HORIZON 2020

H2020 Audits and Results
Helsinki, 7th November, 2019

Gheorghe Bancos
Common Audit Service (CAS)
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1. H2020 Internal Control Framework

Building blocks of the ICS for H2020

- Audit strategy
- Ex-post audits
- Ex-ante checks
- Project and contract management
- Procedures for selecting
- Scientific evaluation
1. H2020 Internal Control Framework

Legal basis for ex-post audits

- Article 29 of the H2020 Regulation of 11 December 2013
- Article 22.1 of the H2020 Model Grant Agreements

External audits ARE NOT:

- Agreed Upon Procedures performed by CFS auditors
- Controls done by operational officers on deliverables
- Controls done by financial officers on Financial Statements (Forms C)

Ex-post controls:
- in-house (CAS) ±25%
- outsourced (EAFs) ±75%

Ex-ante controls:
- 

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

22.1 Checks, reviews and audits by the [Agency or the] Commission

22.1.1 Right to carry out checks

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

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

The [Agency or the] Commission may also request additional information in accordance with Article 17. The [Agency or the] Commission may request beneficiaries to provide such information to it directly.

Information provided must be accurate, precise and complete and in the format requested, including electronic format.
1. H2020 Internal Control Framework

Framework for H2020 ex-post audits

One set of rules MGA

One set of annotations AMGA

One governing body
Common Implementation Centre (CIC)*
AND
One Common Audit Service (CAS) performing the audits

One Indicative Audit Programme
AND
One set of consequences of findings
applied by CAS, KPMG, PwC, and Moore Stephens (now BDO)

Equality of treatment

Consistency of audit reports

Legal certainty
1. H2020 Internal Control Framework

Research and Innovation Family – 20 entities

DGs

**In:**
- DG RTD
- DG CNECT
- DG GROW
- DG HOME
- DG ENER/MOVE*
- DG AGRI*
- DG EAC*
  * Implement budget via EAs

EAs

- REA
- ERCEA
- EASME
- INEA

JUs

- CleanSky
- IMI
- ECSEL
- BBI
- FCH
- Sesar
- Shift2Rail

Other

- GSA - Prague
  (Regulatory Agency)

**Out:**
- EIT - Budapest
- ESA
- P2Ps (Article 185)
- EIB
1. H2020 Internal Control Framework

**H2020 Budget Share**

<table>
<thead>
<tr>
<th>Group</th>
<th>€ million</th>
<th>%</th>
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<tbody>
<tr>
<td>RDGs</td>
<td>18,940</td>
<td>30%</td>
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<tr>
<td>RTD</td>
<td>9,414</td>
<td>14.8%</td>
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<tr>
<td>CNECT</td>
<td>8,328</td>
<td>13.1%</td>
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<tr>
<td>GROW</td>
<td>651</td>
<td>1.0%</td>
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<tr>
<td>HOME</td>
<td>160</td>
<td>0.3%</td>
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<tr>
<td>ENER</td>
<td>261</td>
<td>0.4%</td>
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<tr>
<td>AGRI</td>
<td>85</td>
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<tr>
<td>MOVE</td>
<td>39</td>
<td>0.1%</td>
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<tr>
<td>FAC</td>
<td>1</td>
<td>0.0%</td>
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<table>
<thead>
<tr>
<th>Agencies</th>
<th>€ million</th>
<th>%</th>
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<tbody>
<tr>
<td>REA</td>
<td>12,825</td>
<td>20.2%</td>
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<tr>
<td>ERCEA</td>
<td>12,629</td>
<td>19.9%</td>
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<tr>
<td>EASME</td>
<td>6,374</td>
<td>10.0%</td>
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<tr>
<td>INEA</td>
<td>5,603</td>
<td>8.8%</td>
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<tr>
<td>GSA*</td>
<td>80</td>
<td>0.1%</td>
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</table>

<table>
<thead>
<tr>
<th>Joint Undertakings</th>
<th>€ million</th>
<th>%</th>
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<tbody>
<tr>
<td>CleanSky2</td>
<td>1,704</td>
<td>2.68%</td>
</tr>
<tr>
<td>IMI2</td>
<td>1,638</td>
<td>2.6%</td>
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<tr>
<td>ECSEL</td>
<td>1,167</td>
<td>1.8%</td>
</tr>
<tr>
<td>BBI</td>
<td>975</td>
<td>1.5%</td>
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<tr>
<td>FCH2</td>
<td>665</td>
<td>1.0%</td>
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<tr>
<td>SESAR2</td>
<td>585</td>
<td>0.9%</td>
</tr>
<tr>
<td>SHIFT2RAIL</td>
<td>398</td>
<td>0.6%</td>
</tr>
</tbody>
</table>

**Grand Total** 63,584 100%

*Budget is part of DG GROW budget*
2. H2020 Audit Strategy

Why an Audit Strategy?

DECLARATION OF ASSURANCE
I, the undersigned,
Acting Director-General of Research and Innovation
In my capacity as authorising officer by delegation
Declare that the information contained in this report gives a true and fair view. State that I have reasonable assurance that the resources assigned to the activities described in this report have been used for their intended purpose and in accordance with the principles of sound financial management, and that the control procedures put in place give the necessary guarantees concerning the legality and regularity of the underlying transactions.

This reasonable assurance is based on my own judgement and on the information at my disposal, such as the results of the self-assessment, ex-post controls, the limited conclusion of the Internal Auditor on the state of control, the observations of the Internal Audit Service and the lessons learnt from the reports of the Court of Auditors for years prior to the year of this declaration. Confirm that I am not aware of anything not reported here which could harm the interests of the institution.

However the following reservations should be noted:

☐ Payments in reimbursement of cost claims under the Seventh Framework Programme;
☐ Payments in reimbursement of cost claims under the Research Fund for Coal and Steel.

Brussels, the 28 March 2019
[Signed in ARES]
Jean-Eric Paquet
Director-General DG RTD
Assessment elements

- Assessing L&R of H2020 project payments

- Residual error rate – acceptable level

**General control objective**: To get a residual error rate as close as possible to 2%, without necessarily expecting it to get under 2%.
The H2020 Audit Strategy takes into account the H2020 Regulation which considers that:

"a revised control strategy, shifting focus from minimisation of error rates towards risk-based control and fraud detection, should reduce the control burden for the participants".

Audits may be started up to two years after the payment of the balance.

Extension of audit findings cannot apply to grant agreements for which the payment of the balance occurred two years or more before the date of the letter of conclusion.

As an indication: a maximum of 7% of the number of beneficiaries to be audited during H2020.

The creation of the CIC (previously CSC) - and the CAS in particular – should allow a better coordination of Horizon 2020 audits and avoid over-auditing the beneficiaries.
2. H2020 Audit Strategy

**Corporate approach (single programme)**

- **Common Audit Service (CAS)**
  
  \( \frac{3}{4} \) external, \( \frac{1}{4} \) internal

- Common Representative Audit Sample (CRS)
  
  *Estimate the overall level of error*

- Common Representative Error Rate

- Common Anti-Fraud strategy
2. H2020 Audit Strategy

Methodology – 3 sampling layers

1. Corporate sample
2. Additional sample
3. Article 10 sample

Compl. by Risk based sample
Methodology – (1) Corporate sample

- Common Representative Audit Sample (CRS)
- Monetary Unit Sampling (MUS)
- Risk based audits / 'Corrective audits'
  - Audits of biggest ('top') beneficiaries
  - Cross-cutting specific risks: preceding audit findings, high amounts, large proportion of subcontracting, new beneficiaries, SMEs, entities with a high dependency on EU-funds, etc.
  - Audits on request
  - Fraud-risk audits
2. H2020 Audit Strategy

Methodology – (2) Additional sample

- Depends on the requirements of specific implementing entities to obtain a certain level of direct audit coverage

- Coverage:
  - Specific grant agreements: MSCA and ERC grants
  - Separate discharge procedure: JUs and GSA

- The selection is done by CAS based on the specific requirements of the stakeholders
  - H2020 Working Arrangements
Condition: if the audits under the 2 first layers are not sufficient for the JUs

Additional ex-post audits
Indicators on L&R for H2020

- Overall Detected Error Rate
- Representative Error Rate for the Framework Programme (RepER%)

Residual Error Rate = Non-systematic error rate
3. Audit Process

Audit Strategy and Planning

Example: 100 audits selected

External Audit Firms (outsourced)
80 audits

KPMG
CoI & capacity check for 80 audits
OK = 50 audits

KPMG performs 50 audits

PwC
CoI & capacity check for 30 audits
OK = 20 audits

PwC performs 20 audits

Moore Stephens (now BDO)
CoI & capacity check for 10 audits
OK = 8 audits

Moore Stephens performs 8 audits

CAS (own resources)
20 audits

CAS performs 2 audits

Cascade principle
3. Audit Process

Audit Process

- Audit Strategy & Selection
- Audit Planning & Preparation
- Examination on site
- Implementation of Audit Results
- Reporting & Audit Closure
3. Audit Process

Audit Process – planning and preparation

- Set fieldwork dates
- Prepare Audit Planning Memorandum (APM)
- Prepare and send Letter of Announcement (LoA)
  - Request information (Annexes to LoA)
- Collect audit evidence (Internal Control Questionnaire – Annex II LoA, Breakdown of costs – Annex III LoA, other evidence – Annex I LoA)
- Sampling
3. Audit Process

Audit process – Examination on site

Opening meeting → Systems Analysis → Systems and substantive testing → Closure meeting → Assessment after field-work

Usually during 4-5 working days (one week)

General information on:
- organisation
- projects
- financial administration
- internal control systems

Audit agenda for the week

Collection of information and audit evidence, analysis of documents, interviews with researchers, project presentations, physical inspections, etc.

Discussion on preliminary audit findings and observations

Indication of further audit procedure

(…).
Examination – Personnel Costs

**Hours Worked** (15.9% of errors) \( \times \) \[ \frac{\text{Total Personnel Costs}}{\text{Total Productive Hours}} \] (13.4% of errors) (13.1% of errors)
3. Audit Process

**Examination – Travel & ODC**

**Other goods and services**
- Actually incurred (documentation)
- Ensure best value for money and avoid conflict of interests
- Directly related to the action

**Equipment**
- Ensure best value for money and avoid conflict of interests
- Directly related to the action

**Travel**
- Actually incurred (documentation)
- Directly related to the action
3. Audit Process

Audit process – reporting & closure

1. Preliminary Audit Report (PAR)
   ✓ review by CAS (incl. quality control)
   ✓ consult internally (operational units)

2. Contradictory procedure
   ✓ scrutinise preliminary findings and recommendations
   ✓ submit appropriate, sufficient and persuasive evidence

3. Draft Audit Report (DAR) incorporates beneficiary's comments
   ✓ review by CAS (incl. quality control)
   ✓ scrutinise and address all comments
   ✓ consult internally (units managing the actions, legal advice, internal committees etc.)

4. Final Audit Report (FAR)

5. Letter of conclusion

Implementation of audit findings
Managed by the EC operational services (not the CAS)
4. Audit results

State of Play as of 30th October 2019

• Overall the CAS closed 820 H2020 audits, related to 1821 participations

• In Finland
  • 18 audits closed, related to 40 participations
  • 6 open audits, related to 21 participations

• Figures represent:
  • Value % against all negative adjustment
  • Indirect costs excluded
  • No reclassification

Please consider them with prudence! They are only 20.23% of the multiannual goal of 9000 audited participations of the H2020 Audit Strategy.
Personnel costs – actual costs (52,0% of all adjustments) due to:

- Incorrect time claimed (12,8%)
- Incorrect remuneration costs (11,7%)
- Incorrect productive hours calculation (8,7%)
- Double Charging, double funding (4,6%)
- Other – No valid supporting documents, unreliable/missing timesheets (14,2%)

Personnel costs – unit costs (11,4% of all adjustments) due to:

- Incorrect productive hours calculation (4,4%)
- Incorrect time claimed (3,1%)
- Incorrect remuneration costs - e.g. budgeted, estimated (1,7%)
- Other – No valid supporting documents, indirect costs claimed as direct costs, unreliable/missing timesheets (2,2%)
4. Audit results – Overall 2/3

**Subcontracting** (11,0% of all adjustments) due to:
- Lack of adequate supporting documents (5,5%)
- Not foreseen in Annex I nor agreed by EU services (1,8%)
- Other – including e.g. no value for money (3,7%)

**Other goods and services** (13,5% of all adjustments) due to:
- Lack of adequate supporting documents (7,4%)
- Cost not related to the action (2,4%)
- No direct measurement of the cost (0,9%)
- Other - indirect costs claimed as direct costs, no value for money (2,8%)
## 4. Audit results – Overall 3/3

### Equipment (6,0% of all adjustments) due to:
- No direct measurement of the cost (2,3%)
- Cost not related to the action (0,8%)
- Other – e.g. indirect costs claimed as direct costs (2,9%)

### Travel (2,0% of all adjustments) due to:
- Lack of adequate supporting documents (0,6%)
- Cost not related to the action (0,6%)
- Other – e.g. lack of adequate supporting documents (0,8%)

### Large research infrastructure (2,5% of all adjustments) due to:
- Lack of adequate supporting documents (2,3%)
- Other – e.g. agreed methodology not applied (0,2%)
4. Audit results – Finland 1/2

Personnel costs – actual costs (5,1% of all adjustments) due to:
- Incorrect remuneration costs (4,4%)
- Incorrect productive hours calculation (0,7%)

Personnel costs – unit costs (7,2% of all adjustments) due to:
- Incorrect remuneration costs (6,7%)
- Incorrect time claimed (0,5%)

Subcontracting (25,9% of all adjustments) due to:
- No value for money (25,9%)
4. Audit results – Finland 2/2

Other goods and services (53.8% of all adjustments) due to:
- Lack of adequate supporting documents (19.4%)
- Cost not related to the action (18.0%)
- Indirect costs claimed as direct costs (9.5%)
- Other errors (6.9%)

Travel (7.9% of all adjustments) due to:
- Lack of adequate supporting documents (6.6%)
- Cost not related to the action (0.6%)
- Other errors (0.7%)
4. Audit results

Declared costs vs Errors (January 2019)

Declared costs

- Personnel costs: 75%
- Other Goods and Services: 13%
- Equipment: 5%
- Travel: 4%

Errors

- Personnel costs: 67%
- Other Goods and Services: 11%
- Equipment: 13%
- Travel: 3%
Online Information

At: http://ec.europa.eu/research/participants/portal/desktop/en/home.html

- Horizon 2020 Annotated Grant Agreement

- Horizon 2020 On-line Manual
  https://ec.europa.eu/research/participants/docs/h2020-funding-guide/index_en.htm

- Indicative Audit programme (IAP):

- Questions? Research Enquiry Service
  http://ec.europa.eu/research/enquiries
Thank you!

Find out more:
http://ec.europa.eu/programmes/horizon2020/