FP and H2020 Projects
Guide to Best Practice – Financial Issues
Based on BESTPRAC members' experience

BESTPRAC

WG 2 Finance

Leader Vanessa Ravagni

vanessa.ravagni@unitn.it

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1 Introduction *Vanessa Ravagni*

The administration of research projects plays an important role for the success of the project. Over the years a lot of effort has been made to improve the information and know-how around the research project, but only a small effort has been made to enhance the necessary skills and competencies of the staff members actually dealing with the daily management and administration of the Projects, thus leading to unproductive reinvention of administrative procedures, time-consuming management practices, and worst cases of mismanagement. The main objective of COST Targeted Network BESTPRAC is to establish a network for the administrative, finance and legal services in universities, research organizations and related entities supporting researchers involved in the whole lifecycle of transnational external competition with the aim of allowing networking, exchanging experiences and share and develop best practices, encouraging knowledge sharing and transfer and increasing efficiency in Eu-wide project management.

Since successful implementation of FP7 and H2020 projects is connected not only with achieving the research objectives but also with successful financial project management, Finance Working Group members (WG2) decided to collect in this Guide to project management useful information, best practices and tools with the aim of sharing technical knowledge in FP7 and H2020 financial management and helping colleagues from COST Countries in finding the way to a sound financial management. The resulting document, based on the work done during the first and second period of the project, is intended as supporting but not replacing legally binding and guidance documents of the European Commission applicable to FP7 and H2020 which are the first source for information for the correct managing and reporting on EU finances. As requested by the COST Targeted Network BESTPRAC, in the last chapter we presented our discussions related to the synergies between H2020 and European and Structural and Investments Funds, as starting point for the work planned in the third and fourth periods of the project.

As chair of the WG Finance I would like to thank all the colleagues who dedicated time and work to write, rewrite, adjust and correct the Guide. They all are doing with high-level professionalism their daily job and, at the same time, dedicating effort and enthusiasm to the BESTPRAC Network helping colleagues, sharing knowledge and....having fun in working together.

2 Legal Framework *Vanessa Ravagni*

The fact that an excellent project proposal is submitted for funding by the European Commission is just the beginning of a complex process. Deep knowledge of FP7 and H2020 financial rules and principles is a necessary prerequisite for correct budget preparation (in the proposal phase) and correct spending and cost reporting (in the project implementation phase) for ensuring that EU contributions are correctly used. FP7 and H2020 rules and principles are described by the EC in various legally binding or guidance documents; FP7 and H2020 financial rules and principles themselves are described mainly in the documents listed below in the boxes.

FP7

Rules for participation (FP7RfP) Regulation (EC) No 1906/2006 laying down the rules for the participation of undertakings, research centres and universities in actions under the Seventh Framework Programme and for the dissemination of research results (2007-2013), Section 3 'Community Financial Contribution', containing general financial information

Model Grant Agreement (FP7MGA), with more detailed information provided in the Core Text and primarily in Annex II 'Financial Provisions', and also in the additional annexes containing the Model Financial Statements (C Forms), Terms for the Certificate on Financial Statements (D Forms), and the Certificate on Methodology for calculating personnel costs/indirect costs (E Forms). The MGA differs for specific programmes SP; specific MGAs can be found for SP Cooperation and Capacities (i.e. Standard MGA) or for SP People and SP Ideas.

Guide to Financial Issues explaining the financial provisions of the MGA (especially Standard MGA) by providing detailed interpretations and examples.

The Marie Curie Actions FP7 Financial Guidelines and the **Guide for ERC Grant Holders** complementing the Guide to Financial Issues and explaining the specificities of SP People and SP Ideas.

Guidance notes for beneficiaries and auditors on certificates issued by external auditors providing more information on the implementation of audits and the preparation of certificates.

Rules on verification of the existence, legal status, operational and financial capacity specifying minimum requirements and procedures for the verification of the financial capacity of participants.

Guidance Notes on Project Reporting identifying, inter alia, EC requirements for financial reporting of incurred eligible costs and explanation of the use of resources

H2020

Rules for participation (H2020RfP) Regulation (EC) No 1290/2013 laying down the rules for participation and dissemination in "Horizon 2020 - the Framework Programme for Research and Innovation (2014-2020)" and repealing Regulation (EC) No 1906/2006, Section 3 'Forms of grants and funding rules?', containing general financial information.

H2020 General Model Grant Agreement (H2020MGA), with more detailed information provided in the Terms and Conditions, Core Text and primarily in Annex 2 'Estimated budget for the action, Annex 4 'Model for the financial statements', Annex 5 'Model for the certificate on the financial statements' and Annex 6 'Model for the certificate on the methodology'

The MGA differs for specific programs; specific MGAs can be found for MSC (Marie Skłodowska-Curie (MSC) MGAs) and ERC (ERC MGAs).

Annotated Model Grant Agreement (H2020aMGA): a user guide that aims to explain to applicants and beneficiaries the General Model Grant Agreement ('General MGA') and the different specific Model Grant Agreements ('Specific MGAs') for the Horizon 2020 Framework Programme for 2014-2020. The purpose of this document is to help users understand and interpret the GAs, by avoiding technical vocabulary, legal references.

Please note that this Guidelines is based on the information included in the AMGA : Version 2.1, October 1st, 2015

H2020 Programme Guidance on List of issues applicable to particular countries: List of issues applicable to particular countries regarding the eligibility of different costs categories

2.1 Grant Agreement in H2020

The H2020 Model Grant Agreement is composed of:

Terms and Conditions

Annex 1 Description of the action

Annex 2 Estimated budget for the action

Annex 3 Accession Forms (and if Article 14 applies and if joint and several liability has been requested by the [Commission][Agency]: 3a Declaration on joint and several liability of linked third parties)

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

Take notice of the items the auditor check (Annex 5 of the H2020MGA). The items checked by auditors may require that you keep additional documents or proof to support the eligibility of costs. For example: time sheets have to be signed and collected on a monthly basis. If a project doesn't have to be audited, it still need these supporting documents in case of a EC audit.

Analyzing the single parts of the MGA and focusing on financial issues, the following chapters and articles have to be considered in the "Terms and conditions ":

Chapter 1: General

Single article: subject of the agreement

Chapter 2: Action

- Action, duration and budget

Chapter 3: Grant

- Amount, reimbursement rates, eligible costs

Chapter 4: Rights and obligations

- To implement the action: resources, in-kind contributions, subcontracts
- Grant administration: reporting, payments, audits
- Background and results: access rights, protection of results, exploitation, dissemination
- Others: gender equality, ethics, confidentiality

Chapter 5: Division of roles

- Roles and responsibilities, internal arrangements

Chapter 6: Rejection, reduction, penalties, termination, etc.

- Rejection, reduction, recovery and penalties
- Suspension and termination of the action

Chapter 7: Final provisions

- Accession, entry into force, amendments, applicable law

According to art. 4 of the H2020MGA “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 linked to third party) and budget category.

The estimated budget breakdown indicated in Annex 2 may be adjusted by transfers of amounts among beneficiaries or among 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.

Lump sums set out in Annex 2 can never be adjusted. If the H2020GA foresees unit costs, transferring amounts declared as unit costs to other categories or other beneficiaries is possible if the actual number of units used (or produced) by the beneficiary is less than the number estimated in Annex 2. The cost per unit cannot be changed.

Budget transfers and re-allocation	Amendment needed?
From one beneficiary to another	NO
From one budget category to another	NO
Re-allocation of Annex 1 tasks	YES
Transfers between forms of funding (actual costs, unit costs, etc.)	YES if no budget was foreseen for the "form" receiving the transfer
New subcontracts	YES (strongly advised)

2.1.1. Final grant amount: calculation

The ‘final grant amount’ depends on the actual extent to which the action is implemented in accordance with the Agreement's terms and conditions. This amount is calculated by the Commission/Agency — when the payment of the balance is made (see Article 21.4 H2020 MGA) — 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

According to the „no profit rule“ the grant must not produce a profit. ‘Profit’ means the surplus of the amount obtained following Steps 1 and 2 plus the action’s total receipts, over the action’s total eligible costs. The ‘action’s total eligible costs’ are the consolidated total eligible costs approved by the Commission/Agency.

The ‘action’s total receipts’ are the consolidated total receipts generated during its duration (see Article 3 H2020 MGA).

The following **are considered receipts**:

- 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;
- financial contributions given by third parties to the beneficiary [or to a linked third party] specifically to be used for the action, and
- 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**:

- income generated by exploiting the action's results (see Article 28);
- financial contributions by third parties, if they may be used to cover costs other than the eligible costs (see Article 6);
- 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.

<p>Step 1 — Application of reimbursement rates to eligible costs</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>Total approved eligible costs (actual costs, unit costs, flat-rate and lump sum costs, if any) X reimbursement rate (100 % for research actions, 70% for innovation actions)</p> </div> <p>Step 2 — Limit to the maximum grant amount</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>The grant amount obtained in Step 1 is capped at the maximum grant amount set out in the GA</p> </div> <p style="text-align: center; color: red;">The grant amount following Steps 1 and 2 is the lower of the two amounts.</p> <p>Step 3 — Reduction due to the no-profit rule</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>Profit of the action = Grant amount obtained in Step 2 + Receipts - Total eligible costs of the action If Profit > 0 → grant amount obtained in Step 2 is reduced If Profit < or = 0 → grant amount obtained in Step 2 is not reduced</p> </div> <p>Step 4 — Reduction due to improper implementation or breach of other obligations under the GA at the payment of the balance</p> <p style="text-align: center; color: red;">Final grant amount is the lower of the following two amounts: Amount obtained following Steps 1 to 3 ⇔ Amount obtained in Step 4</p>
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2.2 Consortium Agreements with particular focus on Financial Provisions *Alexandra Attard*

Article 24 of Regulation (EU) No 1290/2013 laying down the rules for participation and dissemination in Horizon 2020, sets out the requirement that members of the consortium participating in the action, shall conclude an internal agreement establishing rights, obligations and responsibilities of project partners with respect to the implementation of the action. This agreement, referred to as the Consortium Agreement, is signed between the Project Coordinator and the members of the Consortium. Consequently, unless otherwise specified in the Call for proposals or the Work programme, the **Consortium Agreement (CA) is mandatory** and should be negotiated during the Grant Preparation phase and concluded before the signature of the Grant Agreement.

A typical Consortium Agreement will include provisions related to the general management of the action; organization of work; finances; IPR management; future exploitation; dissemination of results; confidentiality and a dispute settling arrangement for the parties involved. This chapter will only focus on the financial provisions of the Consortium Agreement.

Even though the European Commission is not a party to the Consortium Agreement, the financial provisions included in it must be in conformity with the provisions set out in the Grant Agreement, which is signed between the European Commission and the Project Coordinator. The tasks allocated to every partner and the relative Person months budgeted emanate from Annex I of the Grant Agreement, whereas the budget allocation per beneficiary and budget category, including the eligible costs and maximum grant should be replicated from Annex II of the Grant Agreement (For FP7 projects, this is included with the Description of Work). For avoidance of doubt, it is recommended that this information is also annexed in the Consortium Agreement together with the work-plan.

During the drafting of the project proposal, the project coordinator and partners must decide on the allocation of tasks and the corresponding budget and therefore, when a project is awarded, these tasks would have already been negotiated and agreed to. In light of this, **it is important that before a proposal is submitted, parties ensure that the budget allocated to them is adequate because it is not possible to amend this budget during the negotiations of the Consortium Agreement.** The Consortium Agreement must stipulate a payment schedule to the project partners, which usually follows the same schedule of funds financed by the EC to the Project coordinator. Furthermore, it is recommended that the General Assembly has the right to amend this payment schedule, in the event that one of the partners does not produce satisfactory project deliverables.

For **collaborative Marie Skłodowska-Curie actions**, it is recommended that an agreement on the sharing of Management costs associated with the organisation and implementation of the secondments between the beneficiaries is reached at proposal stage. The Consortium Agreement should set out how the Management and Indirect costs are divided between the partners. The Project Coordinator is responsible for administering the financial contribution of the EC and fulfilling the financial tasks of the action.

The Consortium agreement must include a clear payment schedule to the parties and the contribution per partner based on the reimbursement rates of eligible costs per partner as approved by the Commission. The funding principles of the action should be clearly established in the agreement. A party will only be reimbursed for the certified eligible costs up to the maximum grant

allocated in the budget. The Agreement must also stipulate how or which body is responsible for taking decisions on the re-allocation of unutilized funds between parties.

In the event of termination of one of the project partners, the eligible costs incurred by the beneficiary are deemed as those costs accepted by the EC. In this regard, the party must refund the Consortium with the difference between any payments received and the amount of contribution that is accepted by the EC. The Consortium Agreement must include how the **financial responsibility** of any rejection/reduction/recovery of costs of any one of the project partners shall be shared within the Consortium. Given that in FP7 and H2020 there is no financial collective responsibility, the general practice is that the rejected or recoverable costs are deducted/recovered from the maximum grant allocated to the partner that has incurred those costs. Should the Consortium decide to share the responsibility in a different manner, this must be specified in the Consortium Agreement.

It is pertinent to **note that in contrast to FP7 actions, under H2020, total eligible costs and receipts generated will be valued at the consolidated level of the action rather than at beneficiary level**. In this regard, because of the 'no profit rule' specified in Article 5.3.3 of the Model Grant Agreement, receipts generated by any of the project partners will be deducted from the total maximum Grant allocated to the action. The Consortium agreement must therefore determine whether or not the deducted amount will be allocated to the party that has generated the corresponding income.

Finally, the Consortium Agreement should also envisage how a reduction in the maximum Grant allocated to the action as a result of improper implementation, default or breach of other obligations will be shared between the parties and whether the default party may incur any additional costs occurring to the other parties in order to perform its/their tasks¹.

3 Eligible and ineligible costs *Dirk De Craemer*

The total budget of a H2020 project is based on the sum of the costs that are estimated to be needed by each of the parties of a H2020 project consortium in order to be able to finance, to perform the activities described in the project proposal and to achieve the goals that are set forward.

Based on the total budget requested a "maximum grant amount" will be determined by the Commission and put to the availability of the consortium on condition the consortium regularly submits intermediary financial reports dealing with the costs incurred while executing the activities described in the granted project. Non-profit legal entities are entitled to 100% of their share in the eligible project costs reported regardless of the type of action they are involved. The reimbursement rate for profit legal entities differs according to the type of action they participate in: profit legal entities are entitled to 70% of their share in the eligible project costs in

¹ See <http://www.desca-2020.eu/about-desca/what-is-desca/> for DESCA (Development of a Simplified Consortium Agreement), a comprehensive Model Consortium Agreement which offers a reliable frame of reference for project consortia. DESCA enjoys broad support within the FP community. Other CA on IPR Helpdesk <https://www.iprhelpdesk.eu/taxonomy/term/27>

case of innovation actions and to 100% in all other types of actions. However the total amount that will be paid by the Commission will never be higher than the maximum grant amount mentioned in the grant agreement.

In order to be taken into account as eligible cost, the cost has to be univocally linked to a project activity mentioned in the description of work. In case no such link is shown, the cost has to be considered as an ineligible cost and has to be covered by the indirect costs. Indirect costs do not have to be justified. To determine the amount of indirect costs for the project partners in a H2020 consortium the total amount of direct costs are taken into consideration using a flat rate of 25% based on the justified and accepted direct costs.

There are three main types/categories of project costs: direct costs, indirect costs and specific cost categories. These three cost categories will be discussed more in detail hereunder.

3.1 Direct costs

In H2020 projects the budget consists of direct costs (several types), indirect costs and so-called “specific cost categories”.

Direct costs are project specific costs that are directly linked to the performance of a specific activity in the framework of the project. For this reason any cost declared as a direct cost has to be accompanied by supporting evidence showing the direct link between the cost and a specific activity of the project. If the evidence is insufficient or lacking, the cost involved will not be eligible as a direct cost to the project and has to be considered as indirect cost for which a flat rate (based on the total amount of eligible direct costs) is applicable. The following budget categories deal with direct costs:

- **Direct personnel costs: these costs include costs for employees (or equivalent), costs for natural persons working under a direct contract, costs of personnel seconded by a third party against payment, costs for SME owners without salary, costs for beneficiaries that are natural persons without salary, and personnel costs for providing transnational access to research infrastructure²;**
- **Direct costs of subcontracting;**
- **Direct costs of providing financial support to third parties;**
- **Other direct costs: travel costs and related subsistence allowances, equipment costs, costs of other goods and services, and capitalised and operating costs of large research infrastructures;**

Direct costs that have not been caused in full by an activity of a H2020 project may be partly reported to the project budget. However, such costs are only eligible on condition that the specific share of the direct cost can be attributed to the project without using an allocation key, a cost driver, a proxy or any other manner to split up the cost over several projects.

For some specific types of H2020 projects the Commission allows project partners to declare unit costs or lump sums for so-called specific cost categories. These cost categories include:

² For more indication on costs' eligibility please refer to " H2020 Programme Guidance on List of issues applicable to particular countries"

- **costs for energy efficiency measures in buildings;**
- **access costs for providing transnational access to research infrastructure;**
- **costs for clinical studies.**

3.2 Direct personnel costs *Geraldine Leonard and Sonja Alles*

As explained under art. 6.A H2020 MGA, **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).

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.

The **costs of personnel seconded by a third party against payment** are eligible personnel costs if the conditions in Article 11.1 are met.

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 2a multiplied by the number of actual hours worked on the action.

Personnel costs must be calculated by the beneficiaries as follows:

hourly rate multiplied by **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 in art. 6.A1 H2020 General MGA

The number of actual hours declared for a person must be identifiable and verifiable 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.

number of annual productive hours for the year
minus
total number of hours declared by the beneficiary, for that person for that year, for other EU or Euratom grants
=
maximum number of hours that can be declared for the grant

3.2.1 Different models for the calculation of productive hours

For the declaration of personnel costs during EC reporting of H2020 projects the annual productive hours have to be calculated. The EC offers three options for this calculation. However, the calculation should be performed per group of personnel within one organisation and during the complete life time of a project. Beneficiaries within the consortium can use different options for the calculation of annual productive hours. But it is beneficial if each beneficiary chooses one option for all European projects of the H2020 programme. The three options for the calculation of annual productive hours are:

1. Fixed productive hours – 1720h
2. Standard annual productive hours of the organisation
3. Individual annual productive hours

The advantages and disadvantages mentioned by the EC can be found in the H2020 MGA. However, beneficiaries may have different experience. Members of the BESTPRAC COST action created a survey on the calculation of personnel costs in European framework projects. A part of this survey was asking the participants for the option they have used in FP7 and will use in H2020 and for the advantages and disadvantages concerning their own experience. 41 participants mainly from universities and research organisations from 25 different countries have answered this survey.

One observes that the number of organisations choosing option 1 (fixed productive hours) increased significantly from FP7 to H2020. On the contrary, the number of organisations choosing option 2 (standard annual productive hours) decreased (see figure 3.2.2 A). The number of organisations taking option 3 (individual annual productive hours) stayed more or less the same. The main reasons for the organisations selecting option 1 are that the method is straight forward, not error-prone, easier to manage for example for professors and researchers working overtime, reducing workload, time-saving, easy acceptance during audits, etc. A clear disadvantage of this option is the loss of EC Contribution, if personnel works less than 1720 hours.

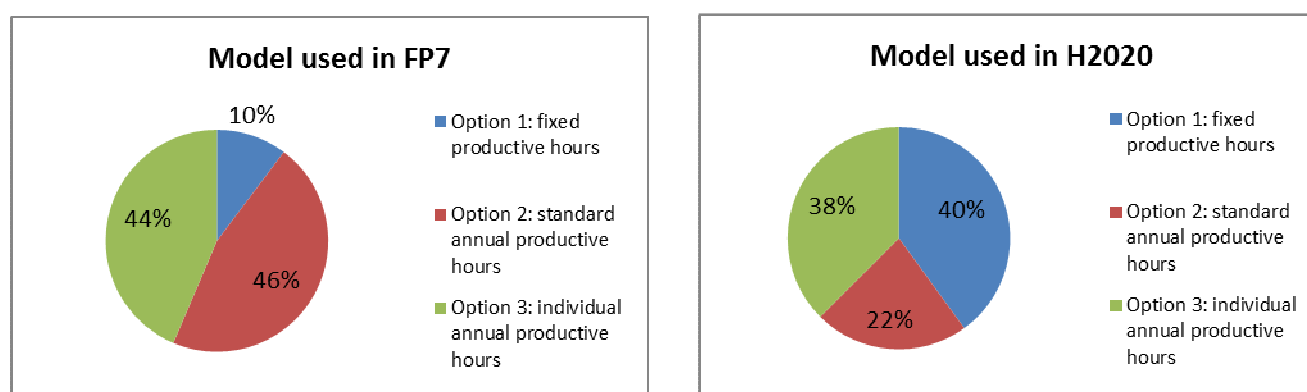


Figure 3.2.2 A: Model for the calculation of productive hours used in FP7 (left) and H2020 (right)

The decrease in the use of option 2 might be caused by the following mentioned disadvantages: Auditors critically scrutinize the calculation of standard annual productive hours and in some cases did re-calculations which resulted in a different number of productive hours, a clear proof of calculation is needed, no reimbursement of researchers working more than the average, e.g. not

taking vacation or being sick. Moreover, option 2 is not suitable for organizations only having few personnel participating in EU projects, since the generation of a clear proof is too labor-intensive. On the other hand, one calculation method can be applied for the whole organizations, so it is easy to communicate, however few organizations report that researchers occasionally apply their own individual calculations. Another reason for the decrease could be that the option can only be applied if the number of standard annual productive hours is at least 90% of the standard annual workable hours.

According to the GA “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 labor agreement or national working time legislation.

Example:

Standard annual workable hours for beneficiary x: 365 days – 104 days (Saturdays and Sundays) – 22 days (annual leave) – 8 days (public holidays) – 3 days (collective agreements) = 228*8 hours per day = 1824 hours

Standard annual productive hours for beneficiary x: 228 days – 3 days (average annual sick leave) – 4 days (days of general training) – 9 days (other unproductive activities) = 212*8 hours = 1696 hours

This number of standard annual productive hours must then be compared with 90% of standard annual workable hours. 90% of 1824 = 1642

1696 hours (usual accounting practices) > 1642 hours (90% annual workable hours)

Beneficiary x may apply its number of standard annual productive hours.

If its number of standard annual hours is lower than 1642 hours the beneficiary must apply 1642 (90% of the annual workable hours).

This new issue might have caused various organisations to change from option 2 to option 1 or even option 3.

According to the participants of the survey option 3 has a wide range of disadvantages, such as time consuming calculation, error-prone, high range of hourly rate revoke questions and re-calculations by the auditors. Nevertheless, this method is used by many organisations as they are more flexible and are able to declare the total remuneration.

Several organisations mentioned that the application of option 1 (fixed productive hours) would be very beneficial for them; however, the number of 1720 seems too high and thus the loss unacceptable. Especially for organisations having a high number of personnel working in EU projects this could cause a significant loss.

Next to the problems of re-calculation of productive hours participants report about difficulties with the approval of timesheets by auditors. For example timesheets have been missing, were not identical with the reported person months or not signed (for further information see below). To sum it up, we identified and listed some advantages and disadvantages for each option. There seems to be no optimal option. Each beneficiary/organisation has to choose the option that seems the most suitable to its organisation and internal rules.

3.2.2 Timesheets

Beneficiaries must keep records on their personnel costs in order to declare these costs in Form C (financial template). This is mostly done by filling in timesheets. Moreover, in case of an audit the assessor will check, if the timesheets or other record keeping is completed correctly and correspond to the person months. (Linked) third parties have to comply with the same obligations.

Each timesheet must meet the following basic requirements as given in the H2020 AMGA:

- a. Title and number of the action, as specified in the H2020MGA
- b. The beneficiary's full legal name, as specified in the H2020MGA
- c. The full name, date and signature of the person working for the action
- d. The number of hours per day declared for each action
- e. The supervisor's full name and signature
- f. A reference to the action tasks or WP described in Annex I
- g. A description of activities carried out (**new in H2020**)

In cases where personnel is involved in several projects, each project has to be listed separately in the same timesheet (EU projects, national projects, internally funded research, administration, etc.). A full time-recording per person and project is recommendable; hours cannot be accumulated. Only productive hours can be entered in the time sheets (illness, holidays, weekends, public holidays etc. have to be excluded from the project, but must be entered in an extra line in the section absences). The EC does not give any recommendation on the type of timesheets to be used. Working hours must be recorded throughout the duration of the project by timesheets or by the usual practice of the organisation (paper or computer-based). Time records must be dated and signed at least monthly by the person working for the action and his/her supervisor. Time records have to be stored within the organisation. Most of the organisations having participated in the BESTPRAC survey are providing paper-based timesheets for European projects (figure 3.2.3 A). Both systems (electronic and paper-based) have several advantages and disadvantages (see table 3.2.3 B).

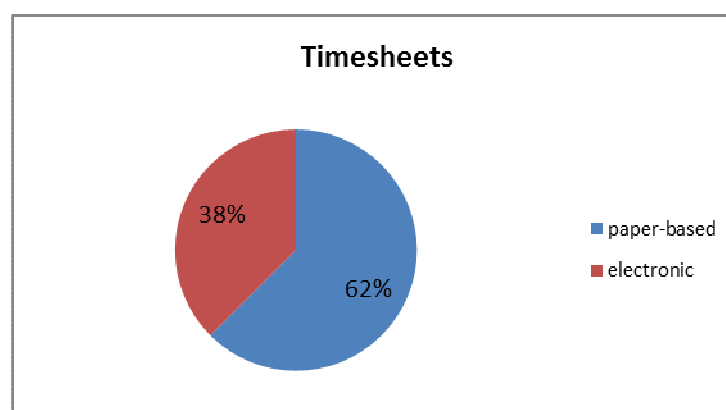


Figure 3.2.3 A: Use of different timesheets

Table 3.2.3 B: Advantages and disadvantages of paper-based and electronic timesheets

Paper-based		Electronic	
Advantages	Disadvantages	Advantages	Disadvantages
cheep	Time-consuming	Easy to use	More costly
Can easily adapted to different requirements	Disliked by researchers	Integrated in daily work	Does not fit to EC requirements or to be adapted
Changes possible	Can get lost	Don't get lost	No changes possible
	Difficult administration	Complete time recording	Check in advance if auditors accept the method
	No summary/overview available	Automatic summary/overview	
	Separate calculation of PM	Same method for all projects	
	Missing information: holiday, sick leave, link to WPs	Holiday and sick leave filled in automatically; Easy link to WPs	
	Not regularly signed	Automated signing process possible	Acceptance procedure is too often forgotten

Some of the organisations are not using a complete electronic system. They are using a hybrid form where the electronically filled in timesheet has to be printed and blue-ink signed. No matter whether the researchers use paper-based or electronic timesheets, the research administrators regularly complain about missing or weakly filled-in timesheets. This also seems to be the most common issue during audits. If the timesheets are not or only partly accepted by the auditor, the eligible personnel costs are lower than the actual costs which causes a loss for the organisation. Good administration is required in order to keep timesheets up to date and as a result receive the full reimbursement of personnel costs. Another issue is the transfer of hours to the calculation tables (calculation of the hourly rate and personnel costs). Few organisations report about electronic timesheets systems which automatically proceed with the calculation of personnel costs for the different projects. Such systems seem to be less error-prone and time-saving. They especially help to prevent double-funding.

The majority of the participants of the survey requests monthly timesheet for each person involved in European project during the whole project even if this person only works occasionally for the project. However, in some organisation time recording is not an obligation for researchers, so they filled in timesheet only when they have been working on a task in a project, which makes the calculation of individual productive hours complicated.

We can recommend that each person involved in a project fills in monthly timesheet even if they are working only occasionally on the project.

3.2.3 Declaration on the exclusive work for the action

In H2020 the EC offers the option to sign a declaration on the exclusive work for the action (one per reporting period and person) to confirm that the person is only working for one action (full and part time working possible). The person can either work for the action during the whole reporting period or during an uninterrupted time-period, covering at least a full natural month. Intermittent (sporadic/random) periods of exclusive dedication can NOT be subject of a declaration (see aMGA article 18). The declaration must be dated and countersigned for acceptance by the person concerned.

Since this approach is new, organisations are still dealing with several questions. This can also be seen in figure 3.1.2 C, as 38% do not recommend using this declaration instead of timesheets. One of the main concerns is that additional documentation will be required for audition. Moreover, researchers loose the flexibility working on other projects or teaching at their organisation.

One further issue to deal with is the calculation of the hourly rate, as requested by the EC. “Exclusive work or not matters only for the record-keeping. It has NO impact on the calculation of the costs to be declared (— in both cases they must be calculated through an hourly rate, per full financial year etc.” Organisations deal differently with this issue. Some organisations are refusing to sign the declaration and rather fill in timesheets in order to calculate the hourly rate for all personnel individually. Other organisations use fixed or standard productive hours for the calculation of the hourly rate, even if they are using individual productive hours for personnel not working 100% on one action.

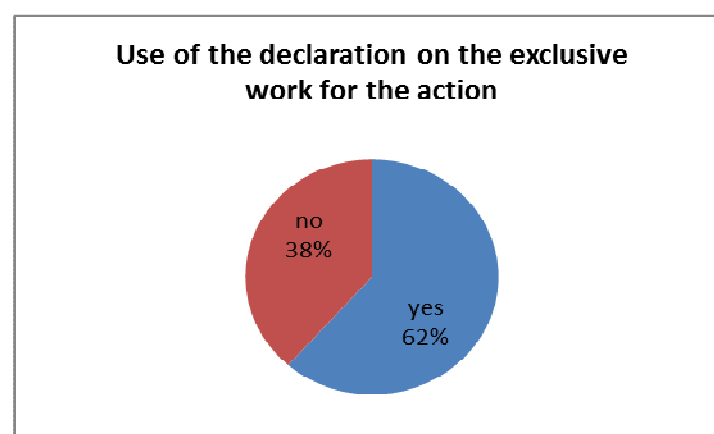


Figure 3.2.4 A: Percentage of organisations that intent to use the declaration on the exclusive work for the action

However, the majority of the participants recommend signing the declaration for personnel working 100% on one H2020 action instead of filling in timesheets (figure 3.2.4 A). Participants who are not recommending to sign the declaration state the following reasons: The effort must be calculated to different WPs and tasks, national rules or internal calculation procedures require timesheets, unsure about the consequences during audits, researchers do teaching next to the H2020 action.

The following questions have been answered as well by the participants of the survey, however, the answers were quite inhomogeneous (see figures 3.2.4. B)

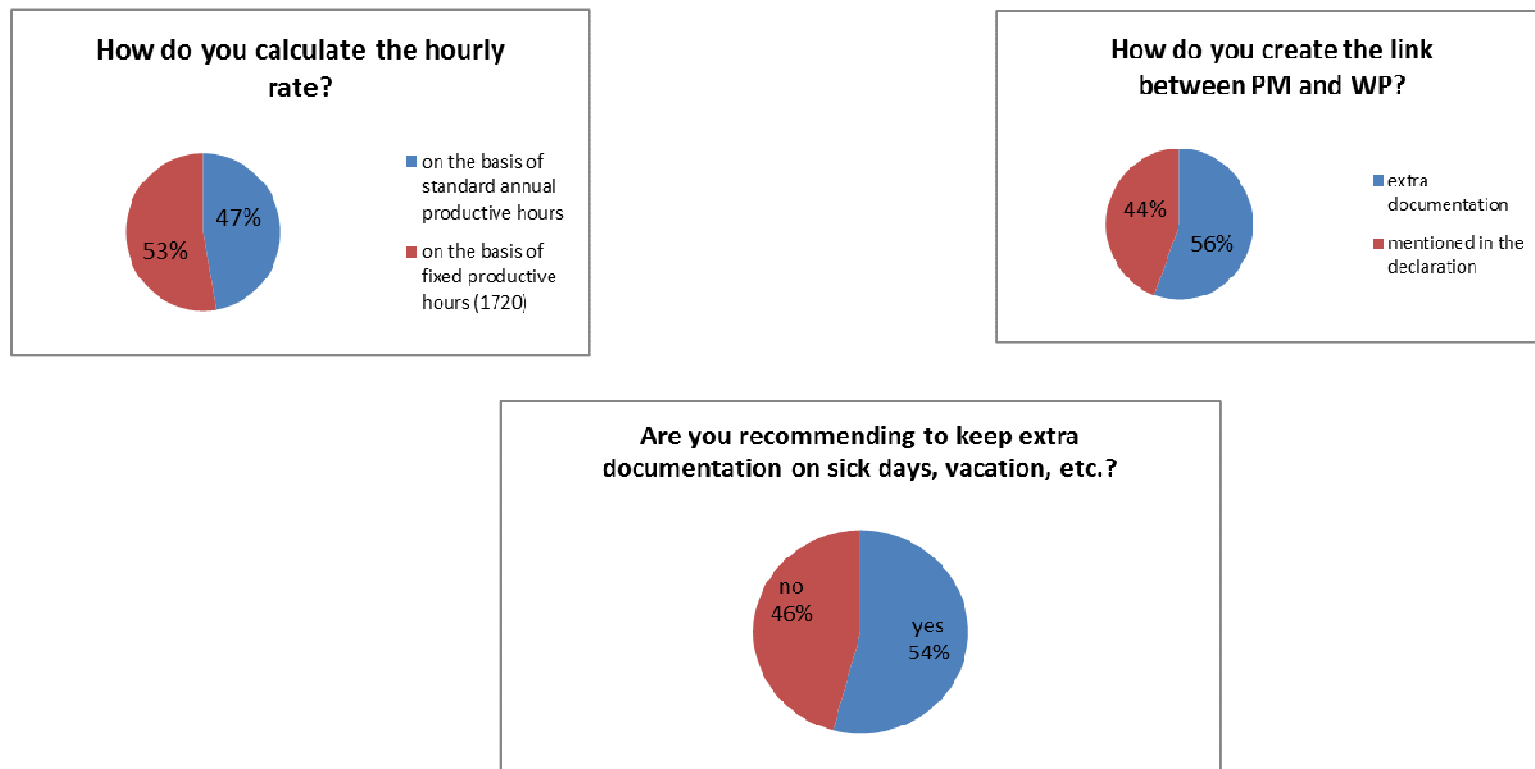


Figure 3.2.4 B: Use of the declaration - calculation of the hourly rate (up left), link between the PM and WP (up right) and extra documentation (below)

The National Contact Point gives the following information: No extra documentation is needed (simplification), the hourly rate shall be calculated on the base of fixed productive hours, the link to WPs shall be established on the declaration (x% of FTE), documentation on sick days and vacation is generally collected in the human resource department.

The calculation of the hourly rate on the basis of standard productive hours should in general also be correct, as long as the calculation procedure is verified.

To conclude, each organisation has to decide between three options for the calculation of annual productive hours according to their internal regulations. The organisation also has to decide how to record working time of personnel involved in a project. We can't advise that one choice is better than another. It depends on each organisation individually, its internal rules and also on the national rules of the corresponding country. We can only give the advice to check the advantages and disadvantages on each method for the organisation and then make the most suitable choice.

3.3 Third Parties *Chelo Morán*

A third party is a legal entity that has not signed the Grant Agreement and provides external support to any of the beneficiaries. According art.8 H2020 MGA, the beneficiaries must normally have the technical and financial resources needed to carry out the action themselves. If it is necessary to implement the action, the beneficiaries may (Figure 3.3.1):

- purchase goods, works and services (see Art. 10);
- call upon subcontractors to implement action tasks described in Annex 1 (see Art. 13 MGA);
- use in-kind contributions provided by third parties against payment (see Art. 11 MGA);
- use in-kind contributions provided by third parties free of charge (see Article 12 MGA);
- call upon linked third parties to implement action tasks described in Annex 1 (see Article 14 MGA).

In these cases, the beneficiaries **retain sole responsibility towards the** Commission/Agency and the other beneficiaries for implementing the action. In general, **the use of third parties must be described in the contract's Annex I**. It is always the principal partner that is responsible for the contract, including where third parties are included. In accordance to this, we can find the following kind of third parties involved in a project funded by H2020:

Third parties which implement specific action tasks

- Contractors providing goods or services (see Article 10 MGA)**
- Subcontractors (see Article 13 MGA)**
- Linked third parties (see Article 14 MGA)**

Third parties which do not implement tasks in the project and only provide resources. These resources are in-kind contributions and could be:

- Against payment (see Article 11 MGA)**
- Free of charge (see Article 12 MGA)**

Third parties summarised

- Example: Need to perform tests with one piece of scientific equipment
- Potential solutions:
 1. Buy the equipment
 - Article 10 – Other goods and services (Depreciation of equipment),
 - PLUS:
 - Personnel costs for your staff
 2. Use a third party's equipment do the job yourself
 - In-kind contribution by third party not used on the premises of the beneficiary,
 - Article 11 • Against payment, OR:
 - Article 12 • Free of charge If provided exclusively for the Action: Receipts Article 5.3.3
 - PLUS:
 - Personnel costs for your staff
 3. Pay an independent third party (who has the equipment) to do the test for you
 - Article 13 1. Action task? => Subcontracting
 - Article 10 2. Not an action task? => Other goods and services
 4. Pay a linked third party (who has the equipment) to do the test for you
 - Article 14 – The linked third party declares its own costs (in its own Form C) as:
 - Other goods and services (Depreciation of equipment),
 - PLUS:
 - Personnel costs for linked third party's staff

Figure 3.3.A, Slide by Per Inge Andresen, Training School “Finance for beginners”, 18-20.04.2016

3.3.1 Subcontracts

If necessary to implement the action, the beneficiaries may award subcontracts covering the **implementation of certain action tasks described in Annex I**. Subcontracting may cover only a limited part of the action. The beneficiaries must award the subcontracts ensuring the best value for money or, if appropriate, the lowest price. In doing so, they must avoid any conflict of interests (see Article 35).

The **tasks to be implemented and the estimated cost for each subcontract must be set out in Annex 1 and the total estimated costs of subcontracting per beneficiary must be set out in Annex 2**. The [Commission/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 technical report and
- they do not entail changes to the Agreement which would call into question the decision awarding the grant or breach the principle of equal treatment of applicants.

How to insert subcontracts in drafting H2020 budget for a project proposal

Add to the cost category “Direct Cost for purchase of goods or services”, some subcontracts that in FP 7 projects are „identified as „subcontracts minor“ (like contract for an audit certificate on the financial statements; contract for the translation of documents);

Add to the cost category “Subcontracts” only subcontracts covering the implementation of certain action tasks described in Annex 1.

In both cases, the beneficiaries must make such purchases of services or subcontracts ensuring the **best value for money** or, if appropriate, the lowest price. In doing so, they must **avoid any conflict of interests** and must moreover comply with the applicable national law on public procurement (see art.13 MGA)

3.3.2 Linked third parties

We can consider as “third parties” only affiliated entities and entities with a legal link to a beneficiary. “Legal link” is an established relationship which is:

- **Not specifically created for the action (duration must go beyond the action duration)**
- **Legal relationship: legal structure (eg. Members of an association) of agreement (eg. Collaboration agreement for research)**

Characteristics of implementation by linked third parties:

- **Tasks implemented by them must be included in Annex I.**
- **Eligibility conditions for costs: the same as for beneficiaries.**
- **Form C: they declare their own costs in their own form C**
- **Beneficiary is always the only responsible for the work carried out by the linked third party towards the Commission.**
- **Intellectual Property Rights are always for the beneficiary.**

3.3.3 In-kind contributions provided by third parties against payment

If necessary to implement the action, the beneficiaries may use in-kind contributions provided by third parties against payment (Art. 11 H2020 MGA). 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 third parties and their contributions must be set out in Annex 1. The [Commission][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 technical 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.

3.3.4 In-kind contributions provided by third parties free of charge

If necessary to implement the action, the beneficiaries may use **in-kind contributions** provided by third parties **free of charge** (*Article 12 MGA*).

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 *[Commission][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 technical 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.

Costs may be declared as eligible costs although there is no cost incurred by the beneficiary. **The in-kind contributions have to be declared as “receipts of the project”.**

3.3.5 Third parties which only provide resources: “Seconded Staff”.

In order to see how to deal with in-kind contributions provided by third parties in Form C, we will analyze a **real example of seconded staff**³. In the following paragraphs we will show how to consider these costs in “third parties providing in-kind contributions” and “linked third parties”.

Third parties providing in-kind contributions:

If staff is in the premises of the beneficiary: direct costs will be included by the beneficiary under “Personnel costs” category + 25% of “overheads” as indirect costs.

If staff is in the premises of the third party: direct personnel costs + 25% if “overheads” will be included by the beneficiary under “Personnel costs”.

³ As explained in the H2020 AMGA “**Seconded**’ means the temporary transfer of personnel from a third party to the beneficiary. The seconded person is still paid and employed by the third party, but works for the beneficiary. S/he is at the disposal of the beneficiary. **Example:** A researcher in a public research centre is seconded to work in a university that is a beneficiary in a GA. **Best practice:** Secondments should be formalized via a secondment agreement. The secondment agreement has to detail the conditions of secondment (tasks, payment (or not) from one entity to the other, duration of the secondment, location, etc.). ”

We can see an example in the following table:

	Staff on the premises of the beneficiary	Staff on the premises of the third party
Personnel costs	40.000 EUR	50.000 EUR
Overheads	10.000 EUR	0 EUR
TOTAL	50.000 EUR	50.000 EUR

For “linked third parties” (How to include them under the Beneficiary’s costs?)

At the proposal stage: information related to third parties must be included in the proposal at 4.2 point:

4.2. Third parties involved in the project (including use of third party resources)

Please complete, for each participant, the following table (or simply state “No third parties involved”, if applicable):

Does the participant plan to subcontract certain tasks (please note that core tasks of the action should not be sub-contracted)	N
<i>If yes, please describe and justify the tasks to be subcontracted</i>	
N/A	
Does the participant envisage that part of its work is performed by linked third parties	Y

An estimated budget has to be included in “other costs” of the beneficiary at the proposal stage:

3 - Budget for the proposal

No	Participant short name	Country	(A) Direct personnel costs/€	(B) Other direct costs/€	(C) Direct costs of sub-contracting/€	(D) Direct costs of providing financial support to third parties/€	(E) Costs of in-kind contributions not used on the beneficiary's premises/€	(F) Indirect Costs / € (=0.25(A+B-E))	(G) Special unit costs covering direct & indirect costs / €	(H) Total estimated eligible costs / € (=A+B+C+D+F+G)	(I) Reimbursement rate (%)	(J) Max. grant / € (=H*I)	(K) Requested grant / €
1	Cut	CY	270 000	90 000	0	0	0	90000,00	0	450000,00	100	450000,00	450000,00
2	Forth	EL	64 000	34 000	0	0	0	24500,00	0	122500,00	100	122500,00	122500,00
3	Imdea Netwo	ES	66 000	30 000	0	0	0	24000,00	0	120000,00	100	120000,00	120000,00
4	Miralab	CH	108 000	30 000	0	0	0	34500,00	0	172500,00	100	172500,00	172500,00
5	Udus	DE	78 000	30 000	0	0	0	27000,00	0	135000,00	100	135000,00	135000,00
Total			586 000	214 000	0	0	0	200000,00	0	1000000,00		1000000,00	1000000,00

What happened once the proposal was approved and before the signature of the GA?

For “linked third parties”:

In the Participant portal the Linked third party appears under the Beneficiary with its own status “TP”:

Number	Role	Short Name	Legal Name	Country	PIC	PIC Status
1	CO	CUT	CYPRUS UNIVERSITY OF TECHNOLOGY	CY	999597223	VALIDATED
2	BEN	FORTH-ICS	FOUNDATION FOR RESEARCH AND TECHNOLC	EL	999995893	VALIDATED
3	BEN	IMDEA	FUNDACION IMDEA NETWORKS	ES	999651058	VALIDATED
	TP	UC3M	UNIVERSIDAD CARLOS III DE MADRID	ES	999899572	VALIDATED
4	BEN	UNIGE	UNIVERSITE DE GENEVE	CH	999974650	VALIDATED
5	BEN	UDUS	HEINRICH-HEINE-UNIVERSITAET DUESSELDORF	DE	999856116	VALIDATED

And with its own financial data:

Beneficiary 3: IMDEA (Active)
Legal Name: FUNDACION IMDEA NETWORKS
PIC: 999651058 Status: VALIDATED
Legal Address: AVENIDA DEL MAR MEDITERRANEO 22, 28918, LEGANES (MADRID) Spain

Third Party 1: UC3M (Active)
Legal Name: UNIVERSIDAD CARLOS III DE MADRID
PIC: 999899572 Status: VALIDATED
Legal Address: CALLE MADRID 126, 28903, GETAFE (MADRID) Spain

Financial Data

Use of 'Costs of in-kind contributions not used on premises?' (m) Yes No 0.00 €

Use of 'costs of large research infrastructure' in the grant? Yes No

No contribution requested? Yes No

Individual costs table:

Cost Category	Unit Cost	Number of Units	Subtotal	Total
a) Direct personnel costs declared as actual costs				22,000.00 €
b) Direct personnel costs declared as unit costs (average costs)				0.00 €
d) Direct costs of subcontracting				0.00 €
e) Direct costs of providing financial support to third parties				0.00 €
f) Other direct costs				10,000.00 €
g) Indirect costs (= 0.25 * (a + b + f + m))				8,000.00 €
j) Total costs (= a + b + d + e + f + g)				40,000.00 €
k) Maximum EU contribution (100%)				40,000.00 €
l) Maximum grant amount				40,000.00 €

Once the **Grant Agreement has been signed**, the **linked third party** does not have project role in the Participant Portal BUT it can see its specific financial information. What happens with costs associated to “**third parties providing in-kind contribution against payment**”? How to include them under the Beneficiary’s costs?

At the proposal stage: information related to third parties must be included in technical annex and in the beneficiary’s budget:

No	Participant	Country	(A) Direct personnel costs/€	(B) Other direct costs/€	(C) Direct costs of sub-contracting/€	(D) Direct costs of providing financial support to third parties/€	(E) Costs of in-kind contributions not used on the beneficiary's premises/€	(F) Indirect Costs / € =0.25(A+B-E)	(G) Special unit costs covering direct & indirect costs / €	(H) Total estimated eligible costs / € (=A+B+C+D+F+G)	(I) Reimbursement rate (%)	(J) Max.EU Contribution / € (=H*I)	(K) Requested EU Contribution/ €
1	Uc3m	ES	0	0	0	0	0	0,00	0	0,00	100	0,00	0,00
Total			0	0	0	0	0	0,00	0	0,00		0,00	0,00

These costs (E) are already included in the 'direct personnel costs' (A) and 'other direct costs' (B). They need to be declared specifically in this column so that they can be subtracted from the sum of direct personnel costs (A) and direct other costs (B) before the indirect costs (F) are calculated.

*Please enter the costs for in-kind contributions that are made by third parties against payment or free of charge **and that are not used on the beneficiary's premises**. Use one row for each beneficiary. Include costs of linked third parties, if any, in the beneficiary's budget. (FP information).*

Costs always must be included under the beneficiary's budget but only should be declared in column E, when they are not used on the beneficiary's premises.

3.3.6 Third parties and receipts

In accordance with Article 10 of MGA and in relation to “third parties” the following are considered receipts:

- (b) Financial contributions given by third parties to the partner [or to a linked third party] specifically to be used for the specific action, and
- (c) In-kind contributions provided by third parties free of charge specifically to be used for the specific action, if they have been declared as eligible costs.

Considering this, if a third party provides in-kind contribution free of charge (Article 12 of MGA) the in-kind contribution has to be declared as “**receipts of the project**”.

4 Other direct costs *Dirk De Craemer*

The expression “Other direct costs” is used in the official documents distributed by the Commission in the framework of the H2020 programme to comprise a set of specific project costs including: travel costs and related subsistence allowances, equipment costs, costs of other goods and services, and capitalized and operating costs of large research infrastructures.

It is generally known that this type of costs are only eligible in case a direct link between the cost and a specific project activity can be shown. For this reason any cost that is declared as a direct cost to the project has to be accompanied by sound evidence showing the indisputable direct link between the cost and a specific activity of the project. If the evidence is questionable, insufficient or lacking, the cost involved will not be acceptable as a direct cost to the project and will have to be considered as an indirect cost to the project involved.

In answer to a discussion held at the first meeting of the BESTPRAC Working Group “Financial Issues” on eligibility issues related to such costs, a specific survey was set up and spread among a number of BESTPRAC partners. The goal of the survey was to search for best practices in justifying research related direct costs that do not always have a direct link to one or more specific research activities mentioned in EU-funded research projects. The results of the survey have been discussed at two consecutive meetings of the Working Group and are described in this subchapter. Several types of costs belonging to this set of other direct costs were included in the survey.

- A) Costs related to the purchase or renting of equipment
- B) Costs of products and goods of general interest
- C) Costs related to dissemination activities
- D) Costs related to subscription fees for scientific journals and book series, and to the purchase of scientific books
- E) Costs related to the organization of project meetings
- F) Costs related to the presence at other meetings

A first set of costs deals with equipment related costs:

1) *Allocation of the purchase of equipment (including computers and other infrastructure)*
The purchase cost might be fully eligible as direct cost on condition that:

- **The apparatus is exclusively used for the project by project staff members;**
- **The activities for which the use of the apparatus is imperative are clearly described in the project;**
- **The rules of depreciation of the host institution are taken into consideration;**
- **A statement of the principal investigator confirming the above conditions could be a useful document to add to the financial report (optionally).**

In case the apparatus is not used exclusively for the project, the purchase cost might still be partly eligible as direct cost. In that case a reliable procedure should be in place at the host institution in order to show the usage time of the equipment spent for project activities in proportion to the total time spent for all activities done using the apparatus.

2) *Allocation of the renting cost of an apparatus*

The renting cost might be fully eligible as direct cost on condition that:

- **The apparatus is exclusively used for the project by project staff members;**
- **The activities for which the use of the apparatus is imperative are clearly described in the project;**
- **A statement of the principal investigator confirming the above conditions could be a useful document to add to the financial report (optionally)**

In case the apparatus is not used exclusively for the project, the renting cost might still be partly eligible as direct cost on condition. In that case a reliable procedure should be in place at the host institution in order to show the usage time spent for project activities in proportion to the total time spent for all activities done using the apparatus.

3) *Allocation of maintenance, repair and insurance cost of an apparatus*

These types of cost might be fully (or partly) eligible as direct cost on condition that:

- **The apparatus is exclusively (or partly) used for the project;**
- **The activities for which the use of the apparatus is imperative are clearly described in the project;**
- **The rules of depreciation of the host institution are taken into consideration;**
- **A statement of the principal investigator confirming the above conditions could be a useful document to add to the financial report (optionally).**

The maintenance, repair and insurance costs are preferably added to the purchase cost after which the depreciation rate is recalculated for the remaining duration of the project.

A **second type of other direct cost** deals with **costs of products and goods of general interest**.

1) *Costs of (laboratory) products used for activities in the framework of several projects of a research group (gasses, gloves, glassware, ...).*

In order to be eligible it is of utmost importance to prove indisputably the necessity as well as the use of these products for the research activities described in the EU-funded project. It is advised to set up a procedure to log the consumption of each product per relevant unit of activity in the framework of the project. This unit of activity could be expressed as an individual experiment necessary for the project, as a unit time of work of a project staff member, as a unit time of usage of a laboratory facility or specific apparatus, or as another basic unit used by the host institution or research group....

In addition it is advised to use an audited cost calculation method that is developed based on relevant expenses and costs made in previous financial years.

An alternative way is to fully justify a number of invoices to the project budget on condition that the invoices are accompanied by a statement signed by the principal investigator and/or by a statement of the EU project officer that these costs were fully made for the project and as a consequence, have to be eligible to the project. However, nevertheless these statements it remains the responsibility of the project partner to show the correctness of the costs reported on the project budget.

2) *Costs of logistics of general interest (sheets of paper, cartridges, copies, use of phone, printing, use of internet, desk supply,...)*

In general these type of costs have to be considered as indirect costs as they serve activities of general interest to the research group rather than activities that are specific to a specific project. However, if one can document that certain of these logistics are necessary to perform research activities described in the project, then the costs of these specific logistics might be eligible on condition that these costs are unmistakably traceable in the accounts of the host institution. Two examples of costs that might be eligible:

- **phone calls made in the framework of a survey on condition that they can be separated from the other phone calls made by the project staff member(s) and on condition that phone calls are mentioned as the way make the inquiries;**
- **costs of photocopies necessary to produce a paper-based survey that is distributed to a number of entrants.**

A **third type of costs** are costs related to dissemination activities (costs for the making of posters, flyers, manuscripts, reports, ...) These costs are overhead costs unless it can be documented that the dissemination activities for which these items are used are described in the project and that their costs can be separated from other similar costs made by the staff members working on the project.

As a **fourth type of costs**, subscription fees for scientific journals and book series on the one hand and for the purchase of scientific books on the other hand are considered. In general this type of costs have to be considered to be overhead costs as they benefit not only the staff members working on the project but at least the whole research group in general. An exception to this rule is the publication fee which is asked by publishers to the authors of submitted a manuscripts to editorial boards of scientific journals or a book publications. In case it can be documented that the results were obtained though the activities in the framework of the EU-funded project and that dissemination of results through publications was foreseen in the project tasks or deliverables, then publication fees are justifiable as eligible direct costs.⁴

A **fifth type of costs** deals with the costs related to the organization of a, d the attendance at meetings in the framework of the project. These costs are eligible direct costs and need to be justified with reference to an activity included in the project (description of work, ...). Meeting reports, minutes of the meeting, signed attendee lists and other written proofs need to be present in order to show that the meeting really took place in the framework of a project activity. As this type of meetings constitutes of meetings organized in the framework of the project, participation of project staff should also be traceable in the time sheets of at least one of staff members working on the project. As an alternative such costs might also be covered by the management costs of the project,

⁴ As explained in art. 29.4 H2020 MGA, **Information on EU funding — Obligation and right to use the EU emblem** *Unless the [Commission][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 and (b) include the following text: 'This project has received funding from the [European Union's Horizon 2020 research and innovation programme][Euratom research and training programme 2014-2018] under grant agreement No [Number]'. When displayed together with another logo, the EU emblem must have appropriate prominence. For the purposes of their obligations under this Article, the beneficiaries may use the EU emblem without first obtaining approval from the [Commission][Agency].*

if present. The same holds true for catering costs (light lunches and coffee breaks), and for the costs related to guest speakers. Guest speakers have to be mentioned in the project. It might help to justify the eligibility of costs related to the invitation of a guest speaker using a written statement of the principal investigator concerning the relevance of the presence and input of such a guest speaker during the meeting.

A **sixth type of costs deals** with the costs related to the attendance of other types of meetings: internships, training sessions, scientific congresses,In principle the costs (for accommodation, travel, registration, ...) related to such activities are non-eligible and have to be considered as indirect costs. However, if this activity is described in the project, the costs related to this activity are justifiable as direct costs. A written statement of the principal investigator stating the necessity of attending and participating at such a meeting and/or a prior written authorization from the EU project officer might be necessary to convince auditors of the eligibility nature of such costs.

In summary it is clear that each direct cost that is reported on an EU-funded project has to correspond to an activity described in the project (description of work, deliverable, project task, milestone, ...). Otherwise this cost is not eligible. For a number of cost types cost calculation methods have to be developed and put into practice based on real-time recording of usage of products, equipment, time or other parameters in order to determine and prove the proportion of the cost that has been made in the framework of the EU-funded project. Preferably such cost calculation methods have been audited in order to guarantee that the method used is a correct method to be used for the purpose of calculating and defining the exact amount of eligible costs in the framework of EU-funded project activities.

4.1 VAT (value added tax) *Staska Mrak Jamnik*

In FP7 Programme VAT (value added tax), whether recoverable or not, is not eligible cost. The beneficiaries have to cover non-recoverable VAT costs from other sources. In Horizon 2020 VAT is eligible cost but only in the amount that is not recoverable under the applicable national VAT legislation and is paid by a beneficiary together with the related eligible costs of goods or services during the project duration. In case of audit the beneficiary should be able to provide to the auditors information about the relevant national legislation treating non-deductibility of VAT and about the way this legislation provisions are applied in the entity.

4.2 Infrastructure Costs *Per Inge Andresen*

In this section we will address financial issues pertaining to the use of research infrastructures in H2020 projects. By *research infrastructure* we mean a physical or virtual environment designed and operated in order to facilitate research.

Typical examples are:

- **Labs**
- **Workshop facilities (for construction of test rigs, etc.)**
- **Large instruments**
- **Digital, online research environments**

Typical costs components are:

- **Staff (technicians, operators, administrators)**
- **Equipment**
- **Consumables, raw materials,**
- **Parts, components**
- **Maintenance, cleaning services, security services**
- **Electric power, water**
- **Real estate/ housing costs**

Generally speaking, in H2020 (and FP7) one would normally expect to see all infrastructure costs declared as **indirect costs**. There is no wide-spread practice to maintain accounting procedures which facilitate the fulfillment of all eligibility requirements for these costs as direct costs. A few organizations have established procedures which make this possible for one or some of these cost components. With reference to **labs**, which may be assumed to be the most common type of research infrastructure, for most beneficiaries in H2020 the likely eligibility conditions for the cost components listed above would be as follows:

Cost component	Direct costs?	Eligibility condition
Staff (technicians, operators, administrators)	Yes	Timesheets
Equipment	Yes	Depreciation only. Documentation of use for the project required.
Consumables, raw materials	Yes	Documentation of use for the project required.
Parts, components	Yes/No	a) If used exclusively for the project, or: b) Entered in the balance sheet and grouped with the equipment as a fixed asset, then included in the depreciation of the equipment (with an updated depreciation calculation)
Maintenance, cleaning services, security services	No	
Electric power, water	No*	*Except for Integrating Activities (costs for Transnational Access or Virtual Access).
Real estate/ housing costs	No	

4.2.1 From indirect to direct costs

In international accounting theory and practice, there are numerous examples of methods for calculating and allocating infrastructure costs as direct costs (or something equivalent to direct costs). Perhaps the most widely recognized body of methods is derived from Activity-based Costing (ABC), developed at the Harvard Business School in the late 1980's.⁵ The original, full-fledged ABC soon turned out to be very complex and costly to implement and maintain in practice. In response to this, Time-driven ABC (TDABC) was introduced in 2004.⁶ Essentially, Time-driven ABC is about converting all indirect (overhead) costs to a time-based – typically hourly – rate. Applied to labs, this could be regarded as “Time recording for labs instead of people”, and charging hourly rates for lab costs to research projects.

During all of the 5th, 6th and 7th framework Programmes for research, the European Commission (EC) did its best to persuade participating organizations to establish their own calculations of indirect costs and systems for charging these to activities and projects. This was referred to as “Full Cost” under the 5th and 6th Framework Programmes, During the 7th framework Programme (FP7), this was referred to as the “Real indirect cost” and “Simplified method” for indirect costs. The percentage of participating organizations that implemented one of these options remained relatively low, except among major research organizations.

However, considerable resources had been spent by universities – individually and through national and international collaboration and networking – in preparation for a switch from flat rates to their own indirect cost models. **The decision by the EU to abandon the “Real indirect cost” and “Simplified method” options for H2020 and provide a universal flat rate as the only available option therefore was met with mixed response among participating organizations.** Because infrastructure costs predominantly have been handled as indirect costs, the discussion of these two terms is closely related. **When a flat, universal rate of 25% has been set for indirect costs in H2020, this has implications for the actual funding rate for infrastructure costs as long as they are accounted as indirect costs. If infrastructure costs – to larger or smaller extent – can be declared as direct costs, and indirect costs are calculated (and funded) as a 25% add-on to all direct costs, the total funding could increase.**

The dividing line between direct and indirect costs follows the definition of direct costs: Costs which can be easily traced directly to a cost object (or cost center). There may be many kinds of cost objects (typical examples would be products, activities or departments), but for the present purpose the relevant cost object would be a research project. Following a strict definition of the term, only a limited proportion of the costs of most research projects would qualify as truly direct costs: Resources, goods and services that are acquired and used explicitly and exclusively for the cost object. As far as personnel costs are concerned, only the costs of personnel that are hired (on a temporary basis) exclusively for the purpose of the cost object would qualify as direct costs in the most strict sense. However, it is common practice – and allowed in FP7 and H2020 – to consider all personnel costs that may be linked to a cost object by means of documentation such as timesheets, as direct costs.

⁵ Kaplan, Robert S. and Bruns, W. “Accounting and Management: A Field Study Perspective”. Harvard Business School Press, 1987.

⁶ Kaplan, Robert S. and Anderson, Steven R., “Time-Driven Activity-Based Costing”, Harvard Business Review, Nov. 2004.

As far as permanent staff is concerned, timesheets may be regarded as a mechanism for allocating fixed costs to specific cost objects, thus converting these costs to direct costs. Conceivably, other costs could be converted to direct costs by calculating a unit cost and recording the number of units used (e.g., hours of lab use) or units produced (e.g., samples analysed).

This is in principle the idea behind LRIs (Large Research Infrastructures) in H2020. It is also part of the rationale underlying a national model for research infrastructure costs for Norwegian universities which will be briefly discussed below.

4.2.2 Large Research Infrastructures - LRIs

For H2020 the European Commission (EC) introduced a new costing model for large research infrastructures – LRIs. This was a response to concerns on the part of major European research organization about low effective funding rates for the use of research infrastructures, given the abolition of the “real indirect costs” and “simplified method” options for indirect costs that were available in FP7. An LRI is a facility, resource or service used for research. It may also be used beyond research. LRIs may be ‘single-sited’, ‘virtual’ or ‘distributed’..

Examples:

- **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.**

There are a number of **preconditions** that have to be fulfilled in order **to qualify as an LRI**⁷:

- Cost/value threshold
 - The sum of historical asset values of each individual LRI must be at least € 20 Mill., and
 - The total value of all LRIs taken together must constitute at least 75% of the organisation’s fixed assets
- Approval before use («Ex-ante assessment»)
 - Status validation (Step 1)
 - Methodology compliance (Step 2)
- Costs must be identifiable and verifiable
- Costs must be incurred in direct relationship with the research infrastructure and with the action
- Costs must not be included as direct costs in any other category

⁷ For the Definition see: Article 2(6) of the H2020 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’. ‘**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, H2020 AMGA, art, 6 B.3.4 Capitalised and operating costs of ‘large research infrastructure’

- Costs must be directly measured

4.2.2.1 LRI Cost categories

The two major LRI cost categories are:

- **Capitalised costs**
- **Operating costs**

Capitalised costs include:

All costs incurred in **setting up and/or renewing the research infrastructure**

- Some costs of specific repair and maintenance of the research infrastructure and parts or essential integral components
- The costs of renting and/or leasing (excluding any finance fee/interest) of a research infrastructure may also be declared⁸

Operating costs include:

Cost for specifically running the research infrastructure, and directly linked to the research infrastructure in order to be eligible.

Examples of **eligible LRI operating costs** are:

- **personnel costs** of administrative and support staff directly assigned to the functioning of the research infrastructure;
- **rental/lease** of the research infrastructure (for the period of its actual use for the action);
- **maintenance and repair contracts** (including calibrating and testing) specifically awarded for the functioning of the research infrastructure;
- **consumables**, materials and spare parts specifically used for the research infrastructure;
- **facility management contracts** including security fees, insurance costs, quality control and certification, upgrading to national and/or EU quality, safety or security standards (if not capitalised), specifically awarded for the functioning of the research infrastructure;
- **energy and water specifically** supplied for the research infrastructure.

Examples of **non-eligible LRI operating costs** are

- rental, lease or depreciation of buildings or plants not directly used for the action
- e.g. administrative buildings, headquarters
- statutory audit and legal fees not including costs of certificates required under the GA
- office supplies and petty office equipment (purchased in bulk)
- other general services i.e. items recorded by the beneficiary under the same account in the general ledger
- management tasks and horizontal services
- non-specific, non-activity-related or non-project-related costs, i.e. items recorded by the beneficiary under the same account in the general ledger

⁸ For more information see "Standard IAS 16 – International Accounting Standard 16 Property, Plant and Equipment"
http://ec.europa.eu/internal_market/accounting/docs/consolidated/ias16_en.pdf

4.2.2.2 Calculating LRI costs

LRI costs are composite unit costs, i.e., they are calculated as costs per unit of use:

$$\frac{\{\text{All capitalised costs of the research infrastructure}\} + \{\text{All operating costs of the research infrastructure}\}}{\text{Total annual capacity}}$$

Units of use must be supported by evidence. Eligible units of use are:

- **the time of use (hours, days or months)**
- **the number of accesses**

The LRI costs that may be claimed as direct costs for a project calculated as follows:

$$\{\text{Actual eligible costs per unit of use}\} \times \{\text{Actual number of units of use used on the action}\}$$

4.2.3 Small and Medium-sized RI - SMRIs

The concept of unit costs for the use of research infrastructure has certain advantages. Once the unit cost has been calculated, it may be charged to the activities (projects) which make use of the infrastructure, in much the same way as time-recording for the personnel that perform work for the projects. The challenge is to document the underlying costs components, and to separate these cost components from costs that are not directly related to the use of the infrastructure.

If the minimum value thresholds that the EU has defined for LRIs under H2020 did not apply, unit costs for the use of research infrastructures could be a practical solution in certain circumstances. The current guidelines for H2020 apparently do not allow for unit costs for the use of research infrastructures that do not qualify as LRIs, except in the case of Integrating Activities projects funded under INFRAIA calls. For projects funded as RIA, IA or CSA, the present version of the AGA (Annotated Model Grant Agreement), v.2.0.1 states that, an “Internal invoice with a global price for the use of a research infrastructure (e.g. laboratory) or for a service (e.g. an analysis)” would not be acceptable (p. 82). Furthermore, it is stated that, “It is NOT possible to calculate an all-in average cost of internally invoiced equipment including, for instance, allocated indirect costs (e.g. maintenance)”. These statements would seem to preclude the eligibility of infrastructure costs declared as unit costs.

On the other hand, it is also stated in the same document (pp. 81 – 82) that, “Internally invoiced costs (i.e. where the use of certain resources is shared between different units of the same organization and the costs of their use are declared through internal invoices) may be eligible if their use and the usage (number of hours) for the action is specifically recorded and it is mentioned in

the invoice. The internal invoice must refer to the use/dedication for the action of specific resources (e.g. per researcher, piece of equipment, etc.”. This suggests that the costs for resources that are part of an infrastructure may be eligible provided that their use

for the project can be documented. However, the text points to a requirement that internal invoicing must concern specific resources, not the entire infrastructure, e.g., lab, as a whole.

It would be a step forward in the financial management of research projects if unit costs for research infrastructures of all sizes were to be accepted by the EU. The following Norwegian and Dutch models are examples that could serve as a point of departure for developing some basic principles of unit costs of research infrastructures.

4.2.4 The Norwegian RIR Model

A national costing model for research infrastructure for Norwegian universities and other higher education organizations was developed in 2012. The model is referred to as the Norwegian Research Infrastructure Resource Model – the RIR model.

This is a model of unit costs. Relevant units of use include:

- Per hour/day/week of use
- Per unit of service/analysis performed
- Per sample produced or analyzed

There is in principle pronounced flexibility in terms of infrastructure size in this model:

No upper or lower formal limit on size

May consist of one or many labs, instruments, etc.

The **cost components** of the RIR are:

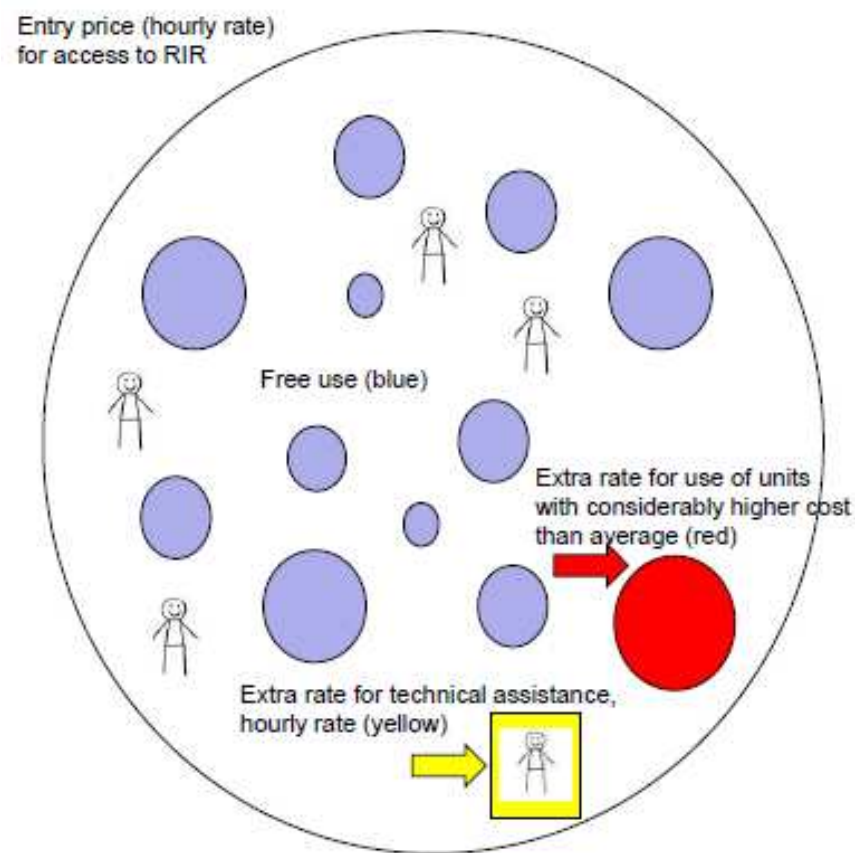
Main cost component	Sub-components
Housing costs	Rental and building related costs for research space such as laboratories and workshops
Scientific equipment	Depreciation costs
Common operating consumables and service/maintenance contracts	Shared costs for all users
Technical support	<ul style="list-style-type: none"> • Personnel costs for the technical support staff needed to sustain the operational infrastructure • Does not include assistance in the execution of research activities • Includes indirect costs

The cost structure consists of two tiers:

Base rate A fixed entry price which provides access to most of the RIR

Additional costs For particularly expensive equipment/components and/or technical services which are only used in some cases; for technical assistance in the execution of research activities⁹

This two-tier cost structure may be compared to an amusement park:



4.2.5 The Dutch NanoLabNL model

NanoLabNL is a Dutch national facility for nanotechnology research. They are operating on 4 locations in the Netherlands (Delft, Eindhoven, Groningen and Twente). NanoLabNL has developed a cost model of rates per unit of use, the units being either per day or per hour. Separate rates have been calculated for the following cost components:

- **installations, materials**
- **technology, personnel**
- **depreciation installations and equipment**

<http://www.nanolabnl.nl/facilities/rates>.

⁹ For more information, see http://www.uhr.no/documents/A_Norwegian_Research_Infrastructure_Resource_Model_270214.pdf.

4.3 Internal Invoicing in H2020 compared to FP7 *Wolfram Rieneck*

Sometimes the use of certain equipment or facilities is shared between the different units of the same legal entity, and the costs of their use are charged through internal invoices. The use of the resource often contains a mixture of services and materials together with the necessary maintenance. The internally invoiced costs therefore include costs for service, equipment, materials and maintenance. At the University context, these shared used services are often named and organized as „core facilities“ such as animal housing facilities, specialized (and very often expensive) lab or testing facilities which only can be used and maintained by well-trained specialists. Such internal invoices are in principle eligible costs for projects both from the 7th Framework Programme and the recent programme Horizon 2020 as long as the specific eligibility rules defined in the Guide to financial issues (FP7 – Art.II.15(h)) or the Model Grant Agreement (H2020 – Art.6.2.D) are considered.

Both regulations state that the costs for internal invoices need to be clearly devoted to the project / action, their use for the project needs to be properly recorded and the costs must follow objective, measurable and auditable criteria. They must not contain indirect costs elements or a profit marge.

The big difference between the two programmes is that in FP7 there is an explicit possibility to use average costs for those items for which it is difficult to calculate the costs for each item

„Internal invoicing may apply also to items like animal maintenance, computer runs, laboratory tests and other similar services where it is difficult to substantiate the actual time and the actual cost of each individual involved in each individual operation, and where an average personnel cost per type of animal, type of computer run, type of test etc. has been calculated based on the actual costs incurred for the personnel involved. For these costs to be eligible the calculation of costs must be auditable.

The same logic applies to equipment, consumable or any other specific direct costs: where it is difficult to substantiate the actual cost of each individual test or use an average cost may be calculated per type of test based on the actual cost of the equipment and consumables used and other specific direct costs such as maintenance of equipment provided“

Guide to Financial Issues relating to FP7 Indirect Actions – page 68

According to the EU Commission, they recognized the problem that „the average unit costs have been included in many cases not only the direct costs but also (parts of) indirect costs – this could not be verified in a precise or justifiable manner“. For that reason the possibility using all-in average costs was removed from the H2020 MGA. Now all internal invoiced costs **need to be declared under the budget category that corresponds to the invoiced resource** (e.g. personnel, equipment, other direct costs, etc.) and must fulfil the eligibility conditions set out in Article 6.1 and 6.2.

This leads to problems especially at universities when it is not possible for the beneficiary to calculate the actual costs and/or the calculation and/or presentation of the actual costs cause an internal effort too big to justify the benefits gained by the reimbursability of the costs . Possible strategies to deal with this new situation:

- Re-designing the internal procedures and accounting according to the H2020aMGA rules -> impossible in most cases
- No use of core facilities -> less excellence of the beneficiary

- Outsourcing of the internal service providers – into distinct external entities -> higher costs
- Subcontracting of the tasks -> higher costs
- Abdication of cost reimbursement -> less involvement in H2020 projects (no commitment of univ. administration)
- Coordinated effort facing to the Commission to adapt the rules

Possible adaptations of the rules by the Commission as proposed in a position paper coordinated by Helmholtz Gesellschaft, Germany (*Position of academic & non-commercial research organisations, research councils and regions - January 2016 - Joint statement*)¹⁰

- **Possibility of total internal costs invoicing as a package within the same cost category**
- **Creation of a new cost category („Internal invoiced goods and services“ similar to subcontracting**
- **Acceptance of internally invoiced costs as package via „other costs“ excluding overheads without splitting up into further cost categories**
- **General feasibility condition: set costs per usage which include the pro rata services calculated on an annual basis**

4.4 Indirect costs *Cristina Velasco and Maddalena Tognola*

Under Horizon 2020 indirect costs¹¹ are generally reimbursed as a flat rate of 25% of all direct costs excluding subcontracting. In the Marie Skłodowska Curie Actions the indirect costs are a fixed amount combined with the contribution to the management costs. In FP7 projects participants were provided with the following options to calculate indirect costs:

- Participants with an analytical accounting system and a detailed cost allocation report their actual **real indirect costs** for the individual project
- Participants without an analytical accounting system may use a simplified method, calculating their indirect costs at the organisational level using a **simple key driver** that nevertheless guarantees the distribution of indirect costs in a fair way
- Non-profit public bodies, secondary and higher education institutions, research organisations and SMEs without an analytical accounting system may choose a **flat rate for indirect costs amounting to 60%** of all direct costs (excluding subcontracts)
- All participants, no matter which legal form or accounting system may use a **flat rate for indirect costs amounting to 20%** of all direct costs (excluding subcontracts)

For some project types the indirect costs would only be reimbursed using flat rates:

7% for Coordination and Support Actions (CSA)

10% for several actions within the Marie Curie Programme

¹⁰ https://www.helmholtz.de/fileadmin/user_upload/03_ueber_uns/organisation/Internationale_Bueros/Bruessel/stellungnahmen/2016-01_Joint_Statement_to_the_current_problem_of_internal_cost_allocation.pdf

¹¹ art. 6. H2020 MGA, "Indirect costs are costs that are not directly linked to the action implementation and therefore cannot be attributed directly to it".

20% for Frontier Research Actions (ERC)

20% for the Innovative Medicine Joint Undertaking (IMI) and Fuel Cell and Hydrogen Joint Undertaking (FCH)

Furthermore the EU contribution to indirect costs may also have the form of a fixed amount contribution, e.g. FP7 Marie Curie Actions .

There is no requirement to justify to the funding agencies the use of the contribution to the indirect costs, which are intended as a contribution to the overhead of the institution carrying out the project¹². Research support offices provide valuable services to the research teams and principal investigators and these services are part of the institution's overhead and it is a common practice to retain a share of the indirect cost contributed by H2020 programmes to (co)fund these services.

During the first project period, we asked the institutions participating in BESTPRAC to report on how they allocate the overhead contribution from European projects FP7 and H2020 projects. We received 31 responses from 22 countries with 29 institutions that already have decided about the allocation. Only 3 institutions assign 100% of the indirect costs to the principal investigator (PI).

26 out of 29 respondents (90%) allocate at least a share of the overhead at a central level: either to the institution ("legal entity") or to the school/department/institute (SDI) level. 22 institutions assign at least 2/3 of the indirect costs to the institution and/or SDI level, in 14 institutions 100% is centralised, but often with the decision power at the SDI level on attributing a share to the lab or the PI. The most common case is the attribution of 100% to the SDI level (7 institutions), 4 assign 100% to the institution's level, the rest divides the overhead between institution and the SDI levels. One institution reports a very different model: Each department receives 100% but it has to transfer a set amount every year to central account.

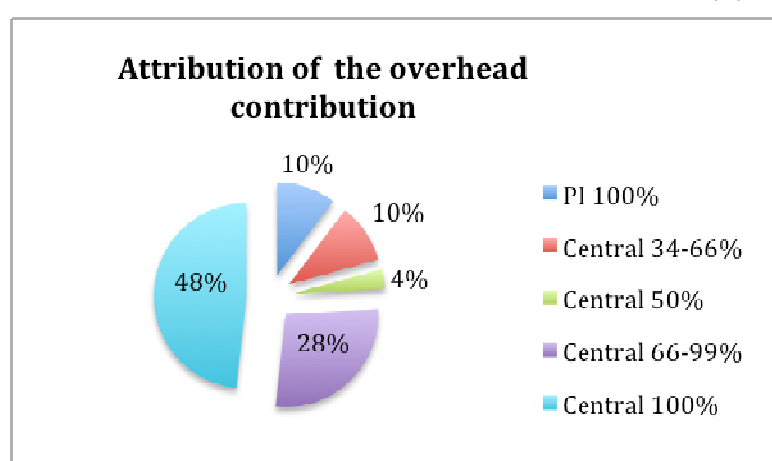


Figure 4.4 A Allocation of the indirect costs in the 29 universities and research centers that participated in the survey by BESTPRAC in March 2015.

The PI is entitled to manage a share of the overhead in 11 institutions; the decision may depend on the faculty/institute.

We also asked the participants of their institution has an internal regulation about the use of overheads, i.e. limiting the use of the overhead contribution to specific items or explicitly excluding specific uses. 10 respondents (34%) have no such internal regulation,

¹² FP 7 Financial Guidelines "Indirect costs, also called overheads, are all the structural and support costs of an administrative, technical and logistical nature which are cross-cutting for the operation of the beneficiary body's various activities and cannot therefore be attributed in full to the project. The nature of an indirect cost is such that it is not possible, or at least not feasible, to measure directly how much of the cost is attributable to a single cost objective".

2 of the respondents declare not yet having experience with FP7/H2020 projects. One year earlier, in spring 2014 it was still 50% of the BESTPRAC institutions that had reported not to have such a regulation.

4.4.1 Indirect costs in the MSCA Innovative Training Networks (ITN)

The funding mechanism in the MSCA actions is based on so called “unit costs” defined by the European Commission. For each unit (one month of employment of an early stage researcher in the project) each beneficiary is entitled to claim a fixed amount. Unlike in the 7th Framework Programme, the contribution to the overhead is no longer separated from the contribution to the management costs, but combined in a fixed amount of 1200€ per researcher month. The contribution to the indirect costs is therefore no longer a fixed percentage of the other costs because the amount for the living allowances is corrected per country with a fixed correction coefficient.

The units per researcher month (without family) with correction coefficient of 1 are:

3100 € (A: living allowance) + 600 € (B: mobility) + 1800 € (D: research, training, network costs) + 1200 € (E: management and overhead) = 6700 €.

Calculating the indirect costs as 10% of the direct costs (sum A, B, D) results in 550 € per month (6600 € per year per fellow). The result changes according to the correction coefficient of the country.

The management costs of the project are incurred mainly by the coordinator of the ITN. The partners of an ITN will therefore have to agree on the amounts from the “overhead and management budget” that each beneficiary must transfer to the coordinator to fund the central management effort. Grant support offices should consider this issue when supporting proposals for Innovative Training Networks under Horizon2020

5 Budgeting in H2020 at proposal stage *Claire Faichnie*

This section will explore the key issues to be considered when preparing a budget for a Horizon 2020 proposal. In Horizon 2020 as in Framework Programme 7 (FP7) a project participant can include a budget for the estimated cost of carrying out tasks and activities as described in the project proposal as long as the costs are **eligible** (see section 3 for a full description of eligible costs) and as long as the project participant is from an **eligible** country. Both Horizon 2020 and FP7 are international research programmes and legal entities from outside of the EU member states and associated countries can participate in Horizon 2020. However whether these countries can receive funding from the EC is determined on a case by case basis and will be detailed in the description of the call. Budgets for all projects are required in euros.

At the proposal stage it is important to note the **type of project**, the **reimbursement method** and the **reimbursement rate**. For Horizon 2020 this is summarized in the table below.

Horizon 2020: Type of Project and Reimbursement Rates and Methods

Type of project	Reimbursement Rate	Reimbursement Method
<i>Research and Innovation Actions (RIA)</i> Multi beneficiary: minimum of three partners from three different EU member states/associated countries	100% direct costs & 25% flat rate indirect costs	Eligible and actual costs
<i>Innovation Actions (IA)</i> Multi beneficiary: minimum of three partners from three different EU member states/associated countries	70% direct costs (100% direct costs for non-profit organisations) & 25% flat rate indirect costs	Eligible and actual costs
<i>Coordination & Support Actions (CSA)</i> Mono or multi-beneficiary	100% & 25% flat rate indirect costs	Eligible and actual costs
<i>Marie Skłodowska Curie Actions</i> Mono or multi beneficiary	Flat Rates	Flat rates and lump sum
<i>European Research Council</i> Mono or multi beneficiary	100% & 25% flat rate indirect costs	Eligible and actual costs

This is a significantly simpler model compared with FP7 when the reimbursement rate varied by the type of project and by the type of activity and the indirect costs model varied by institution, a summary is provided below.

FP7: Type of Project and Reimbursement Rates and Methods

Type of project	Reimbursement Rate by type of activity			Indirect Cost Model
	Research & technological development (RTD)	Demonstration	Other including consortium management, training & dissemination	
<i>Network of Excellence</i>	50% large industry 75% others		100%	60% transitional rate or 20% flat rate or actual
<i>Collaborative Projects</i>	50% large industry 75% others	50%	100%	60% transitional rate or 20% flat rate or actual
<i>Coordination & Support Actions</i>			100%	7%
<i>Marie Curie Actions</i>	Lump sum flat rates		Ceiling of 3% or 7%	10% of direct costs
<i>European Research Council</i>	100% of eligible direct costs			20% of direct costs

5.1 Budgeting at the partner/beneficiary level

Focusing on the Horizon 2020 budget preparation stage for partners, the key source of information is the topic description for each call, this is available on the participant [portal](#). The topic description will provide information on:

- **Type of project.**
- **Whether the topic has a one or two stage deadline.**
- **Estimated budget that will be required for the entire consortium to complete the action. However consortiums can submit requested budgets above and below this estimate.**
- **International aspects, the eligibility of partners outside of EU member states and associated countries.**

All of these factors will have an impact on the development of the budget. For example two stage proposals will require only one consortium wide budget figure to be presented at the first stage. However it is advisable for consortiums to have an understanding of how this budget would be split between partners even at the first stage.

5.1.1 Research and Innovation Action

At the second stage or proposals which have a single deadline then the budget table is completed via the participant portal online; Section 3 of the administrative forms. An example of the budget table from section 3 for a *Research and Innovation Action* is provided here.

(A) Direct personnel costs	(B) Other direct costs	(C) Direct costs of sub- contracting	(D) Direct costs of providing financial support to third parties	(E) Cost of in-kind contributions not used on the beneficiary premises	(F) Indirect Costs (0.25*(A+B- E))	(G) Special Unit Costs covering direct and indirect costs	(H) Total Estimated Eligible Costs (A+B+C+D+F+ G)	(I) Reimburse ment rate (%)	(J) Max grant =(H*I)	(K) Requested grant

In addition to completing Section 3 of the administrative forms online, for *Research and Innovation Actions* the budget details also need to be provided in the technical annex of the proposal, this is also known as the part B. In the part B detail needs to be provided on:

- How the budget and the resources requested equate to person months by partner.
- How the budget, the resources and the person months are then divided by work packages and by partner.
- A breakdown of the other direct costs category (category B) if these costs exceed 15% of the personnel costs (category A). This has to be calculated at individual partner level and provided for each individual partner.
- Any tasks and activities that are proposed to be carried out via subcontracting and/or third parties.

5.1.2 Marie Curie Budget Table

In contrast to *Research and Innovation Actions* the budget table for *Marie Skłodowska Curie Actions (MSCA)* is generated depending on the number of researcher months requested. The table below shows the budget template from section 3 of the online forms for a multi partner *MSCA Innovative Training Network*.

No. of researchers	No. of person months	Researcher Unit Cost			Institutional Unit Cost		TOTAL
		Living Allowance	Mobility Allowance	Family Allowance	Research, training & networking costs	Management & indirect costs	

The allowances are fixed monthly unit cost rates and the living allowance is multiplied by a correction coefficient. The monthly unit costs and country coefficients may change between work programmes.

The key changes to note from FP7 are:

- The inclusion of a separate family allowance for researchers who have family obligations. In FP7 there was no separate family allowance as there were two separate levels of mobility allowance.
- The inclusion of a mobility allowance for all researchers.
- Management and indirect costs are now one category whereas in FP7 these two categories were separated out
- All costs are unit costs so at reporting stage there is no need to document the actual costs categorized as management as was the case in FP7.

There is no requirement to describe the budget within the technical annex, part B. However, consortium coordinators may want to discuss with consortium partners the allocation of the institutional costs. For example, the coordinator may propose that a portion of the management and indirect costs is held by the coordinator to employ a project manager.

The coordinator may also want to allocate a portion of the research, training and networking costs to a central fund to cover summer schools and workshops.

The allocation of the institutional unit costs should be discussed and agreed within the consortium and detailed in the consortium agreement. At proposal stage partners should be aware of any proposed reallocation of these unit costs.

5.1.3 European Research Council Budget Table

The ERC follows the funding model and rules of other Horizon 2020 projects in that 100% of direct costs are reimbursed plus there is flat rate of 25% for indirect costs. However the information required at proposal submission stage is different from other projects. One budget figure is provided in the administrative online forms and a completed budget table (see template below) is required for part B2c of the proposal. In addition to the table a descriptive explanation of the resources is also required.

Cost Category			EURO €	
Direct Costs	Personnel	PI		
		Senior Staff		
		Postdocs		
		Students		
		Other		
	i. Total Direct Costs for Personnel (in Euro)			
	Travel			
	Equipment			
	Other goods and services	Consumables		
		Publications (including Open Access fees), etc. Other (please specify)		
ii. Total Other Direct Costs (in Euro)				
A- Total Direct Costs (i+ii)				
B - Indirect Costs (overheads) 25% of Direct Costs				
C1- Subcontracting Costs (no overheads)				
C2 - Other Direct Costs with no overheads				
Total Estimated Eligible Costs (A + B + C)				
Total Requested EU Contribution				

ERC proposals are generally mono beneficiary however they can be multi beneficiary and in these cases, the budget of the beneficiaries would be separately identified in the online form and the table above should be amended to add additional columns for the additional beneficiaries.

5.1.4 Budgeting at the consortium level

In most cases Horizon 2020 projects are collaborative projects which are required to have at least three partners from three different EU member states/associated countries. At the consortium level preparing a budget will be an iterative process as it is not simply a case of dividing the total budget equally between partners. The approach to budgeting should ideally be 'bottom up', starting from 'how much is it going to cost' rather than a top down approach of 'how much am I going to receive'.

The budgeting process will be led by the Coordinator. **The Coordinator will:**

- **Prepare a budget template** to be completed by each partner/beneficiary. The template should include details of an estimated start date, the type of project and the duration of the project.
- **Provide each partner/beneficiary with details** of their tasks, activities, deliverables and work packages.
- Ensure that **resources** are **split** between partners/beneficiaries consistent with the complexity of the work being carried out.
- Ensure that there is a balanced spread of resources across the work packages.

An **example budget template** is provided here for a *Research and Innovation action*, the template captures a detailed description of the types of costs as well as capturing the work package and person months required for the project. Each Coordinator and institution will have their own templates and there are also publicly available templates from organisations such as EMDESK and the Finance Helpdesk¹³.

¹³ <http://www.finance-helpdesk.org/Front/ShowCategory.aspx?CatId=30>

Horizon 2020 Budget Preparation								
Partner name								
Partner short name								
Start Date								
Duration								
PIC Number								
Personnel (A)	WP	Person Months over duration of project	EURO €	NOTES				
				Insert here the name/ role/ type of person working on the project.				
				Indicate the WP and person months over the duration of the project.				
Total Personnel (A)		0.00	0.00	Add a separate row for each name/role.				
Other Direct Costs (B)	WP		EURO €	Recommend €6k per partner for kick off and network meetings.				
Travel and subsistence (provide as much detail as possible)				Please note any additional travel beyond the network meetings.				
<i>Example - Kick off meeting flights for 3</i>				Include the cost of an audit certificate if your direct cost spend exceeds €325k.				
<i>Example - Kick off meeting accommodation for 3 people 2 nights</i>				Include here all data access costs.				
<i>Example - Other network meetings - 6 meetings, 1 person flight and 2 nights accom</i>				Also remember to note WP that this works refer to.				
Consumables (provide as much detail as possible)								
<i>Example - Lab supplies</i>								
<i>Example - Publication costs</i>								
<i>Data access costs</i>								
<i>Audit fees (required once at end of project if direct costs exceed €325,000)</i>								
Equipment (provide as much detail as possible)								
Research Infrastructure Costs (provide as much detail as possible)								
Total Other Direct Costs (B)			0.00					
Subcontracting (C)				carried out by the partner and instead will be carried out by a subcontractor.				
Other subcontracting				A subcontract can only cover part of the work to be done by any partner, the partner remains fully responsible for the work done by the subcontractor.				
Total Subcontracting (C)			0.00	A price is included for the subcontractor.				
Costs of inkind contributions not used on the beneficiary premises (E)				Third parties such as labs can provide seconded staff, lab space.				
				The costs can be claimed by the partner.				
Total Costs of inkind contributions not used on the beneficiary premises (E)			0.00	Only the amount incurred by the third party can be claimed - no profit.				
INDIRECT COSTS (F)		0.25	0.00					
TOTAL PROJECT BUDGET (H)			0.00					
PROPOSAL SUBMISSION FORM								
A - Direct Personnel Costs	B- Other Direct Costs	C-Subcontracting	E- Inkind contributions	F - Indirect Costs	H - Total estimated eligible costs (A+B+C+D+F+G)	I - Reimbursement rate	J - Max grant	K - Requested grant
0.00	0.00	0.00	0.00	0.00	0.00	100	0.00	0.00

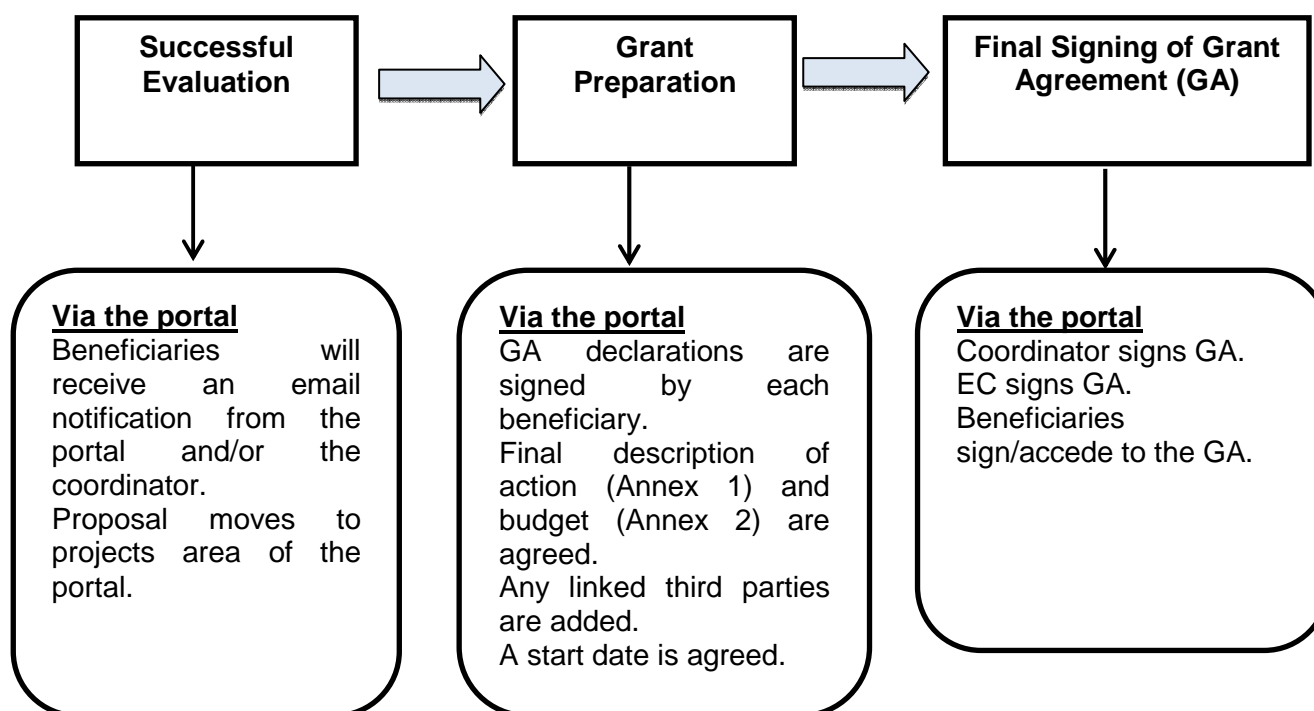
It is important to note that any budget template needs to capture the effort as well as the amount of resource. For example within part B of the proposal information has to be provided on the resources requested in terms of effort, this is known as **person months**. Time needs to be built into the budgeting process to ensure there is a consistency between the person months requested and the absolute amount of resource requested.

5.2 Budgeting setup for the implementation stage

A significant change between FP7 and Horizon 2020 is the development of the participant portal for all communication between the European Commission and their executive agencies and the Coordinator and the project partners. Evaluation results will be available on the participant portal and all of those with access to the project on the portal will receive a notification email when the evaluation results are announced.

Projects that are successfully evaluated will then enter into what is known as the **grant preparation stage**. This is another significant change from FP7 when this was known as the *grant negotiation* stage. In Horizon 2020 it is intended that projects are awarded as they are submitted and so there should be no significant change to the project description and budgets. Other key changes to note from FP7 are that GPFs (grant preparation forms) are replaced with the declaration of honour. And blue ink signatures are no longer required, both the declaration of honour and the grant agreement are signed electronically.

The steps at award and implementation stage and information available in the portal are outlined below.



The key issues to be aware of at this stage which may hold up the grant preparation process are:

- **Delays with LEAR mandates** - all legal entities must appoint a LEAR (legal entity appointed representative). Organisations which have participated in FP7 will have a LEAR but they need to ensure that the LEAR has been reappointed and mandated for Horizon 2020. Linked third parties also have to have LEAR mandates in place for Horizon 2020.
- **Delays with LSIGNs.** The LEAR must nominate LSIGNs (legal statement authorised signatory). This is a new role which did not exist in FP7.
- **Delays with agreeing consortium agreements.** The consortium agreement is an agreement between beneficiaries and does not involve the EC. This must be negotiated and concluded before the EC will sign the GA.

In advance of the start date as a partner you should be aware of:

- **The budget and person month allocation by work package allocated to your institution.**
- **The financial and scientific reporting periods.**
- **The financial and scientific reporting requirements.**
- **Any additional reporting requirements imposed by the Coordinator**

The start and implementation stage of a project will require close collaboration between research management, finance and HR departments to ensure that the partner can fully meet the obligations of the model grant agreement. Partners will need to ensure that they have processes in place to:

- **Track and *monitor* financial expenditure on the project.**
- **Track the amount of time personnel are working on the project. The EC provides a template that can be used for this purpose¹⁴.**

The table below shows the type of information that will be required at reporting stages and partners and coordinators should set up processes at the start of a project to ensure that this information is captured.

Budget Category	Information Needed
Staff	Amounts, name, status, working time on which work package and salary rate. Evidence on institutional practices re annual productive hours .
Travel	Amounts, participants, dates, destination, purpose and link with project.
Equipment	Nature, net price, depreciation rate, % use, amount claimed, purpose/link with project.

¹⁴ http://ec.europa.eu/research/participants/data/ref/h2020/other/legal/templ/tmpl_time-records_en.pdf . As explained in Chapter 3, in Horizon 2020 there are three options for the calculation of annual productive hours whilst calculating personnel costs. The option chosen will vary by partner however each partner needs to ensure their institutional practices comply with the option they have chosen .

Consumables	Amounts, nature and main components.
Subcontracting	Amounts, nature, name of subcontractor, tasks.

5.3 Budget reallocations

If a proposal is successful then the budget that was submitted will become the budget in Annex 2 of the grant agreement. In Horizon 2020 the Commission is committed to light negotiation and so there should not be any significant changes between budgets awarded compared with submitted budgets. In comparison during FP7 the grant negotiation phase often saw changes to budgets at consortium and at partner level. In Horizon 2020 the budget in Annex 2 is an estimation and therefore at the time of reporting partners/beneficiaries may declare costs that are different from the estimated budget.

Reallocations without GA amendment: as the budget is an estimate partners/beneficiaries are permitted to:

- **Transfer budgets between partners.**
- **Transfer budgets between linked third parties.**
- **Transfer budgets between budget categories.**

All of these transfers are permitted without requesting a formal amendment to the grant agreement. For example if one partner/beneficiary has incurred eligible costs which are lower than the estimated eligible costs then the difference can be allocated to another beneficiary or another budget category. The amount reimbursed for the other beneficiary or for the other budget category may thus be higher than planned. Whilst there is no need to formally amend the grant agreement to take account of such budget changes the Coordinator should have in place a process to monitor and agree such budget changes within the consortium so that any changes from the estimated budget can be explained at the reporting stage. It would also be considered best practice to inform the project officer of any changes.

Reallocations with GA amendment: It is important to note that the Grant Agreement permits transfers of budgets but not transfer of tasks. The following changes to the budget would require formal approval:

If a budget is to be transferred to a form of costs that has not been foreseen in Annex 2, for example, subcontracting.

If the budget transfer is due to a significant change in Annex 1, an amendment to the GA is needed. A significant change is a change that affects the technical work (the 'tasks' of the action) of Annex 1.

The Coordinator can contact the Commission/Agency to ask whether the transfer of budget reflects a significant change in Annex 1 which requires an amendment.

6 Financial Management *Staska Mrak Jamnik*

When planning the budget and financial management of the future project it is important to know the main financial flows during the whole duration of the project. Each Beneficiary must have the financial capacity to cover the costs according to the project financial plan regardless of inflows from the European Commission. In H2020 the Commission provides to the consortium the pre-financing at the beginning of the project. The aim of pre-financing is to make it possible for the beneficiaries to have a positive cash-flow during (most of) the project life-cycle. It remains the property of the EU until the payment of the balance. The Commission makes the pre-financing payment within the 30 days, either from the entry into force of GA or from 10 days before the starting date of the action, whichever is the latest. There is only one pre-financing payment during the project timeline.

Normally (if not agreed otherwise in the GA) the pre-financing amounts for 100% of the average EU funding per reporting period. From the pre-financing the amount corresponding to 5% of the maximum grant amount is transferred to the Guarantee Fund.

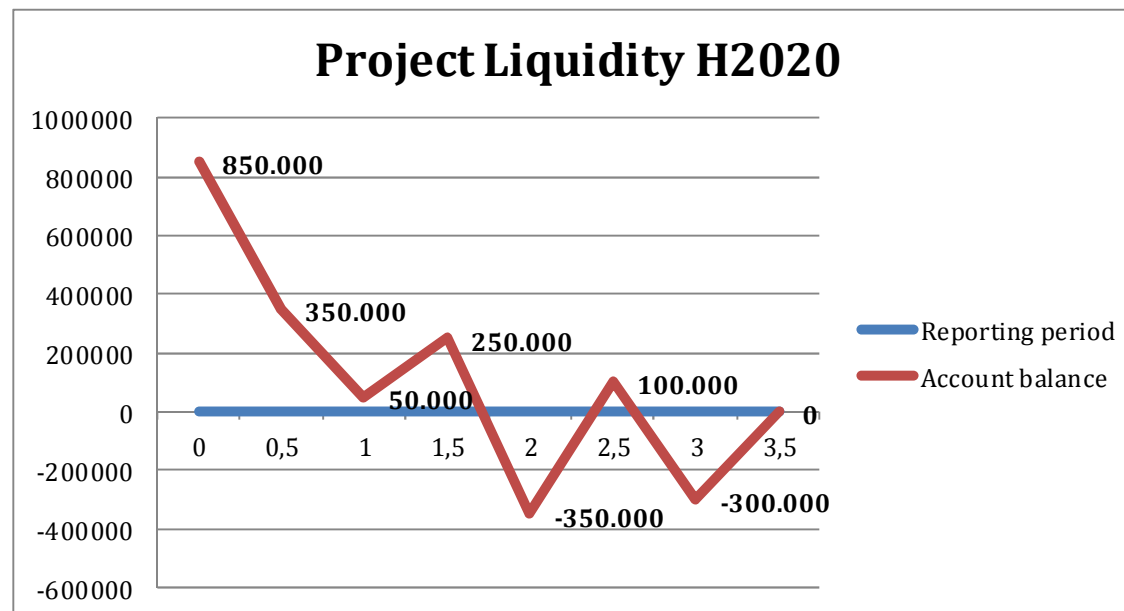
After each reporting period, if the financial report is approved, the Commission makes the interim payment within 90 days from receiving the interim report. Pre-financing and interim payment together may not exceed 90% of the maximum grant amount and only the payment of the balance can reimburse the remaining part of the eligible costs (if existing). The amount retained for the Guarantee Fund is released at the payment of the balance.

CASE:

Maximum EU contribution 3.000.000 EUR	Project duration: 4,5 years
Number of reporting periods :	3 (one reporting period takes 18 months)
Reporting periods average costs:	1.000.000 €
Maximum EC payment during the project 90% : (10% only after the approved Payment of Balance)	2.700.000 €
Transfer to Guarantee Fund:	150.000 €

Inflows/Outflows :		Liquidity Account balance
Pre-financing at the beginning (100% - 5%):	$1.000.000 - 150.000 =$	850.000 €
	850.000 €	
1.RP-expenditure 800.000 €		50.000 €
Report approved : <u>800.000 €</u>	EC interim payment: 800.000 €	850.000 €
2.RP- Expenditure 1.200.000 €		- 350.000 €
Report approved : <u>1.200.000 €</u>	EC interim payment: 1.050.000 € (Max. 90%=2.700.000 €)	700.000 €
3.RP-Expenditure 1.000.000 EUR		- 300.000 €
Report Approved : 1.000.000 EUR	EC payment of balance: 300.000 €	0 €

Point in Reporting periods		Account balance	Inflows/Outflows
Beginning	0,0	850.000	Pre-financing EC 850.000
Middle of 1.RP	0,5	350.000	expenditure 500.000
End of 1.Rp	1,0	50.000	expenditure 300.000 (800.000)
Middle of 2.RP	1,5	250.000	Interim payment EC 800.000 Expenditure 600.000
End of 2.RP	2,0	-350.000	expenditure 600.000 (1.200.000)
Middle of 3. RP	2,5	100.000	Interim payment EC 1.050.000, Expenditure 600.000
End of 3.RP	3,0	-300.000	Expenditure 400.000 (1.000.000)
Payment of Balance	3,5	0	Payment of Balance EC 300.000



6.1 Financial Management of MSCA *Dirk de Cramer*

The **eligible costs** in Marie Skłodowska Curie Actions (MSC Actions) can be divided into two categories: the **costs of recruited researchers** on the one hand and the **institutional costs** on the other hand. The latter are only eligible in case they can be linked to eligible costs of recruited researchers under the same Action.

The **total cost** of each **recruited researcher** is composed of up to **three types of fixed allowances**:

- 1) living allowance
- 2) mobility allowance
- 3) family allowance.

The **institutional costs of the beneficiaries are split in up to three types of fixed lump sums** (depending on the type of MSC Action):

- 1) management + indirect costs
- 2) research, training and network costs
- 3) staff member unit costs.

Each of these allowances and lump sums is expressed as a unit cost per person month. The unit cost of each of these 6 cost categories differs among the four types of MSC Actions (see table X).

Table X: overview of the unit costs of recruited researchers and the institutional unit costs in Marie Skłodowska Curie Actions (WP 2016-2017; country correction coefficient 100%)

Type of MSCA	Living allowance (person/month)	Mobility allowance (person/month)	Family allowance (person/month)	Management + Indirect Costs (person/month)	Research, Training and Network Costs (person/month)	Staff Member Unit Costs (person/month)
	(researcher)	(researcher)	(researcher)	(institution)	(institution)	(institution)
ITN	€ 3,110	€ 600	€ 500	€ 1,200	€ 1,800	N/A
IF	€ 4,650	€ 600	€ 500	€ 650	€ 800	N/A
RISE	N/A	N/A	N/A	€ 700	€ 1,800	€ 2,000
COFUND	€ 1,855 (ESR)* € 2,625 (ER)*	N/A	N/A	€ 325* + € 0	N/A	N/A

* In the COFUND scheme: only 50% cofunding is foreseen.

The **living allowance** has to be used to pay the employment contract (or other direct contract with equivalent benefits, including social security coverage) or — if not otherwise possible under national law — under a fixed-amount-fellowship agreement with minimum social security coverage.

The **mobility allowance** also has to be used for the benefit of the researcher during the Action.

The **family allowance** is only due if the researcher has a family at the time of recruitment. In this regard 'Family' means persons linked to the researcher by marriage (or a relationship with equivalent status to a marriage recognised by the legislation of the country where this relationship was formalised) or dependent children who are actually being maintained by the researcher.

The institutions must keep adequate records and other supporting documentation to prove the number of units declared and that the costs for recruited researchers (living allowance, mobility allowance, family allowance) have been fully incurred for the benefit of the researchers.

6.1.1 Unit costs of recruited researchers versus fixed wage scales

In several European countries, universities have to use fixed wage scales to determine the personnel costs of their researchers and other staff members. In fact, this is the case in Belgium: Ghent University has to follow fixed wage scales that have been introduced by the regional government (Flanders). This implies that the university is not allowed to adjust the monthly personnel

cost of a recruited researcher to the monthly amount of living allowance that is put to the availability through a MSC Action. As these wage scales in Flanders also take into account seniority, marital status, number of children at charge, and other personal characteristics of the individual researcher, the monthly cost of a recruited researcher even varies between recruited researchers and it evolves over time.

To address the challenge of spending the living allowance according to the rules set for the MSC Actions, Ghent University set up a specific policy. In case the sum of monthly living allowances is higher than the total amount needed to pay the personnel cost of a recruited researcher for the duration of the appointment, the university pays the remaining amount of money of the living allowance as an extra lump sum at the end of the appointment period (such payments are, at least in Belgium, free of taxes). In case the sum of monthly living allowances is not sufficient for the personnel cost of a recruited researcher for the duration of the appointment, the university takes part of the mobility allowance and adds this to the living allowance in order to be able to pay the monthly salary of the recruited researcher without having to cofinance from other financial resources. In the latter case the researcher is paid a reduced amount of mobility allowance each month. This procedure is explicitly mentioned in the employment contract of each individual researcher paid via a MSC Action.

With regard to reporting purposes this procedure is not mentioned in financial reports: in fact only the number of person months of recruited researchers and their corresponding monthly unit costs are reported. This looks like a simplification measure for the reporting phase of MSC Actions but it is not a simplification measure at the side of the bookkeeping office: as the real monthly payments differ completely from the monthly unit costs that are reported, a double bookkeeping system has to be installed and used to be able to continuously monitor the differences.

6.1.2 Relative freedom to spend the institutional costs

As the costs have to be declared under the form of units in which one unit corresponds to one month of recruitment of a researcher under the MSC Action, all costs for recruited researchers (living, mobility and family allowances) as well as all institutional costs (management and indirect costs, and if relevant, research, training and networking costs, and staff member unit costs) are calculated on the basis of the amount(s) mentioned in table X per unit declared. This implies that the beneficiary institutions do not have to report on the “real” use of these amounts. As a consequence the institutions have a certain freedom to use the institutional costs for a variety of activities and costs as long as these are in the framework of the MSC Action. One might think on costs related to renting a flat by the mobile researcher, consumables to be used during their research activities at the research group, dissemination of research results (congresses, workshops,...), subscriptions to courses in the framework of a doctoral training programme.

6.1.3 Management + Indirect Costs: a potential conflict of interest within an institution

The modalities of the MSC Actions do not impose a fixed partition between management costs and indirect costs. Only in one type of MSC Action (COFUND) it is stated that the amount has to be used as management costs within the project. The use of (part of) this money to cover indirect costs is not allowed. This is indicated by mentioning “325 + 0” in the relevant cell of Table X in which 325 stand for € 325 management costs and 0 stands for €0 indirect costs.

The Management + indirect cost category contains a potential risk for conflicts between the central level and the decentral level within the institution: at the one side the institution has the right to claim at least a share of this cost category to cover the indirect costs linked to the activities to be performed in the framework of the MSC Action involved while at the other side the principal investigator is eager to use as much as possible of this cost category to cover the coordination and management tasks.

Clear rules with regard to the use of this cost category have to be in place in order to prevent such conflicts. Potential principal investigators of future MSC Actions must be informed, in a transparent way, about the rules on how their home institution deals with this cost category. At Ghent University the Board of Governors decided to use 50% of this cost category to cover the indirect costs related to the MSC Action (except for COFUND projects as the specific COFUND modalities do not allow such a deduction). The destination of the remaining 50% of this cost category depends on the type of MSC Action and on whether Ghent University acts as coordinator or project manager of the MSC Action (type ITN or RISE):

- In case of an **Individual Fellowship (IF)**: the remaining 50% is put at the availability of the principal investigator.
- In case **Ghent University acts as coordinator or project manager in a multi partner MSC Action (type ITN or RISE)**: the remaining 50% is put at the availability of the principal investigator. The principal investigator is recommended to ask up to 50% of the management and indirect costs of the other partners in the consortium to additionally cover the cost of coordinating or managing the multi partner Action. No indirect costs are counted to the incoming financial contributions from the partners.
- In case **Ghent University acts as partner in a multi partner MSC Action (type ITN or RISE)**: the principal investigator is allowed to transfer the remaining 50% of this cost category to the coordinator or the partner who will manage the project. No indirect costs are counted to these funds. In case none or only a part of the remaining 50% of this cost category is transferred to the coordinator or the partner who will manage the project, then indirect costs are first counted to these funds. The overhead deduction is calculated on the total amount of institutional costs which is available for the principal investigator (i.e. 50% of the Management and Indirect Costs + 100% of the other types of institutional costs) using the fixed flat-rate of the university.

6.1.4 Incentives to stimulate the coordinatorship of MSC Actions at Ghent University

Part of the indirect costs are reinvested in actions to stimulate the coordinatorship of multi partner projects in the Horizon 2020 programme. In the framework of the MSC Actions, the incentives are focusing on taking up the coordinatorship of RISE and ITN projects. Two types of incentives are installed at Ghent University.

A **first incentive** consists of a “free to use” allowance for each principal investigator who is taking up the coordinatorship of a RISE or ITN proposal on condition that the proposal obtains a score equal to or above the overall threshold score identified in the call document. Most applicants use it to pay the costs of hiring external expertise to write the proposal. Others use to fund other types of research activities within the research group.

A **second incentive** consists of a financial support to hire a half-time staff member. This half-time staff member is supposed to assist the principal investigator in performing the coordination tasks of the RISE or ITN project on condition the project counts at

least 3 partners. This financial support is limited to the personnel cost of a typical young administrative staff member (half-time appointment) per project year.

7 Financial Reporting *Vanessa Ravagni*

Under Article 20 of the grant agreement (GA), the coordinator must submit to the Commission technical and financial reports, including requests for payment - specifically¹⁵

- a periodic report (both technical and financial) within 60 days of the end of each reporting period (including the final one)
- a **final report** at the end of the project ('action')¹⁶

The **periodic report** consists of the periodic technical and financial reports:

1. **Technical report** (in 2 parts)

- **Part A** structured tables from the grant management system:
 - cover page
 - publishable summary
 - web-based tables covering issues related to the project implementation (e.g. work packages, deliverables, milestones, etc.)
 - answers to the questionnaire about the economic and social impact, especially as measured against the Horizon 2020 key performance indicators and monitoring requirements.
- **Part B** the free text, core part of the report that you must **upload to the grant management tool as a single PDF document** with:
 - explanations of the work carried out by all beneficiaries and linked third parties during the reporting period
 - an overview of the progress towards the project objectives, justifying the differences between work expected under Annex I and work actually performed, if any.

2. **Financial report**

Consists of structured forms from the grant management system, including:

- individual **financial statements** (Annex 4 to the GA) for each beneficiary (and third parties)
- explanation of the **use of resources** and the information on **subcontracting** and **in-kind contributions** provided by third parties, from each beneficiary for the reporting period concerned
- periodic **summary** financial statement including the **request for interim payment**.

¹⁵ For RIA, IA, MSCA , see http://ec.europa.eu/research/participants/data/ref/h2020/gm/reporting/h2020-tmpl-periodic-rep_en.pdf

¹⁶ http://ec.europa.eu/research/participants/docs/h2020-funding-guide/grants/grant-management/reports_en.htm

For the **final reporting period**, the Coordinator must submit 2 reports, within 60 days of the end of the period:

- **final periodic report**
- **final report** (overview of the project results over its entire duration)

The final report consists of 2 parts - both of which must be completed in the grant management system (no need to upload any documents):

1. Final technical report:

publishable summary of the entire project (giving an **overview of the results**, their **exploitation and dissemination**, and the **conclusions** about the project and its **socio-economic impact**)

2. Final financial report:

final summary financial statement that is automatically created by the system and corresponds to the request for payment of the balance.

In some cases (and for beneficiaries/linked third parties requesting a total contribution of EUR 325,000 or more) it must be **accompanied by a certificate on the financial statements** (one certificate per beneficiary/linked third party).

8 Financial Audit in FPVII and H2020 *Vanessa Ravagni*

The Commission, during the implementation of the project or afterwards, checks, reviews, investigates and audits the proper implementation of the project and its compliance with the grant agreement. Types of controls foreseen for each beneficiary, the Consortium as whole and third parties and subcontractors (via beneficiary) according Article 22 H2020 MGA are:



Type	Action	By whom
Checks: any aspect	Control implementation of the action Verify compliance with legal obligations Assess deliverables and reports Can relate to any aspect of the grant Usually includes desk review and is carried out remotely May be carried out during the project and afterwards	Commission/Agency or external auditors European Court of Auditor
Reviews (technical + scientific aspects)	Mainly concern technical, scientific, ethics aspects Can include financial and budgetary aspects May include on-the-spot visits or review meetings Review report and 30 days "contradictory review procedure" Up to 2 years after payment of the balance	Commission/Executive Agencies
Audit	Mainly concern financial implementation of the action Can include technical and other aspects Audit report and 30 days "contradictory audit procedure" May be started up to 2 years after payment of the balance	Commission/Executive Agencies, European Court of Auditors

	Usually includes on-the-spot visit and desk review	
Investigations (illegal aspects)	Discover fraud, corruption or illegal activities Usually includes on-the-spot checks and inspections at any moment during and after the action	European Anti-Fraud Office OLAF
Special cases: Checks and audits apply to international organisations	Usually includes on-the-spot visit and desk review	European Court of Auditors ECA

Regarding the **financial audits**, in FP7 and H2020 we have two level of controls, with some differences as following detailed:



Ex-ante controls: Certificate on the Methodology, Large Research Infrastructure (LRI)

Certificate on the Methodology COM

	
Optional: 2 types: CoM / CoMAv: ex-ante certification of methodology for average personnel costs (CoMAv) and indirect costs (CoM)	Optional: Only 1 type: CoM (replaces former CoMAv) Ex-ante certification of the methodology (CoM) for unit costs (average personnel costs) Not for indirect costs (=flatrate 25%) Obligatory: Large Research Infrastructure (LRI)


Ex-post controls

First level audit: Certificate on the Financial Statements (CFS)

	
Threshold: € 375.000 EU contribution Certificate necessary every time threshold is exceeded and "counter" set back to zero Costs for CFS eligible under category "Subcontracting costs" auditor to be selected by beneficiary	Threshold: € 325.000 actual + unit costs (direct) 1 certificate at the end of the action (together with payment request) Costs for CFS eligible under category "Costs for goods or services" auditor to be selected by beneficiary

Second level audit:

Financial audits, investigations by European Commission (Common Audit Service), ECA, OLAF

	
<p>Up to 5 years after the end of the project = activities foreseen by Annex I "Extrapolation procedure" for systematic errors No contradictory process</p>	<p>Up to 2 years after payment of the balance Extension of audit findings" for systematic errors 90 days contradictory process</p>

Therefore, as above detailed, the European Commission may order an audit of a H2020 grant during the project or at any time up to 2 years after the final payment. It can be a direct audit (with the Commission's own staff) or an indirect audit (with external, persons or bodies appointed by the Commission). Any claimed costs found to be ineligible will then be recovered or deducted from the next payment. If systematic errors are found, the Commission may extend the findings of the audit results to non-audited grant agreements or non-audited periods. Besides these corrections, other measures may be taken, including financial and administrative penalties¹⁷.

8.1 Financial audit of a FPVII project: case study *Jonne Ritari and Staska Mrak Jamnik*

In 7th Framework Programme European Commission could up to five years after the end of the project arrange for financial audits to be carried out. EC sent a notice letter about the planned audit (usually outsourced) and timeframe of the audit to the beneficiary. EC usually appointed auditing company to co-ordinate and conduct the audit assignment on behalf of EC. The reply of the beneficiary was expected within one calendar week and the audit was expected to start within 20 calendar days after the receipt of the notice letter except agreed otherwise with the auditors. The beneficiary had to assure that auditors had complete and unhindered on-the-spot access to the original versions of all necessary data including computer and accounting data and including information on individual salaries of persons involved in the project. The audit usually lasted one week.

The auditors might ask to get some documents in advance so they were able to prepare for the audit, like electronic breakdown of costs with the details of the other direct costs, subcontracting costs and of the personnel costs (name of the researchers, hours and hourly rate calculation) of the audited projects.

The auditors asked the beneficiary to prepare the following documentation for on-the-spot audit :

I. General information :

- Basic data about the beneficiary and its activities
- Summary of the usual accounting principles and rules used by the beneficiary

¹⁷ See H2020 AMGA, Chapter 6, Rejection of costs, Reduction if the grant, Recovery, Penalties, Damages; the ONLINE MANUAL on the participant portal, "Checks, audits, reviews & investigations"

- Copy of the official statutory Financial Statements of the beneficiary and some financial indicators for the last three years
- Presentation of the accounting system
- Presentation of the time recording system
- Organisation chart of the beneficiary with the brief summary of the internal control system of beneficiary
- All the documents regarding the project (Grant Agreement, Project Financial Statements (FORMs C)), audit certificates if any, list of personnel working on the project, full print-out of project account with the detailed breakdown of all cost items and transactions charged to the project, bank statements showing the pre-financing, final payments and paying the costs, conversion rate policy/method applied and other relevant documents)
- Copies of the audit reports issued in previous audits (if any) of beneficiary

II. Direct costs – Personnel costs

- List of personnel involved in the project,
- Employment contracts, ledgers/accounts, payroll records, time records including time sheets, teleworking system (if applied)
- Justifications of any special salary conditions, bonuses, national social security reductions, indirect taxations
- Methods of calculation of workable hours, monthly/hourly rates
- Certificates on Methodology (if issued) and all the explanations regarding the average personnel costs
- Any other important documents

III. Direct costs – Equipment and consumables

- Inventory list of all equipment dedicated to the project
- Original purchasing invoices and proofs of payment and list of rabates and discounts
- Rental contracts (if any)
- Justifications of the portion of costs allocated to the Project (in case of partly used equipment)
- Depreciation policy applied and detailed calculation of depreciation

IV. Direct costs – Travel and subsistence expenses

- List of trips with the dates
- Missions approval forms, original invoices and proofs of payments, reports, records, minutes
- Written policy on the reimbursement of travel expenses

V. Direct costs – Subcontracts and other contracts for third party assistance

- Description of procedures usually applied by the beneficiary for procuring contracts from third parties, internal guidelines and rules concerning procurement
- Original subcontracts, relating invoices and proofs of payments (bank statements), evidences of respect of the procurement policies and rules
- Original documents evidencing the delivery of the services
- List of third parties resources used on the project

VI. Indirect costs

- Explanation on the use of cost accounting or analytical accounting system
- Justification of cost drivers, reconciliation of the indirect costs allocated to the project and other justifications (in case of analytical accounting system)
- If using flat-rate method – the calculation of the indirect costs

VII. Receipts/interests yielded

- List of financial transfers from third parties, contributions in kind other receipt/income generated by the project
- Detailed calculation and justification of the interests yielded by the advanced payment made by the European Commission (for coordinators)

After the audit the auditors issued a **draft audit report** and sent it to the beneficiary for comments and additional explanations. The final results of the audit were distributed to the relevant EC services and the Commission could issue recovery orders and apply sanctions including liquidated damages. The auditors had to indicate in the report if any of the errors detected during the audit were of a systematic nature. In case of systematic errors the final audit report would require the beneficiary to apply the findings of the audit and to correct the errors in all FP7 projects by resubmitting the financial statements of all projects where the audited entity participated and recalculate the costs affected by the systematic error (possible application of a flat-rate correction).

According to the **Note for beneficiaries published by EC in March 2012, the most frequent errors in FP7** were :

1. **Cost claimed** that were **not substantiated** or were not linked to the project (evidences missing)
2. **Third parties and sub-contracting were not identified during the negotiations and set out in Annex I** (« Description of work ») or in amendment to the Grant Agreement. Also sub-contracting between partners of the consortium is not permitted. Costs of subcontracting can also not be used as a basis for calculating indirect costs
3. Beneficiaries claimed the **full purchase cost of equipment immediately instead of claiming depreciation of the equipment** according the usual depreciation policy of the beneficiary and according to the real use of the equipment by the project
4. **Improper use of calculation of indirect costs** regarding the possible models
5. **Ineligible costs included in the pool of the indirect costs**, especially in case of actual indirect costs models
6. Improper calculation of **productive hours**
7. **Non-reliable time sheets** and time record systems, e.g. time charged to the project, while the staff members were on leave of attending conferences unrelated to the project
8. **Use of average personnel costs** without meeting the criteria and conditions for the use according to the Commission Decision 174 of 24/1/2011
9. **Wrong calculations of costs for owners/managers of SMEs** who would need to charge flat rate payments based on the « Marie Curie » rates
10. **Charging VAT to the project which was ineligible cost in FP7.**

8.2 Financial audit of ERC Grants: case study *Marta Depczynska*

The financial audits may be carried out by ERC Executive Agency (Unit C4 - Audit Management and Implementation), external auditors appointed by the EC or by the European Court of Auditors. It can happen at any time during the implementation of the project and up to 5 years after the end of the project (last payment).

The subject of the audits carried out on the ERC projects at my Institution, the Technion, was always closed and reported financial period (based on costs claimed in the relevant FORM C, narrative part of the Periodic Financial Management Report and breakdown and follow-up tables). The purpose of the audit is not only checking the eligibility of claimed costs and detecting errors or even systematic errors. The auditors can advise how to avoid and prevent mistakes and propose improvements to the implementation procedures.

Like for any other EC projects, the audit for ERC project is announced at least 4 weeks before the planned dates. It is important to provide prompt feedback to the first e-mail received from the auditors, to try and accommodate the proposed dates and appoint a contact person that will coordinate the audit at the Host Institution (HI).

The crucial thing is to **start planning the audit** immediately after receiving the **Letter of Announcement (LoA)** as follows:

- Ensure **the presence of key scientific and financial personnel** during the time of audit (most important the PI and the financial officer that prepared and submitted the report as well as other officers who deal with costing, accounting, internal control and recording systems, in particular in relation to the ERCEA grant agreements). In case of any difficulties inform the auditors in advance and propose an alternative date.
- Start **preparing the audit tasks** (i.e. preparing a room for the auditors, meetings, presentations, documents, logistics etc.) according to the LoA.
- **Submit the pre-audit info**, as requested by the auditors (Internal Control Questionnaire, breakdown of costs, samples of invoices etc.).
- **Prepare proper documentation** for all the costs claimed as well as translate to English all your relevant internal procedures.

On-site audit for 2 projects usually takes 5 working days and consists:

- **Opening meeting** (present your organization – history, figures, statistics, achievements; clarify HI's internal control structure and any organizational specificities related to the project management, consider presentation of Accounting/IT systems etc.)
- **Fieldwork** (provide supporting documents logically ordered and marked in folders, assist auditors with questions and additional information/documents upon request, arrange requested meetings and interviews with the scientific/administrative team as well as walk-through tests, ensure access to project equipment for physical inspection)
- **Closing meeting** (preliminary observations, recommendations, problematic expenses, further info to be provided to the auditors, conclusions, etc.)

After the on-site audit the draft audit report will be provided. The report, among other information, includes the summary of findings and conclusions as well as recommendations. It is important to underline, that the audited institution is allowed to provide comments to the draft report within the deadline. Once the final version is agreed, the auditors provide the final audit report. EC audit is equivalent to a Certificate of Financial Statements (CFS) and thus resets the clock to zero (no need for obtaining the CFS for already audited costs).

TABLE 8.2. A List of Documents to be kept in case of audit (not exhaustive)

Copy of the Grant Agreement, annexes and any amendments.	
Copy of the submitted Financial Statements and if appropriate, the supporting CFS.	
Detailed and clear transaction listing of all the costs claimed, clearly linked to the supporting documentation.	
Supporting documents for ALL costs claimed:	Purchase orders, Invoices Proof of payments
Supporting documents for Travel	Internal travel requests, travel itineraries/boarding cards, invoices and receipts, agendas/minutes, participant's lists etc.
Supporting documents for Equipment/Consumables	Inventory listing, equipment delivery notes, records concerning equipment usage, rental contract (in case of rented equipment) etc
Supporting documents for Subcontracting	Sub-contracts, evidence to support tendering/ procurement procedures (if necessary) and deliverables.
Supporting documents for Personnel	Timesheets, employment contracts, job descriptions, pay slips and productive hours calculation used for the calculation of the hourly rates, explanations on social costs and the relevant legislation/procedures
Supporting documents for Visiting Experts	prepare a detailed list of all visitors and their contribution to the audited project . Print the papers that the PI published with acknowledgements to the ERC in order to prove the link to the project's staff /travel/visitors
Supporting documents for Internal invoices	Well documented, updated and convincing Pricing for all internal charges such as Animal House, Heavy Equipment (Clean Rooms), etc
Relevant Internal Procedures/Policies:	Organizational chart and reporting responsibilities Finance and Accounting Procedures Human Resource Procedures Travel and Subsistence Procedures Equipment Purchasing Procedures and Depreciation Policy Procurement Procedures (if relevant)

List of all EU projects the Host Institution is currently involved in	
Host Institution's Corporate Annual Income Statement together with EU annual percentage of funding	
Calculation of the interest rate generated by the project (until 31.12.2012).	
Any relevant project correspondence (internal correspondence or exchanges of e-mails/letters between the HI and the ERCEA).	

TABLE 8.2. B List of Common Checks

All cost categories	<p>Check of supporting documents</p> <p>Check of the compliance to EU Financial Rules : i.e. Art II 14.1a (costs must be actual) – if the beneficiary reports estimated costs, because actual costs are not available at the moment of the submission, it must be explained in the narrative part of the Periodic Financial Management Report and corrected with an adjustment FORM C in the next period.</p> <p>Check of the compliance to HI's Own Internal Procedures /Normal Practices . ERCEA fully respects the HI's Internal Procedures and does not require adjusting them only because the HI became a beneficiary of an ERC grant. However, these procedures must be written, clear and followed.</p> <p>Check that ERC project funds are not be used to make lump sum payments and all costs claimed are actual / incurred by the Beneficiary and supported by original invoices.</p>
Timesheets/Personnel costs	<p>Check that timesheets are original , complete, global, signed, cut-off at contractual hours and/or reconciled with HR/travel records.</p> <p>Days off reported in the timesheets must comply with the HR evidence.</p>
In case of lack of the timesheets the alternative evidence will have to be presented. In such case ERC auditors will:	<p>Verify that the personnel contract exists and were employed for the project during the period in question and paid. The qualifications and experience of the personnel will be also reviewed.</p> <p>Interview as many of the personnel as possible. Researchers will be asked to describe their part in the project and work</p>

	<p>performed, to demonstrate equipment and consumables used to estimate their time worked on the project.</p> <p>Verify how workable hours have been split between different projects (to exclude that more than 100% of workable hours have been charged). They will also verify that the hours claimed are within the project period</p> <p>Match the time charged with the periodic reports produced on the progress of the work</p> <p>Verify if the personnel charged have been present in meetings concerning the project</p> <p>Verify if the personnel charged are named in scientific reports and publications relating to the project</p> <p>Examine working papers to establish a link between the work performed and the project</p> <p>KEY MESSAGE: Timesheets are the easiest/simplest way of providing evidence of a person's time</p>
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TABLE 8.2. C Best Practice

<p>All cost categories:</p>	<p>Do not book entries on Pro-forma invoices only.</p> <p>Double-check VAT excluded from invoices charged.</p> <p>Have a clear conversion policy for non-Euro invoices.</p> <p>Have a clear system for apportioning common expenses between projects (If the equipment was not purchased entirely from ERC – there should be clear evidence supporting the division of costs)</p> <p>Avoid excessive and uneconomic costs.</p> <p>Avoid unnecessary expenses made in the last few months/weeks of the project</p> <p>Total expenses in the last period should be relatively low.</p>
<p>Equipment/Consumables</p>	<p>NO EQUIPMENT IN THE LAST PERIOD! (Unless it is absolutely necessary, relatively small, clearly and finely explained and justified or pre-approved by the PO).</p> <p>Follow HI Depreciation procedures</p> <p>Follow HI procedures for accounting classification as equipment or consumables (e.g. large piece of equipment with small component parts).</p> <p>Exclude overhead/internal profit elements from consumables</p>

	purchased via internal warehouses.
Travel	<p>Only the team members are entitled to travel using ERC funds.</p> <p>If somebody is not getting salary/fellowship directly from the project, it is still possible to charge the travel expenses.</p> <p>However, it has to be clearly explained: who is this person, how is this person related to the project and PI has to confirm that he/she is involved in the project</p> <p>If the travel abroad is not entirely related to ERC and paid partially from other budgets, there should be clear, consistent and logical division of costs already on the travel request</p> <p>Travels of in-house consultants – possible only in case it is clearly written in their contract with the HI.</p> <p>Ensure PI's avoids excessive/long duration trips (up to 3-4 weeks; if it's longer, there should be special approval and very convincing explanation to the extended travel for the benefit of the project).</p> <p>Collect agendas/minutes etc., papers with ack. to the project.</p> <p>Keep e-mails to support set-up of any visits (especially when the travel purpose is scientific collaboration).</p> <p>Encourage production of small mission reports, especially when the travel purpose is scientific collaboration.</p>
Visiting	Clearly justify all Visiting Experts costs.
Internal invoices	<p>Have a clear methodology for charging internal invoices and costs of shared facilities (labs):</p> <p>no additional costs (internal profit/overhead/taxes) can be charged.</p> <p>there must be clear lab costing (!).</p> <p>usual accounting practice has to be followed.</p> <p>all costs have to be accounted/booked.</p> <p>relevant supporting documents should be archived and available for audit.</p>
Personnel costs:	<p>Team members MUST have employment contract with HI and clear link to the project.</p> <p>There must be clear guidelines for Teleworking (there must be a clear HR procedure regarding this issue, not only one time solutions for ERC needs).</p> <p>There must be clear procedure regarding administrative support</p>

	<p>staff; these costs can be charged to ERC if this is the normal HI procedure and the costs are mentioned in the DoW. If the salary and productive time of administrative assistant is split between 2 projects, the auditors will check it carefully (with a personal interview and checking the situation on the faculty).</p>
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As summary, the best guidelines are those based on experience and exchange of knowledge. Therefore it is important to be proactive, seek advice as soon as issues arises and consider audit as opportunity for constructive dialogue and advice.

It is also crucial to have a very professional auditor working with your Institution (CFS), which can advise you constantly with controversial issues

8.3 How to prepare yourself for an “Audit of 1st level” in FP7 and H2020 *Mirella Collini*

As anticipated at the point 8, an audit could be of different types.

One of this is the audit of the first level, compulsory in order to obtain a CFS (Certificate on Financial Statement).

All the information on the CFS can be found on the Grant Agreement (GA):

- for H2020: art. 20.4 GA - Annex 5
- for FP7: art. II.4.4 – Annex D

I try to present this topic dividing in sub-paragraph questions and answers.

What is a CFS, how and when we have to submit it to EU?

CFS is an independent report of factual findings produced by an auditor in support of the payment requested by the beneficiary.

The CFS has to be submitted via the Participant Portal together with the beneficiary's Form C¹⁸ in periodic and final reports (could be both for FP7, only final for H2020).

A CFS is mandatory for every cost claim whenever the amount of the EU contribution is equal or superior to:

- EURO 325.000,00 in H2020 (not requiring interim certificates (only one at the end of the project per participant reaching the triggering ceiling); basing the triggering ceiling only on actual and unit costs (i.e. excluding flat rates, lump sums, etc).
- Euro 375.000,00 in FP7 (when cumulated with all previous interim payments (excluding pre-financing) for which a CFS has not been submitted. However for projects of a duration of 2 years or less, the CFS shall be submitted only for claims on final payments when the amount of the EC contribution claimed by a beneficiary is equal to or superior to Euro 375.000,00 when cumulated with all previous payments).

What auditors can issue the Certificate on the Financial Statement (CFS)?

All types of Beneficiaries and linked third parties are free to choose a **qualified external auditor** (including the statutory auditor) who is:

- independent

¹⁸ Forms C are financial statements where the beneficiary declares project costs of a specific reporting period.

- and qualified to carry out statutory audits of accounting documents (under the national legislation implementing the 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).

In H2020, for **Public bodies** only: it is possible to choose an independent public officer who has been granted (by the relevant national authorities) the legal powers to audit the beneficiary/linked third party.

Would the cost for a CFS be eligible?

As you've already read at point 8, the cost of producing a CFS is eligible, as long as it is mandatory and the related costs fulfill the eligibility conditions (i.e. for H2020 see Article 6.1 and 6.2).

Regarding the cost category in which you can claim the cost, it depends on two factors.

First of all if the project is under the FP7 or in H2020: in the first case, you have to claim the cost for the CFS under the category "Management – Subcontracting" and for this amount there are no indirect cost.

If you are under H2020 rule, you can claim the cost under:

- "Costs for other goods and services" if the certificate was issued by an **external** auditor.
- "Personnel costs" if the certificate was issued by an independent **internal** auditor. In this last case the cost results from multiplying the actual hourly rate applicable to him/her by the time spent for this activity (timesheet required).

In both these H2020 cases, indirect cost will be calculated also on the CFS cost.

What do you need to prepare for a 1st level audit?

Contrary to what happen for the other types (see point 8.1 and 8.2), you have to organize by yourself the first level audit and the time at your disposal is limited, since you have to upload the CFS on the Participant Portal by 60 days after the end of the reporting period.

Usually I start the audit preparation more or less one month before the end of the reporting period. Indeed, there are some documents that you have to prepare in advance and the procedure takes a lot of time.

The pre-audit procedure can be divided into three steps:

1. Selection of the auditor: a call for tender and the contract to the auditor you selected are the first thing you need to do; following the eligibility criteria foreseen by the GA and your internal procurement policy, you need to prepare a public call (if you are a public body) or – anyway – collect several (at least three) offers by different auditors and choose the one that guarantee the lowest price or the respect of the best-value-for-money principle. Your organization could decide to do a single call for all the projects that need a CFS (for example at the beginning of an year for all the projects ending by the end of the year); in any case the auditor must give you a specific CFS (and related invoice) for each project.

When the auditor accepts the assignment, s/he has to respect what is foreseen in the GA and the related Annex (5 or D). It is important underline both in the call and in the contract that a strong deadline must be respected.

This deadline is also for who prepares the documents: better you prepared them (in a good way, organized, completed, respectful of the eligibility criteria), faster will be the auditor's work and the CFS will be uploaded in due time.

2. The preparation of the CFS documents: the CFS is composed by 2 separate documents; the templates that you and the auditor have to use are at the Annex 5 for H2020 and D for FP7.

These two documents are:

- The **TERMS OF REFERENCE (ToR)**: it has to be signed by both the Beneficiary (or Third Party) and the Auditor. As best practice: in my University we fill in the ToR, print (two copies) and prepared it already signed by our side (usually this kind of documents are signed by the Director or Legal Representative who are not available at any time for a signature) before the first meeting with the auditor. The data are related the organization (name, address,...), the auditor (name, address) and the project (title, acronym, number of GA, periods, ...): all information that you already have.
- The **INDEPENDENT REPORT OF FACTUAL FINDING** (the Report): this must be prepared and signed only by the Auditor on his/her letterhead; it 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.

Another type of document that has to be prepared by the beneficiary and provide the Auditor is a written **representation letter** supporting the above two statements.

3. The documentation to be prepared: the documents that you have to prepare for an audit are more or less listed in the procedure of Annex 5 (or D).

- For any cost claimed, is necessary prepare all the supported documents foreseen in the AGA (for example for personnel costs: contracts, payroll, timesheet, ...). You can follow the list of the above point 8.1 and 8.2.
- Furthermore, it is necessary that you provide the auditor:
 - all the official documents related to the specific project: the GA signed, possible amendments, the Forms C, any reports that could help the auditor to understand if a cost is related or not to the specific action/project and respect the eligibility criteria required by EU (i.e. for travel or publication costs).
 - all the internal (of your organization) rules (travels rule, procurement internal process, timesheet procedure, ...).
- Last but not least, it is better if you provide the auditor the excel sheet or any work sheet you used for the preparation of the Form C and print the list of cost registered for the specific Action/Project from your accountability system.



Don't be afraid to give to the auditor copy of the excel table you use for the preparation of the Form Cs – better if with the formula and not only the amount of the cost.

How can you prepare the documentation?

The documents should be collected in some folders. Whether the documents are paper-based or electronic, the folders (or files) should be prepared in a

- logic
- accurate
- clear, and
- «elegant» order.

For example, if they are paper-based: on the right top of each document you have to write a code and prepare an index that guide the auditor when he needs to find that specific document.

If you need to send electronic files, save them with a specific numerical code in front, use different folder for each topic and prepare an index.

An example could be:

Project "Alfa" – GA n. XXXXX
Folder 0: Official documents
- 0.1 GA
- 0.2 DOW
- 0.3 Amendments 1
- 0.4 Contribution received
- 0.5 Distribution of the contribution (if coordinator)
- 0.6 Form Cs per each Reporting Period with related accepted cost declaration sent by the PO
- 0.7 Periodic Reports submitted
- 0.8

For the Financial documents for each cost category try to follow the numbers of the Procedures in the Annex 5 (or D).

For example, in case of H2020:

A. Personnel Costs (A.1 PI – A.1.1 contract PI, A.1.2 Timesheet of PI – A.1.2.1 timesheet year 1 - A.1.2.2 timesheet year 2, ;
A.2 Mr. X – full professor...)

B. Subcontracting (B.1 Subcontract Z – B.1.1 Selection Documents – B.1.2 Contract – B.1.3 Invoice – B.1.4 Payment receipts,)

C. Third Parties (if any)

D. Other Direct Costs:

D.1 Travels
D.2 Equipment
D.3 Other goods and Services

How can I be sure that I've prepared all the documents?

At my organization we use a check list that we prepared following the AGA. It is really very useful.

H2020 CHECK LIST			
FULL NAME OF THE BENEFICIARY			
NAME OF THE UNIVERSITY DEPARTMENT OR RESEARCH CENT			
PROJECT	GA. NUMBER	ACRONYM	
<input type="checkbox"/>	the FINAL proposal submitted		
<input type="checkbox"/>	Copy of all the documents required by the European Commission (EC) or agencies, under the power delegated by the EC (REA or ERCEA) during the Grant Agreement preparation phase: Declaration of Honour (final version, duly signed on line, downloaded from the participant portal) the requirements related to ethics issues (if applicable)		
<input type="checkbox"/>	The Grant Agreement (GA) duly signed online, including all the Annexes and amendments approved by the EC or agencies (to be downloaded by the Participant Portal)		
<input type="checkbox"/>	If applicable, the Consortium Agreement signed by all the beneficiaries including all the Annexes and amendments duly signed		
<input type="checkbox"/>	When UNIVERSITY NAME is the coordinator: the original copy duly signed by all the beneficiaries, including Annexes and amendments signed		
<input type="checkbox"/>	When UNIVERSITY NAME is a beneficiary: the original agreement duly signed by all the beneficiaries (or a copy, if the coordinator hasn't foreseen one original for each beneficiary) including all the Annexes and amendments duly signed by all the beneficiaries		
<input type="checkbox"/>	ERC projects:		
<input type="checkbox"/>	the original internal support letter signed by the Head of the Department or Research Center and the original Commitment letter submitted to the ERC at the proposal stage di proposta (the letter must be dated and signed by the Rector)		
<input type="checkbox"/>	The original Supplementary Agreement signed by the PI and the Rector		
<input type="checkbox"/>	Marie Skłodowska Curie IF		
<input type="checkbox"/>	Notification of the start date (if applicable)		
<input type="checkbox"/>	For the Global Fellowships, the partnership agreement signed by UNIVERSITY and the Outgoing Hosts, for all the other IF additional agreements signed with institutions hosting the researchers during the secondments foreseen in the project		
<input type="checkbox"/>	If applicable, questions on budget modification sent to the EC or agency and the related answers received		
<input type="checkbox"/>	Copy of all the queries sent to the EC and the answers received concerning budget transfers, changes or reallocation, amendment procedures etc.		
<input type="checkbox"/>	Reports submitted by UNIVERSITY to the EC or agencies		
<input type="checkbox"/>	Periodic and final activity reports, periodic final management reports, supplementary reports required by the Grant Agreement or Action		
<input type="checkbox"/>	All the Financial reports (Form C) sent to the EC or agency to be downloaded from the participant portal (the downloaded version per ogni periodo archiviare la copia scaricata dal participant portal		
<input type="checkbox"/>	All the Certificates on Financial Statement sent to the EC (or agencies) or to the Coordinator with the acknowledgment of receipt		

In addition, some days before the meeting with the Auditor, I ask one of my colleague to check the documentation I prepared following the above suggestions. During the meeting with the auditor, I'll show her/him how I've organized the folders and choosing random one document of each cost category, how I calculated the cost claimed using the excel sheet and the supported documents I had collected.

In conclusion, I perfectly agree with the summary of Marta Depczynska when, at the end of her point 8.2, suggest to be "proactive, seek advice as soon as issues arises and consider audit as opportunity for constructive dialogue and advice".

During my experience at University of Trento, I had several audits (both 1st and 2nd level) and during all of them I met a lot of professional people whom help me to understand and improve my knowledge and way to work.

The exchange of ideas, but also problems and related solutions, in a word sharing best-practices - is the best way that a financial manager/team has to grow and improve her/his work in managing European projects.

9 Synergies between H2020 and European and Structural and Investments Funds *Valeria Di Caro*

European Institutions consider the creation of synergies between the European Structural and Investment Funds (ESIF) and the funding programmes in the field of research, innovation and competitiveness directly managed by the European Commission – Horizon 2020 (H2020), COSME, Erasmus+, Creative Europe and EaSI - of utmost importance to maximize the impact and efficiency of public funding and face the increasing competitive pressure from global markets.

The European Commission elaborated a medium, long-term strategic framework integrating ESIF and the other research and innovation funding. The staff working document issued in March 2014¹⁹ provides recommendations to policy-makers and implementing bodies²⁰ to accomplish those synergies.

Based on the latter document, this chapter explores the concept of synergy between ESIF and H2020²¹, its implementation modalities and provides insights on its state of the art.

European Structural and Investment Funds (ESIF) include the financial tools²² for the implementation of the European cohesion policy (article 174 of the Treaty on the Functioning of the EU), whose goal is to promote the overall harmonious development of the EU member states, reducing the disparities between the levels of development of the various regions and the backwardness of the least favored regions. 366.8 billion euro were invested in the 2014-2020 cohesion policy. The 2014-2020 cohesion policy contributes to the Union strategy for smart, sustainable and inclusive growth (Europe 2020) and focuses on a limited number of common thematic objectives to ensure maximum impact for their investments: innovation and research, digital agenda, support for smart and medium-size businesses and low-carbon economy. In this framework, each region identifies its own strategy and priorities according to its competitive advantages, matching regional research and innovation strengths to business needs, so that emerging opportunities and market developments are addressed in a coherent way. This approach is defined as smart specialization.

The implementation modalities and the nature of projects carried out within the ESIF funds and H2020 are different, mainly due to a different level of implementation.

As a matter of fact, ESIF act mainly at a national and regional level, while H2020 is mainly centered managed by the European Commission.

¹⁹ *Enabling synergies between European Structural Funds and Investment Funds, Horizon 2020 and other research, innovation and competitiveness-related Union programmes. Guidance for policy-makers and implementing bodies*, European Commission, Directorate-General for Regional and Urban Policy, 2014, http://ec.europa.eu/regional_policy/sources/docgener/guides/synergy/synergies_en.pdf

²⁰ Public authorities at EU, national and/or regional levels defined by Member States, both involved in the design of smart specialisation and ESIF strategies (members of programme and monitoring committees, managing authorities in charge of designing and implementing ESIF programmes) and in charge of their implementation (agencies in charge of payments, control and audit, institutions involved in the implementation of policy instruments for research, innovation and competitiveness and intermediaries that facilitate access to funding).

²¹ Due to the scope of BESTPRAC, this chapter focuses on H2020, leaving aside the other funding programmes on research and innovation directly managed by the European Commission.

²² The ESIF include five thematic funds: the European Regional and Development Fund (readdressing the main imbalances as to investment and growth), the European Social Fund (human resources policies), the Cohesion Fund (transport and environment), the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund.

The following table shows the main differences between ESIF and H2020:

	HORIZON 2020	ESIF
Territorial coverage	Non-territorial. Geographical specificities are not taken into account. The projects are transnational, i.e. involve international consortia.	Locally-based. Projects and actions are addressed to specific regions and economic needs.
Geographical level of management	Directly managed by the European Commission or executive agencies and awarded directly to final beneficiaries.	Shared managed with national and regional public authorities (implementing bodies), which define the implementation details and allocate the funding to final beneficiaries.
Type of funded activities/actions	Individual research and innovation projects tackling the whole circle of innovation selected based on impact and excellence criteria related to strategic approaches at EU level (e.g. European Innovation Partnership).	Largely focused on improving the research and innovation capacities and eco-system with the objective of regional growth and place-based economic transformation towards higher added value and more knowledge-intensive activities.
Beneficiaries	Competitive calls for proposal addressed to multi-country consortia (to individuals within Marie Skłodowska-Curie actions and to SMEs within the SME instrument).	Policy-related prioritization based on cohesion considerations and smart specialization priorities to individual firms/bodies and consortia within the region. Calls and aid schemes based on selection are also applied.
State Aids	Not counted for EU State Aid purposes.	Counted for EU State Aid purposes.

9.1 Regulatory scope for synergies

The European Commission defines the concept of synergy between different EU funds as “joint or coordinated efforts to achieve greater impact and efficiency”²³.

The regulations of the 2014-2020 cohesion policy and H2020 contain a number of novelties that enable the synergic use of EU funds. Some provisions of Regulation 1303/2013, laying down common provisions for ESIF, explicitly allow the possibility to cumulate grants from different EU funding instruments for the same beneficiary or project (article 65.11). The same regulation states that synergies should be foreseen and regulated in the design phase of regional policies (in the partnership agreements²⁴, article 15.1b) as well as the operational programmes²⁵ (article 96.6a, article). The alignment of ESIF and H2020 cost models for corresponding costs and similar types of operations is also allowed (article 67.5b and 68.1.c).

²³ *Enabling synergies between European Structural Funds and Investment Funds, Horizon 2020 and other research, innovation and competitiveness-related Union programmes. Guidance for policy-makers and implementing bodies*, European Commission, Directorate-General for Regional and Urban Policy, 2014, http://ec.europa.eu/regional_policy/sources/docgener/guides/synergy/synergies_en.pdf, p. 3

²⁴ According to R 1303/2013, a partnership agreement is “a document prepared by a Member State with the involvement of partners in line with the multi-level governance approach [including public authorities, economic and social partner and relevant bodies representing civil society] which sets out that Member State’s strategy, priorities and arrangements for using the ESIF in an effective and efficient way”, article 2.20.

²⁵ In the framework of the Regional Cohesion Policy, the general strategy foreseen for each region is set in a document called strategic policy framework (article 2.2 of R 1303/2013). The operative arrangements for the implementation of such a strategy are contained in the operational programmes, which define priorities and specific objectives with the related financial support from the ESIF, national co-financing as well as quantitative, qualitative indicators and targets (article 26 and 27 of R 1303/2013).

Since the other EU research and innovation funds involve transnational actions and partnerships, article 96.3 of R 1303/2013 foresees “arrangements for interregional and transnational actions [...] with beneficiaries located in at least one other Member State”²⁶ in the operational programmes.

As for H2020, regulation 1290/2013, laying down the programme rules for participation, envisages the possibility to cumulate different grants for the same project at article 37.

Both article 65.11 of R 1303/2013 and article 37 of R 1290/2013 make reference to the **non-cumulative principle**²⁷: **H2020 and ESI funding shall not cover the same expenditure/cost item, to avoid double funding. A cost/expenditure item is here intended as the cost of the resources consumed for an action/project.**

The regulation also makes clear that the synergy of funding does not have to be intended as a substitution of co-funding that integrates a grant (non-substitution principle). Therefore, when combining two grants in the same project, the second cannot be the co-funding of the first.

The European Commission indicates different ways of combining H2020 and ESIF to create synergies. Those synergies are possible if the research and innovation topics involved are in line with the relevant regional and smart specialization strategy and are in detail:

1. Simultaneous/cumulative use of funds (i.e. combining ESIF and H2020 funds in the same project).

One beneficiary of a H2020 project can cover expenditures items - either costs that are not eligible within H2020 or eligible costs that are not submitted under this programme - by ESIF. In this case the ESIF support is subject to a separate grant agreement established according to ESIF regulations.

2. Parallel use of funds in separate projects (i.e. ESIF and Horizon 2020 funding run in parallel and are mutually supportive).

This is the case of two separate projects, one funded by H2020 and the other by ESIF, that investigate two issues of the same major topic. While the two projects are legally separated, synergies are developed through the targeted, parallel use of funds to create higher impact. In this context, the two projects have to be considered as part of a wider *operation*, intended as an activity consisting in different groups of projects²⁸ and actions (regulated by different contracts and grants) managed in a coherent manner.

3. Upstream sequential combination of funds (ESIF investment potentially enables H2020 successful proposal submissions)

ESIF investments on research and innovation capacities - i.e. capacity building in physical capital, innovation infrastructures and social capital – benefit regional actors and can increase their possibilities to submit a successful proposal within a H2020 call.

²⁶ *Enabling synergies between European Structural Funds and Investment Funds, Horizon 2020 and other research, innovation and competitiveness-related Union programmes. Guidance for policy-makers and implementing bodies*, European Commission, Directorate-General for Regional and Urban Policy, 2014, http://ec.europa.eu/regional_policy/sources/docgener/guides/synergy/synergies_en.pdf, p. 5

²⁷ The non-cumulative principle is stated in article 129 of regulation 966/2012 on the financial rules applicable to the general budget of the Union.

²⁸ A project is considered as “a temporary endeavor designed to produce predefined results with a defined beginning and end and has an identified and qualified project manager as well as identified related project costs”, *Enabling synergies between European Structural Funds and Investment Funds, Horizon 2020 and other research, innovation and competitiveness-related Union programmes. Guidance for policy-makers and implementing bodies*, European Commission, Directorate-General for Regional and Urban Policy, 2014, http://ec.europa.eu/regional_policy/sources/docgener/guides/synergy/synergies_en.pdf, p. 7

4. Downstream sequential combination (H2020 or FP project results are used or further developed through subsequent ESIF investments)

In this case, ESIF support the demonstration and exploitation activities – such as applied research, experimental development and prototyping, technology transfer, proof-of-concept, pilot lines for first production – related to successful FP7/H2020 projects and performed by regional actors that are part of the project consortium.

Pre-commercial public procurements²⁹ are also a way through which the outputs of the previous FP7/H2020 could be exploited. ESIF could also invest in the improvement of the regional innovation eco-system in order to facilitate the follow-up of successful research and innovation activities developed in FP7/H2020 projects. In particular, ESIF could bring the output of successful FP7/H2020 projects higher up in the technology readiness level scale³⁰ or closer to commercialization by investing on infrastructures (incubators), financial engineering (loans, guarantee, venture capital), research staff skills (entrepreneurial skills for researchers), targeted services (business advisory services), networking activities (brokerage events, “meeting the buyers” innovation events, etc).

5. Alternative funding through ESIF (H2020 projects that have been positively evaluated reoriented towards ESIF)

When a H2020 proposal has received positive evaluation but it is not funded in the framework of this programme for unavailability of funds the proposal can be financed by ESIF. Taken into consideration the scope of ESIF, the activities that those funds can support are related to applied research, development and demonstration activities, etc.

In this case, those that previously submitted the proposal has to resubmit it, adapting its content to the requirement of the ESIF selection procedures.

6. In the framework of the Maria Skłodowska-Curie Actions (MSCA) synergies with ESIF imply that the latter funds cover the costs that are considered ineligible in the MSCA funding scheme, such as infrastructures or large equipment, but also training events or networking activities.

This synergy is seen as a way to improve the regional attraction capacity of talented researchers and help remedying brain drain.

9.2 Conditions for the creation of synergies

Synergies between ESIF and H2020 imply a new conception and design of the European cohesion policies.

Due to the different nature of ESIF and H2020, which involve different geographical, thematic scopes, selection and implementing procedures, synergies are not possible without clearly planning them at the programming stage and foreseeing operative measures for the implementation stage.

Regional smart specialization and ESIF strategies and related documents should include H2020 activities, combining regional smart specialization objectives and H2020 actions. In particular, they should clearly identify which research and innovation activities/actions funded in the framework of H2020 are suitable to implement the regional smart specialization objectives. At the same time, smart specialization strategies should envisage operations that enable local stakeholders to be more competitive when submitting H2020 proposals, for instance investments to improve local research and innovation infrastructures and equipment.

²⁹ Pre-Commercial Procurement (PCP) is the procurement of research and development of new innovative solutions before they are commercially available, <https://ec.europa.eu/digital-single-market/en/pre-commercial-procurement>

³⁰ Technology Readiness Levels (TRL) are a type of measurement system used to assess the maturity level of a particular technology, i.e. its readiness to users (and thus to the market). There are nine technology readiness levels. TRL 1 is the lowest and TRL 9 is the highest.

The fulfillment of synergies between ESFI and H2020 is hindered by a series of practical, operative issues. The main ones have to do with the misalignment of submission deadlines and selection timelines and the lack of common financial reporting/cost schemes. Those issues need to be addressed and solved through dedicated operative measures that should be included in the operational programmes.

The European Commission suggests a system of conditional approval for ESIF grants as a way to align the timelines of the selection procedures. That means reserving ESIF budget until the results of the evaluation of H2020 proposals are known (generally 5 months after the submission deadline). Permanent open submission of applications for ESIF funding is suggested for simultaneous/cumulative use of funds, while prioritized selection procedures are recommended for H2020 proposals that have been successfully evaluated but cannot be funded due to lack of budget.

The European Commission pushes for an alignment of the content and selection criteria for ESIF funding to H2020 types of activities, cost models, eligibility rules, reporting and audit requirements. A system to alleviate workload for beneficiaries in terms of financial management, reporting and audits should also be envisaged.

9.3 Awareness raising and involvement

Synergies between H2020 and ESIF are a new conception of cohesion policies that is complex to understand both for national and regional implementing bodies and (potential) beneficiaries. Developing knowledge on the functioning of ESIF, H2020 and the ways to implement synergies is key.

For this reason, national and regional implementing bodies should first of all raise awareness vis à vis their staff and offer them knowledge and competences to operate. Secondly, awareness raising activities, training and advice should be provided to stakeholders and potential beneficiaries.

The European Commission suggests to establish advisory services (on how to access EU programmes, to explore project feasibility, to support potential H2020 applicants), information sessions/material on research and innovation support programmes and the creation of sectorial, inter-sectorial interest groups and alumni clubs of former and current regional beneficiaries.

Programme National Contact Points, the Enterprise Europe Networks are suitable actors to manage those awareness raising and support actions.

The involvement of regional research and innovation stakeholders is key in implementing ESIF and H2020 synergies. National and regional implementing bodies need to map stakeholders, potential beneficiaries (e.g. innovative entrepreneurs/start-ups, hidden champions or persons with an entrepreneurial potential) and set up information systems to allow them to exploit synergies opportunities (including online supports).

Having a clear picture of the performance of their regions in H2020 is key for national and regional implementing bodies to detect stakeholders, potential beneficiaries and be aware of the projects which can benefit from synergies between H2020 and ESIF. It also helps an entrepreneurial discovery process³¹ in the elaboration of regional cohesion and smart specialization strategies, involving regional champions, that are the target of H2020.

³¹ The EDP is an inclusive and interactive bottom-up process in which participants from different environments (policy, business, academia, etc) are discovering and producing information, identifying potential opportunities that emerge through this interaction, while policymakers assess outcomes and ways to facilitate the realisation of this potential. The European Commission considers this approach key to identify priorities and elaborate policy strategies in the framework of the smart specialisation.

The European Commission and the national agencies and H2020 contact points can offer detailed reports and documentation that would make such mapping possible.

9.4 Fulfillment of synergies between ESIF and H2020

As mentioned in the second paragraph, ESIF imply a shared management between the European Commission and national and regional implementing bodies. In particular, the policy planning (elaboration of strategic policy frameworks and operational programmes) is fulfilled by national and regional bodies and approved by the European Commission. The implementation of the ESIF is carried out by the regional bodies. The latter are free to decide the modalities of implementation of the ESIF (including the auditing), provided that they are compliant with the provisions contained in the strategic and operational documents.

Due to the shared management of ESIF, the role of national and regional implementing bodies is pivotal in the fulfillment of synergies between these funds and H2020. The role of the European Commission consists in giving impetus to those synergies by providing a not binding framework and guidance.

The European Commission elaborated a medium to long-term strategic framework/vision integrating ESIF with the research and innovation funding directly managed by the European Commission. In this context, the resources of the ERDF in the 2014-2020 programming period are focused on research and innovation and considered a key instrument to fulfill the objectives of the Innovation Union flagship³² together with H2020.

In 2014 the European Commission (Directorate-General for Regional and Urban Policy) issued a staff document called “Enabling synergies between European Structural Funds and Investment Funds, Horizon 2020 and other research, innovation and competitiveness-related Union programmes”. This documents is addressed to policy-makers and national and regional implementing bodies to make them aware of the importance of synergies and suggests operative measures to enable them.

In particular, the document clarifies the concept of synergies, describes the modalities of its fulfillment and provides recommendations on support tools, project formats, reporting and audit requirements to make them possible.

There is no official monitoring/report on how national and regional implementing bodies are implementing synergies between ESIF and H2020, so it is not possible to assess the state of the art and whether the single regions managed to satisfy the conditions described in the previous paragraph.

A survey on the implementation of ESIF projects has been carried out in the framework of BESPRAC³³. The survey involves 37 respondents (86.5% of which universities) that are part of the BESPRAC network in 21 European countries. Due to the small sample, it is not possible to make generalization but the output gives us an idea of the main shortcomings that beneficiaries encounter in submitting, managing and implementing projects funded by the ESIF in synergy with H2020.

³² The Innovation Union flagship is one of the initiatives that composes Europe 2020 strategy, whose aim is to “create an innovation-friendly environment that makes it easier for great ideas to be turned into products and services that will bring our economy growth and jobs” (Innovation Union website page, http://ec.europa.eu/research/innovation-union/index_en.cfm).

³³ The survey “Survey on European Structural and Investment Funds” was conducted by Dace Kārkle (Latvian Institute of Organic Synthesis), Ewelina Wronka (University of Łódź, Poland), Jaco de Graaf (Leiden University Medical Centre, the Netherlands), was presented during the WG1/WG2/WG3 meeting of BESTPRAC in Sofia (10-11 March 2016).

The first part of the survey, concerning projects entirely funded by ESIF, shows that the main obstacles for participation in the ESIF project calls are:

- complex bureaucratic application and project implementation procedures (86.2% of the respondents),
- delayed implementation of the ESIF funding instruments (62.1% of the respondents)
- frequently changing rules and regulations (56.7% of the respondents)
- inefficient administration (53.3% of the respondents)

As for the implementation stage of ESIF projects, according to the respondents of the survey, the main difficulties are related to:

- high administrative workload (83.3% of the respondents)
- lack of clearness as to eligibility of costs (58.6% of the respondents)
- complicated procedures for construction and/or equipment purchase (58.6% of the respondents)

Most respondents (80% of the respondents) believe designing actions financed under ESIF in synergy with H2020 is feasible.

According to the respondents, the main obstacles to implement synergies are:

- lack of transparency in the financial rules leading to inability to avoid overlaps with other instruments (83% of the respondents)
- lack of national actions complementary to H2020 (83% of the respondents)
- fear that auditors will not be able to distinguish clearly what was funded under ESIF and what was funded under H2020 (67% of the respondents).

The first two elements point out lack of systematization in the strategies and measures envisaged to enable synergies between ESIF and H2020, as perceived by the respondents involved (as we explained above we cannot generalize due to the small sample).

9 WG2 "Finance" Members

This Guidelines presents the result of the first two periods of the BESTPRAC Project and the active contribution of following WG2 members³⁴:

Sonja Alles, University of Hannover, Germany

Per Inge Andresen, Norwegian University of Science and Technology, Norway

Alexandra Attard, University of Malta, Malta

Mirella Collini, University of Trento, Italy

Dirk De Craemer, Ghent University, Belgium

Meike Dlaboha, Weihenstephan-Triesdorf University of applied sciences, Germany

Marta Depczynska, Technion Research & Development Foundation, Israel

Valeria Di Caro, Politecnico di Torino, Italy

Claire Faichnie, University of Manchester, United Kingdom

Géraldine Leonard, Université d'Orléans, France

Katarzyna Markiewicz-Sliwa, Silesian University of Technology, Poland

Chelo Morán, Universidad Carlos III de Madrid, Spain

Staska Mrak Jamnik, University of Ljubljana, Slovenia

Vanessa Ravagni, University of Trento, Italy

Wolfram Rieneck, Medical University Innsbruck, Austria

Jonne Ritari, University of Turku, Finland

Maddalena Tognola, University of Bern, Switzerland

Dennis van Doorn, TU Delft, Netherlands

Cristina Velasco, Universidad Carlos III de Madrid, Spain

³⁴ More on <http://www.bestprac.eu/working-groups/wg2-finance/members/>