DG REGIO – Preventing fraud and corruption in the European Structural and Investment Funds – taking stock of practices in the EU Member States

Study on the implementation of Article 125(4)(c) of the Regulation (EU) No 1303/2013 laying down the common provisions on the European Structural and Investment Fund in Member States

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List of Acronyms

Acronym	Description
AA(s)	Audit authority(ies)
AFCOS	Anti-Fraud Coordination Service
CA(s)	Certifying authority(ies)
CF	Cohesion Fund
CPI	Corruption Perception Index, by Transparency International
CPR	Common Provisions Regulation
DG	Directorate-General
EAFRD	European Agricultural Fund for Rural Development
EC	European Commission
EMFF	European Maritime and Fisheries Fund
ERDF	European Regional Development Fund
ESF	European Social Fund
ESI Funds	European Structural and Investment Funds
EU	European Union
FEAD	Fund for European Aid to the Most Deprived
FRA	Fraud Risk Assessment
GANTT	A type of bar chart, devised by Henry Gantt
INTERREG	Brand name that is used to refer to the European Territorial Cooperation (ETC) which is funded by European Regional Development Fund
IB(s)	Intermediate body(ies)
MA(s)	Managing authority(ies)
MCS	Management and control system
MS	Member State(s)
NAFS	National Anti-Fraud Strategy
OECD	Organisation for Economic Co-operation and Development
OLAF	Office Européen de Lutte Antifraude / European Anti-Fraud Office
OP(s)	Operational Programme(s)
DG REGIO	Directorate-General for Regional and Urban Policy
TFEU	Treaty on the Functioning of the European Union
YEI	Youth Employment Initiative

1. Introduction

1.1   Context

With approximately EUR 460 billion allocated for the 2014-2020 programming period, the European Structural and Investment (ESI) Funds (consisting of the Cohesion Fund (CF), the European Regional Development Fund (ERDF), the European Social Fund (ESF), the European Agricultural Fund for Rural Development (EAFRD), and the European Maritime and Fisheries Fund (EMFF)) represent almost a third of the EU budget.[1]

ESI Funds finance operational programmes (OPs) in Member States (MS), each aimed at achieving specific objectives within the areas defined as EU priorities. 380 OPs[2] are funded through ESI Funds for the 2014-2020 programming period and managed by competent authorities within each EU Member States.

The European Commission (EC) and MS share responsibilities for the implementation and management of ESI Funds, and both must ensure funds are spent properly and achieve the greatest possible impact. Moreover, they must put in place the proper safeguards to limit the risks of fraud and corruption. Fraud affecting the Union's financial interests is defined in detail in Article 3 of Directive (EU) 2017/1371 on the fight against fraud to the Union's financial interests by means of criminal law; in a generalised and simplified manner, fraud may be characterised as the deliberate act of deception intended for personal gain or to cause a loss to another party. A definition of corruption used by the EC is the abuse of (public) position for private gain.[3] Example of fraudulent and corrupt practices can include but are not limited to conflict of interest, double funding, bribery or falsification of documents.[4]

MS authorities have the legal obligation to safeguard EU funds as per Article 325 of the Treaty on the Functioning of the European Union and Article 59(2) of the Financial Regulation. This obligation was specified and reinforced in 2013 via Article 125(4)(c) of the Common Provisions Regulation (CPR). Article 125(4)(c) requires the implementation of risk-based, effective and proportionate measures to prevent fraud when managing and controlling the OPs.

The present study focuses on the implementation of this article in MS.

1.2   Background information

Three key authorities within MS are responsible for managing and controlling operational programmes (OPs). These authorities include the managing authorities (MAs), certifying authorities (CAs), and audit authorities (AAs). In addition, each MS possesses an anti-fraud co-ordination service (AFCOSs). Throughout the present report, we refer to these bodies as "authorities."

- MAs are responsible for managing one or several OPs in accordance with the principle of sound financial management. The MA is also ultimately responsible for putting effective and proportionate anti-fraud measures in place taking into account the risk identified.

- CAs are responsible for, amongst others, drawing up and submitting payment applications to the EC, and certifying that they result from reliable accounting systems, are based on verifiable supporting documents, and have been subject to verifications by the MA.

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[1] See https://cohesiondata.ec.europa.eu/overview

[2] See the full list of OPs at http://s3platform.jrc.ec.europa.eu/esif-viewer

[3] See p7 https://ec.europa.eu/sfc/sites/sfc2014/files/sfc-files/guidance_fraud_risk_assessment.pdf

[4] European Commission. European Structural and Investment Funds, Guidance for Member States and Programme Authorities, Fraud Risk Assessment and Effective and Proportionate Anti-Fraud Measures, June 2014

Additionally, they are responsible for certifying the completeness, accuracy and veracity of the accounts and that the expenditure entered in the accounts complies with applicable law.

- AAs ensure that audits are carried out on the proper functioning of the management and control system (MCS) of the OP. As a part of the assurance that the AAs give, they have the obligation to verify and monitor how the MA complies with Art. 125(4)(c) of the CPR. Auditors have a key role (both an audit and an advisory role) in providing an opinion on the functioning of management and internal control systems for ESI Funds OPs. They have an obligation in the fight against fraud and must assist the MS in preventing, detecting and correcting irregularities and fraud.

- The OLAF Regulation[5] requires the MS to designate a service ('the anti-fraud coordination service' - AFCOS) to facilitate effective cooperation and exchange of information, including information of an operational nature, with OLAF[6] (Article 3 (4) of the OLAF Regulation). Following this requirement to establish an AFCOS[7], the EC has issued a Guidance Note on the main tasks and responsibilities of an AFCOS. It has to be kept in mind that in each country, the set-up, role and functions of AFCOS differ in many ways.

MAs and CAs may also delegate some of their duties to intermediate bodies (IBs). An IB is any public or private body which acts under the responsibility or carries out duties on behalf of an MA (or sometimes a CA).

Article 325 of the Treaty on the Functioning of the EU[8] stipulates that both the EC and MS must put in place measures to protect the EU's financial interests against fraud and corruption. In the framework of ESI Funds, the Common Provisions Regulation (CPR) is the main binding legal framework. It defines common rules for the management and control of ESI Funds. It establishes a shared management of ESI Funds between the EC and MS and places specific requirements on both counterparts with respect to curbing fraud and corruption.

Importantly, the 2014-2020 programming period calls for changes and efforts in MS' management and control systems of ESI Funds, including strengthening the audit trail of funds' operations and MS' accountability, and curbing fraud and corruption activities. Article 125(4)(c) of the CPR requires that MAs put in place effective and proportionate anti-fraud measures, taking into account the risk identified.

With a view to providing assistance and recommendations to MS in properly carrying out their fraud risk assessment FRA, the EC has developed guidance and template material and organised anti-fraud seminars and events[9] aimed at relevant national authorities. The EC guidance package contains one main guidance note, "Fraud Risk Assessment and Effective and Proportionate Antifraud Measures," complemented by four annexes on specific aspects of anti-fraud. The guidance mentions the legal basis and includes definitions and key concepts and explanations on the FRA process. It also outlines the minimum standards MAs are recommended to comply with, in designing an effective anti-fraud policy covering the full anti-fraud cycle (prevention, detection, reporting and prosecution).

The first annex is composed of a FRA template spreadsheet and of instructions on how to use it. The FRA template spreadsheet consists of a self-assessment tool for MAs developed and

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[5] Regulation (EU, EURATOM) No 883/2013 of the European Parliament and of the Council of 11 September 2013 and repealing Regulation (EC) No 1073/1999 of the European Parliament and of the Council and Council Regulation (Euratom) No 1074/1999.

[6] Article 3 (4) of the OLAF Regulation No 883/2013, available at: http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2013:248:FULL:EN:PDF

[7] Ref. Ares (2013)3473285 - Guidance note on main tasks and responsibilities of an Anti-Fraud Co-ordination Service (AFCOS), 13/11/2013.

[8] Treaty on European Union and the Treaty on the Functioning of the European Union, available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:12012E/TXT&from=EN

[9] Fraud Risk Assessment and Effective and Proportionate Anti-Fraud Measures' Annexes, available at: http://ec.europa.eu/regional_policy/en/information/publications/guidelines/2014/fraud-risk-assessment-and-effective-and-proportionate-anti-fraud-measures

recommended by the EC for carrying out the FRA. The spreadsheet is structured around the four key processes identified by the EC as those are the ones most prone to risks of fraud and corruption, namely:

1. Selection of applicants;
2. Implementation and verification;
3. Certification and payments;
4. Direct procurement process (where relevant: not all MAs carry out direct procurement processes).

For each key process, the most frequent fraud and corruption risks and sub-risks are listed, their level is indicatively assessed, and mitigating control measures are proposed. The template also leaves the flexibility to authorities to add new risks and new mitigating measures, and to fill in a 'planned new controls" section, in case a risk would remain significant or critical despite the existing mitigating measures.

The second part of the annex, named 'How to use this self-assessment tool', guide the authorities through the entire process of using the FRA tool.

A second annex provides an overview of all the mitigating controls recommended by the EC (EC-recommended measures) categorised by key processes, which MAs can use to address fraud risks identified during their self-assessment.

Annex 3 proposes a template to guide MAs in designing an anti-fraud policy. Finally, in Annex 4, AAs are provided with a template checklist for assessing MAs' compliance with Article 125(4)(c) of the CPR.

In addition to this package, the EC has published:
- a guidance for MS on designation procedures[10], for the programming period 2014-2020. It clarifies the requirements for MA's and AA's with regard to Article 125(4)(c) in the context of the designation process[11];
- a note on fraud indicators for ERDF, ESF and CF, published in 2009 and which provides for each fraud risk a non-exhaustive list of indicators or red flags.

Components of a comprehensive anti-fraud approach

With all of the above guidance and proposed mitigating measures at hand, it is the responsibility of MS authorities to develop a comprehensive anti-fraud approach that addresses their specific needs. Such a comprehensive approach should include a combination of prevention and detection measures.

Prevention is critical to the fight against fraud. It is easier and more cost-effective to prevent fraud than to detect it. **Prevention measures** promote an ethical, anti-fraud culture and guide public employees and beneficiaries through the system. **Detection measures** exist to allow potentially fraudulent behaviour to be identified and investigated.

For this study, we have grouped the prevention and detection measures into three categories depending on their focus and impact. All mitigating measures are categorized as either **soft measures**, **hard measures** or **verification measures**, as shown at the figure below.

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[10] The Guidance for Member States on Designation Procedure is available at
http://ec.europa.eu/regional_policy/sources/docgener/informat/2014/guidance_ms_designation_en.pdf

[11] The designation procedure and designation criteria are set up in the Art. 123 and Art. 124 of the CPR (Reg. (EU) N° 1303/2013) and in the Art. 21 of the European Territorial Cooperation (Reg. (EU) N° 1299/2013).

Figure 1: Typology of measures in the comprehensive anti-fraud system
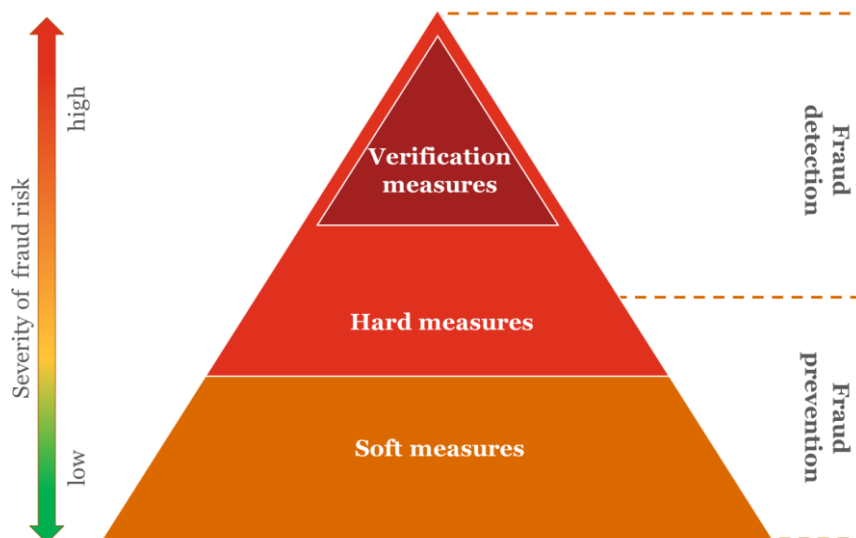
Source: PwC

Soft measures are the **passive or intangible** aspects of an anti-fraud approach that establish how things should or should not be done, such as trainings for staff, established processes for managing funds, and having a code of ethics for employees. Soft measures form the necessary basis of a comprehensive anti-fraud approach, and should be implemented irrespective to the severity of the risk. However, in cases of higher fraud risk, soft measures may not be sufficient. Soft measures are by definition **exclusively prevention** measures.

Hard measures are **active or concrete** obligations that have a **direct impact** on the prevention or detection of fraud by placing specific obligations on different stakeholders, and creating a paper trail that can be used to identify, and later be used as evidence of fraud. One example of a hard **prevention** measure is requiring stakeholders to complete and sign an annual anti-conflict of interest declaration. Hard **detection** measures include actions like doing regular controls of samples of invoices and other documentation. Because hard measures are more resource-intensive than soft ones, their use should be targeted at areas of medium or high identified fraud risk.

Verification measures are a subset of hard measures that involve comparison with external information sources or verification by independent authorities, such as the use of tools like Arachne to verify conflict of interest declarations. Because verification measures are the most resource-intensive kinds, their use should be targeted to address the areas of highest fraud risk. Verification measures are by definition always **detection** measures. Finally, verifications made by the MA, such as on-the-spot checks, represent the common form of mitigating measures focusing on detection.

A well-designed, comprehensive anti-fraud system should combine all three types of measures, each of which has an important role to play in preventing and detecting fraudulent activities. However, prevention and detection measures are not sufficient to cover the full anti-fraud cycle. Once detected, the fraud has to be reported. Therefore, authorities need to have strong cooperation mechanisms in place allowing authorities to quickly disseminate information on the fraudulent cases and possibly adjust the anti-fraud framework, if needed. Finally, sanctions should be in place and have a deterrent effect.

Objective of the study

This report aims to take stock of and disseminate information on the measures that authorities have established in order to prevent and detect fraud and corruption in the programming period

2014–2020 and how Article 125(4)(c) of the CPR has been implemented. In addition to OP-level measures, the report also provides information on national, MS-level measures.

1.3   Methodological approach

Scope

The study's analysis covers all 28 EU MS and therefore the issues related to national anti-fraud measures always refer, in the following sections, to information gathered from all 28 MS.

The study team gathered additional in-depth data from a sample of 50 OPs selected by the EC (see annex 3). Thus, the study analysis related to OP level is based on this sample of 50 OPs, chosen to reflect a broad range of ESI co-financed programmes. It contains at least one OP from each MS (regional and/or national level), as well as two European territorial co-operation OPs. The OPs represent a wide range of sectors and thematic objectives, covering transport infrastructure, environment, maritime and fisheries, education, competitiveness, and regional development.

The sample of OPs selected for this study includes OPs co-financed by the European Regional Development Fund (ERDF), the Cohesion Fund (CF), the European Social Fund (ESF) and the European Maritime and Fisheries Fund (EMFF). The list of selected OPs also includes two OPs financed by the new Fund for European Aid to the Most Deprived (FEAD). When the expressions "selected OPs" or "interviewed MAs" are used in the sections below, they always refer to the sample of 50 OPs.

Finally, the analysis of the FRAs in Section 3 "Fraud Risk Assessments," focuses on the sample of OPs who have conducted such FRAs (47 OPs). Moreover, the assessment of EC-recommended and additional measures developed in Section 5 "Analysis of Sample FRAs" and Section 6 "Risk Categories and mitigating measures" focuses on 36 OPs, among the 50 ones, for which authorities used the FRA template from the EC.[12]

Methodology

The study relied on two data collection techniques, literature review and interviews, to obtain a comprehensive overview of how MAs have analysed fraud risks and implemented **proportionate** and **effective** measures to counter them.

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[12] The use of the EC FRA template is not mandatory.

Effectiveness

In the context of this study, effectiveness is understood as the degree to which mitigating measures are successful in reducing the risks. The study does not assess the effectiveness of the measures since it should assessed ex-post. As of April 2018, most MAs have only carried out a limited number of ESI Funds-funded operations for the programming period 2014-2020.

Some MS have just recently completed the designation procedure; a few are in the process of completing it. Many MAs are in the process of putting in place anti-fraud measures. Therefore, there is a limited amount of data available to assess the effectiveness of anti-fraud measures put in place. For these reasons, this study focuses on assessing the proportionality of anti-fraud measures to the level of the identified risks. Effectiveness is only touched upon occasionally, where relevant.

Note: Art. 123 and Art 124 of the CPR sets a requirement to designate a MA and CA for each OP under the ESI Funds. Designation criteria includes procedures related to internal control environment, risk management, management and control activities and monitoring.

Proportionality

As regards proportionality, it is understood as measures corresponding both in quantity (number of measures) and quality (nature of measures) to the level and nature of fraud and corruption risks identified for each OP.

Firstly, for each of the 50 OPs, the team **interviewed** the following types of authorities:

- managing authorities (MAs);
- audit authorities (AAs)[13];
- anti-fraud coordination services (AFCOSs)[14].

The team also interviewed certifying authorities (CAs) and intermediate bodies (IBs) when they played an important role in the anti-fraud and anti-corruption efforts.

Secondly, the study team **reviewed documents** such as management and control system descriptions, audit reports and fraud risk assessments for all 50 OPs.

The data collection for this study was performed during October 2017-March 2018. Then, the study team analysed the data gathered from the interviews and the document review to define whether the mitigating measures were proportionate to the risks.

Based on the data collected, the team produced **"analytical reports" for each of the 50 OPs assessed**. The analytical reports provide a brief description and analysis related to the choice of fraud risk assessment tool and timing, anti-fraud policy, prevention, detection, reporting and correction measures at OP level. A summary including its strengths, weaknesses and good practices recorded is included for each OP.

Besides its use in the analytical reports, the **information collected was summarised per country as "working papers" for each of the 28 MS**. Working papers summarise the analysis of the national anti-fraud policy, anti-fraud tools, the FRA process and provides a detailed description of the specific risks and measures of the MS's analysed OPs. **Both the analytical reports and working papers are the basis for the current study**.

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[13] See http://ec.europa.eu/regional_policy/en/policy/what/glossary/a/audit-authority

[14] EU Member States are required to designate an AFCOS (Anti-fraud co-ordination service) in accordance with Article 3(4) of Regulation 883/2013 in order to facilitate cooperation and exchange of information with OLAF

Approach

The figure below provides an overview of the approach used for the study.

Figure 2: Study approach

Source: PwC

The **first step** of our analysis is to **analyse the risks** included in the FRAs of the sample of OPs. The study team classified the risks and associated measures proposed in the EC FRA template[15] in six risk categories, as detailed in Annex 2. Each of risk categories summarises associated measures, as suggested by the EC FRA template. The team created the risk categories based on the analysis of risk categories included in the FRAs, literature review, and expert opinion. The team then assessed the risk level for each risk category based on the average risk level in the FRA, reflecting both the likelihood and impact of each subcategory of risks included in the relevant category in the EC FRA template.[16]

Then, our analysis aimed at benchmarking the self-assessment of fraud risks against external corruption indicators. Corruption is a difficult concept to measure, and as such, the most commonly used indicators are surveys of the perception of corruption. These include Transparency International's Corruption Perception Index (CPI) and Eurobarometer surveys of businesses and the general public.

In the following analysis, the team primarily relies on Transparency International's CPI as an external measure of risk to compare with self-assessments of risk level in order to validate the severity of risks as assessed by each OP in the sample.[17] Using this indicator, MS were classified in three categories:

- **High CPI**: CPI score above 65. Corruption is perceived as low in these countries;
- **Medium CPI**: CPI score above 50 up to 65. In these countries, corruption is neither perceived as low nor high;
- **Low CPI**: CPI score of 50 or below. Corruption is perceived as high in these countries.

As a **second step**, after having analysed the risks, the team analysed the measures. Firstly, **EC-recommended** measures, i.e. measures proposed by the EC and already included in the FRA template, and **additional ones**, i.e. measures added to the FRA by the different MS authorities. Additional measures are tailored by the authorities and are implemented in addition to, or as a replacement for EC-recommended measures. For this analysis we assess them as additional to EC-recommended measures, as they do not have the same scope or focus as EC-recommended measures. Additional measures are implemented by the Authorities to adjust the controls to the specifics of the local environment, additional risks, or as a historical practice to reinforce or moderate soften the EC-recommended measures depending on the self-assessed severity of risk. We classified EC-recommended and additional measures into three categories as previously described in chapter 1.2 'Background Information':

- **Soft measures** are the passive or intangible aspects of an anti-fraud policy that establish how things should or should not be done, such as trainings for staff, established processes for managing funds, and having a code of ethics for employees;

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[15] Fraud Risk Assessment and Effective and Proportionate Anti-Fraud Measures, Guidance for Member States and Programme Authorities, Annex 1: Assessment of exposure to specific fraud risks - selection of applicants by managing authorities, available at https://ec.europa.eu/sfc/en/2014/anti-fraud

[16] As self-assessed by Authorities in the FRA

[17] See https://www.transparency.org/research/cpi/overview

- **Hard measures** are active or concrete obligations that have a direct impact on the prevention or detection of fraud, such as signed declarations of lack of conflict of interest, or controls of documents; and
- **Verification measures** are hard measures that involve comparison with external information sources or verification by independent authorities, such as the use of tools like Arachne to verify conflict of interest declarations.

Moreover, the team also looked at whether measures focused on the prevention or the detection of fraud and corruption. Organising the measures suggested in the FRA by their type, i.e. as prevention or detection and as soft, hard, or verification, adds another layer of analysis to our methodology, and strengthens the assessment of the proportionality between the measures put in place and the risks identified.

Finally, the team compared measures in the FRAs with the ones suggested by the EC. The discrepancy between the measures in the FRAs and the EC-recommended ones was analysed to understand whether there were EC-recommended measures not retained by Authorities, and if so, whether these measures were compensated by additional measures of a similar nature. The availability and number of additional measures alone, however, does not prove a more proportionate response.

All the above elements fed into an overall assessment of the proportionality of the measures for each risk category (third step). The assessment was conducted considering the risk level of each risk category and number, focus and type of suggested mitigating measures (EC-recommended and additional). While the above allowed the team to compare across MS, the team also considered contextual elements from the interviews and the desk research to strengthen the assessment of proportionality.

As a result of the analysis, the team determined, based on the qualitative assessment, whether the proportionality of the measures for each risk category was either high, medium or low. Qualitative assessment is based on the analysis of the FRA provided by the MA, the inputs of audits and literature review and the opinion of the country experts involved in this study. The categories of high, medium and low proportionality were developed for this study for the ease and clarity of conclusions.

- **High proportionality**: the nature and number of measures is sufficient to address the severity of risk;
- **Medium proportionality**: the nature and number of measures is not sufficient to address the level of risk, but only small adjustments are necessary to remedy the situation;
- **Low proportionality**: the nature and number of measures is insufficient to address the level of risk.

The analysis of the proportionality in this report is based on a quantitative and qualitative analysis of the sample of 50 OPs included in the study. However, the size of the sample varies depending on the issue being analysed. The quantitative assessment is based on comparisons of those OPs with the FRA (38 out of 47) that used the EC's FRA template. However, the sample size included may vary from issue to issue depending on the availability of data, and the relevance for specific OPs. For comparability's sake, the sample for the quantitative analysis is restricted to those OPs with the FRA (38 out of 47) that used the EC's FRA template. The qualitative assessment covers all 50 OPs in the sample.

2. *Overview of anti-fraud approaches*

This section provides an overview of anti-fraud approaches divided into two aspects. First, the section focuses on how the EU and the designated ESI Funds authorities have changed their approaches to anti-fraud and corruption in the 2014-2020 programming period in comparison to the previous programming period. Secondly, it focuses on the National Anti-Fraud Strategies (NAFS), including their content and structure.

2.1 Changes for the 2014-2020 programming period

Article 125(4)(c)[18] has led to a changed approach to fighting fraud in ESI Funds in the selected OPs. In general, **MAs' approaches to anti-fraud are now more articulated and formalised than during the previous programming period**. Even those measures and procedures that were in place in the previous programming period are now better documented than they were in the past, also thanks to the FRA process.

Many (49%) MAs have started, or are planning to use Arachne (for more detail, see section 5. "Anti-fraud tools" below).

Arachne

Arachne is an IT tool developed on behalf of the EC and in close cooperation with MAs from three different Member States. It aims to support MAs and IBs in their administrative controls and management checks on ESF and ERDF projects. The tool has three main functions:
1. It establishes a database of ESF and ERDF projects from the information submitted by MAs;
2. It uses publically available data to enrich the data provided by MAs;
3. Using this data, it identifies fraud risks and red flags related to projects, beneficiaries, contracts and contractors.
In this way, Arachne helps MAs and IBs with additional information to prevent, detect errors and irregularities among projects, beneficiaries, contracts and contractors.

A number of MAs among the interviewed ones focused more on prevention for the 2014-2020 programming period than in the previous programming period. The EC's "Guidance note on fraud risk assessment and effective and proportionate anti-fraud measures," published in 2014, puts great emphasis on fraud prevention.[19] It highlights that prevention is particularly important in the fight against fraud, since the fraudulent activities are difficult to detect and it is challenging to prove that suspicious activities indeed are fraudulent. In line with this, a number of interviewees indicated that fraud detection becomes a difficult task as fraudulent schemes become more complex and adapt to the detection practices. Therefore, in the current programming period, Authorities increased the focus on prevention activities in combination with the existing detection measures. In a number of the OPs (14%), interviewees mentioned that more emphasis was placed on prevention for the 2014-2020 programming period compared with 2007-2013 period. For example, some MAs created "tone from the top" communications.

Interviewees also mentioned, among the changes for the 2014-2020 programming period, an increased awareness of the staff with respect to the importance of anti-fraud risk assessment and improvement of IT systems used to prevent and detect fraud.

In most MS, national funds and European funds are subject to common basic procedures (e.g. separation of duties), but additional controls are implemented for European funds. EU funds are more controlled due to EU requirements. Only a small number of interviewees mentioned that there was in principle no difference, or pointed to small differences

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[18] Regulation (EU) No 1303/2013 laying down the common provisions on the European Structural and Investment Fund, available at http://data.europa.eu/eli/reg/2013/1303/oj

[19] See http://ec.europa.eu/regional_policy/en/information/publications/guidelines/2014/fraud-risk-assessment-and-effective-and-proportionate-anti-fraud-measures

such as different "points of contact," i.e. different persons responsible for following-up on fraud issues depending on whether the funding is national or EU.

Overall, Article 125(4)(c) has had a notable impact on anti-fraud efforts in the EU. Most of the impact lies in the systematisation and formalisation of the FRA process and of (sometimes new) anti-fraud and anti-corruption measures.

2.2 *National Anti-Fraud Strategies*

A National Anti-Fraud Strategy (NAFS) is a document embedding anti-fraud actions for the management of ESI Funds, to ensure homogeneous practices at national level. MS may also choose to elaborate more general NAFS encompassing actions to protect both the EU and national budgets. Having a NAFS is encouraged by the EC.[20] To support MS in drafting of their NAFS, the EC published "Guidelines for National Anti-Fraud Strategies for European Structural and Investment Funds," including a template for the structure of a NAFS.[21] The template proposes five main sections for a NAFS:

1. **Introduction / General context** covering the legal and institutional framework, purpose and methodology of the strategy.
2. **Preparatory phase: state of play and fraud risk assessment** identifying the needs that the strategy should meet.
3. **Elaboration phase: objectives and performance indicators** elaborating on the objectives, means and resources allocated to the implementation of the strategy.
4. **Action plan** with the measures to be implemented, and the corresponding target timeframe and responsibilities for implementation.
5. **Evaluation and update of the strategy** laying out how the strategy will be evaluated and updated.

None of the thirteen MS that reported to have drafted a NAFS[22], used the EC template. To a certain extent, this can be explained by the fact that some MS had a NAFS, or may have started the process of drafting it, before the EC template was prepared. Indeed, two MS had published a NAFS before 2014 (date of publication of the EC template), and two published theirs in 2014 or early 2015. Despite the fact that MS did not use the EC template, the NAFS contain elements of it. For example, they describe the state of play of the anti-fraud landscape in the MS, or provide information on anti-fraud related initiatives developed at the national level.

When MS have adopted a NAFS, the document provides concrete measures for the fight against fraud and corruption in EU funds. 13 MS reported to have a NAFS, and an additional 5 are planning to formalise one in the near future. All existing NAFS but one mention EU funds, and those do provide concrete measures that may have a positive impact and standardise the fight against fraud and corruption in these funds. To this extent, NAFS achieve their initial objective of harmonising the approach to anti-fraud in the management of ESI Funds.

Existing NAFS focus on prevention and coordination. Regarding prevention, three main aspects are touched upon:

• Capacity building of the administration via training and workshops;
• Increasing public awareness through communication;
• Increasing transparency, e.g. via publishing online reports on selected projects.

Regarding coordination, NAFS focus both on internal (within MS) and external (with the EC or other MS) coordination. Internal coordination will be achieved via, e.g. exchange of information across institutions and interoperability of databases. Finally, some NAFS mention legislative modernisation e.g. to give the appropriate mandate to institutions.

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[20] See https://ec.europa.eu/sfc/sites/sfc2014/files/EN-ORI-General%20Guidelines%20on%20National%20Anti-Fraud%20Strategies%20ARES%282016%296943965.pdf

[21] See https://ec.europa.eu/sfc/en/2014/anti-fraud

[22] NAFS of two out 13 MS, that report to have NAFS, do not comply with the EC definition of NAFS. Therefore, there is a difference between the amount of NAFS considered by the EC and amount of NAFS presented in this study.

3. *Fraud Risk Assessments*

3.1 *FRA process*

This section provides an overview of the organisation, processes and procedures implemented by authorities to guide the preparation of the FRA. When characterising the practices of authorities, this section focuses on a **subset of 47 OPs out of the sample of the 50 OPs where the authorities have conducted a FRA**. First, this section looks at the organisation of the FRA and the involvement of IBs, or other authorities such as the CA and the AA. Then, the analysis focuses on the effort and approach taken by authorities across the EU to develop the FRA template based on our sample of 50 OPs and sub-set of 47 OPs that conducted a FRA.

Different approaches to collaboration between IBs and MAs during the FRA process were identified across OPs. Under the CPR, MAs and CAs have the possibility to delegate responsibilities to IBs. This includes anti-fraud and anti-corruption responsibilities, such as conducting a FRA. In our sample of 50 OPs, authorities of 38 OPs have delegated certain responsibilities to the IBs. Out of these OPs, authorities of 28 OPs delegated partial or full responsibility of conducting a FRA to the IBs (74%). For four OPs out of 28 (14%), MAs had delegated the full responsibility for compiling a FRA to the IBs. However, as MAs provided limited assistance in the FRA filling process, it lead to inconsistent FRA approaches across IBs and lack of consolidated FRA at the level of MA.

For 24 OPs out of 28 OPs that delegated to the IBs responsibilities to conduct a FRA (about 86%), MAs conducted the FRA together with IBs. The strength of the cooperation varied greatly across OPs. In fact, some MAs provided IBs with guidance and advice on how to approach their FRA during a dedicated workshop, and collected notes prepared by IBs summarising the process and outcome of their self-assessment. In other OPs, the IBs only provided some input on potential risk areas and were only consulted on the FRA process.

For 10 OPs where IBs have responsibilities, the MA conducted the FRA on its own, thereby limiting its ability to obtain a comprehensive overview of all the fraud risks and measures at OP level.

For about 23% of the OPs who have IBs in MS in which corruption is perceived as relatively low or medium (according to the Transparency International Corruption Perception Index (CPI)CPI (see Approach for detailed methodology on CPI), the MA fills in the FRA on its own, without relying on IBs. Among MS with high perception of corruption, fewer (around 6% of OPs) took this approach. This shows the application of the proportionality principle, as these countries could have higher risks of corruption and fraud.

In most OPs (40), authorities took an active approach to developing their FRAs. An active approach means that authorities have taken a proactive approach to complying with the EU legal framework. For example, they have been setting up an FRA self-assessment team, completing sections of the FRA template and defining controls to for categories and sub-categories of fraud risks On the contrary, under a passive approach, authorities have done the minimum. For example, some have only filled in the sections of the FRA related to detected instances of fraud from the previous programming period, leaving the majority of risks and sub-risks unassessed. Only a handful of authorities in the sample took this passive approach (6).[23] The choice of active or passive approach is not correlated with the MS's Corruption Perception Index (CPI) score (please see Approach for more details on the CPI used for this study). Indeed, out of the six MS that adopted a passive approach, two are perceived as relatively less corrupt, one as medium and three as relatively highly corrupt. One explanatory factor for the passive approach of MS with lower perceived corruption is their perception of the FRA as an additional administrative burden.

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[23] For four OPs, the chosen approach could not be assessed.

In all OPs for which the FRA process is well-advanced (47), authorities foresee regular updates of their FRA. The regular review of the FRA takes place for a majority of OPs (72%) on a yearly basis. However, in some instances, the MA did not update the FRA as regularly as foreseen in their procedures. In some OPs authorities review the FRA only every second year when they assess risks as low or unchanged. In two OPs the FRA is reviewed twice a year.

In most (34) OPs of the sample, authorities have procedures in place for ad-hoc updates of their FRAs. 72% of authorities in low and medium scoring countries (according to the CPI – see Approach for more details on the CPI relevance) have procedures in place for the ad-hoc reviews of their FRA. Such procedures allow authorities to address in their FRAs key changes that could alter the effectiveness of their mitigating measures, such as changes in procedures, changes to staff, new identified perceived weaknesses, or legislative changes. The figure is slightly lower (57%) for OPs in CPI high-scoring countries. These MS, which benefit from a less risky environment in terms of corruption, also less frequently have procedures in place for ad-hoc review of their FRA. To some extent, this is in line with the principle of proportionality.

For 24 OPs in the sample, the CA has contributed to the FRA. While MAs have a central role in assessing fraud risks in their OPs, in most cases, also the relevant CA, AA, or AFCOS, or some combination of them, were involved in the preparation of the FRA. Of these authorities, CAs were observed to be involved in this process more frequently than AAs or AFCOSs, and in many cases they either completed their own FRA, or had responsibility for the 'certification and payments' part of the overall FRA. Although AAs have no direct obligations to participate in the FRA process, they were involved in the development of the FRA for 28% of OPs (13 OPs) in the sample of OPs that conducted a FRA. In addition, 5 OPs (11%) benefitted from participation of AFCOS in the FRA development. Therefore, in many MS, the AFCOS was observed to have much less direct contact with the MA than the CA or the AA. When comparing the participation of different bodies in the FRA and the level of perceived corruption at MS level, it emerged that higher scoring countries tended to have more inclusive FRA processes.

3.2 FRA coverage

This section focuses on the quality, scope, and completeness of the FRAs, taking the EC-recommended FRA template as a benchmark. As described in the background information section of this study, the EC has provided a template for authorities to adopt a risk-based approach to their fight against fraud and corruption as required by Article 125(4)(c) of the CPR. The EC FRA template is broken down into four key processes for which the level of gross and net risks are assessed. To mitigate the risks, the template offers a selection of controls (henceforth "EC-recommended measures"), which can be consolidated with "additional controls" defined by authorities themselves. Alongside these controls, the following specifications need to be provided:

- Do you evidence the operation of this control?
- Do you regularly test this control?
- How confident are you in the effectiveness of this control?

This section looks at the extent to which the above-mentioned specifications were filled in, in order to comprehend the conclusions reached by authorities with regards to their measurement of net risks. Finally, this section looks beyond the EC template to understand the approach used by MAs which have implemented a different methodology.

For a majority of the OPs, authorities are using the EC FRA template. Of the OPs where an FRA was implemented, 62% used the EC-template. Among the remaining OPs where the EC template was not used, most (19% of OPs implementing FRA) have integrated elements of it, while just a handful (19%) did not appear to have used it at all. All OPs using the EC template have included **additional measures** to those recommended by the EC.[24]

The level of detail of the FRAs differs substantially across OPs. The EC FRA template contains a number of different elements to complete. As such, there was substantial variance

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[24] The information could not be retrieved for one OP.

among authorities as to which fields were completed, and in the level of detail provided. In assessing the comprehensiveness of the FRAs, we looked at:

- Inclusion of additional measures to the EC-recommended measures;
- Filling-in of the action plan section;
- Answer to the question "Do you regularly test this control?";
- Answer to the question "How confident are you in the effectiveness of this control?".

A large majority of the FRAs based on the EC template (76%) were filled in comprehensively, 14% only partially, and 8% contained only basic information. The two FRAs that had the least information were from those OPs where the passive approach was taken.

In some OPs, authorities had problems understanding the methodology set out in the Commission guideline. Based on the analysis of the FRAs, and the feedback provided in interviews, we identified a number of areas where authorities were unsure about the EC's proposed approach to the FRA. This is the case, for instance with the column "Do you evidence the operation of this control" which was understood in some cases as asking whether authorities has put in place the control. However, as specified in the guidance provided alongside the FRA template, this question defines whether "evidence for the operation of the control is documented," such as evidence of approval being documented by a signature[25].

Moreover, assessments of risks are measured by authorities using different scales, making it more difficult to compare FRAs. In cases where the net risks remain high, authorities have not consistently filled in the action plan section of the FRA with planned new controls, which could be those recommended by the EC or additional ones, in order to further mitigate the risk. Finally, some only based their FRAs on previous cases of fraud, which gave only a partial view of fraud and corruption risks.

Many authorities that did not adopt the EC template have been inspired by it. For approximately one fifth of all OPs, authorities used risk-assessment tools in a way that incorporated elements of the EC template. During interviews authorities said that the EC-template is useful.

- First, in order to develop appropriate controls which fit the specificities of the fraud and corruption environment of their OPs. In fact, the EC-recommended measures provided guidelines on the types of measures that would be suitable to reduce a certain type of risk;
- Secondly, in order to understand the various areas of risks to assess;
- Thirdly, the template provided an overall framework in order to conduct the assessment of risk, for instance, in measuring gross and net risks, and in stressing the importance of implementing an action plan.

Authorities did not fully embrace the template in order to fit in particularities of their OPs, such as local procedures, a specific legislative framework, or in order to simplify it, for instance, by focusing on net risks, and not addressing some specifications, such as whether authorities regularly test this control. Furthermore, some authorities expanded the scope of the FRA self-assessment to other forms of risks such as, legal, financial, and human resources risks, while other MAs provided more granularity to their assessment of the level of risks, by adding a column to the FRA spreadsheet providing justification for the level of risk assessed.

For 9 OPs that did not use the EC template at all, fraud risks were covered in a broader risk assessment. Several authorities had pre-existing processes for assessing risks that include, but are not limited to, fraud risks. Some of these authorities opted to continue using their pre-existing tools rather than adopting the EC template. These tools do not use the same four key processes or specific sub-risk categories as the EC template. Because of this lack of comparability, these OPs are not included in much of the FRA analysis that follows.

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[25] Fraud Risk Assessment and Effective and Proportionate Anti-Fraud Measures, Guidance for Member States and Programme authorities, Annex 1: Assessment of exposure to specific fraud risks - selection of applicants by managing authorities, How to use the tool, available at https://ec.europa.eu/sfc/en/2014/anti-fraud

4. *Anti-fraud tools*

This section assesses the use of anti-fraud tools by the authorities of the 50 selected OPs. Authorities are using a number of national and EU-wide tools to detect and prevent fraud in ESI Funds. While all authorities are using the Irregularity Management System (IMS) for reporting irregularities to OLAF, they also implement a number of specific tools that are used for preventing and detecting fraud. In this section we analyse the use of these tools, such as Arachne.

4.1 *Uptake of Arachne*

The majority of the interviewed MAs do not use Arachne. Only one third of the interviewed MAs[26] are using Arachne as a risk scoring or fraud detection tool (see figure below)[27]. The majority of the MAs that are using the tool consider it gives added value to assess potential conflicts of interest, and identifying red flags.[28]

Figure 3: Use of Arachne across Operational Programmes

- Does not use Arachne
- Plans to use Arachne in the future
- Uses Arachne
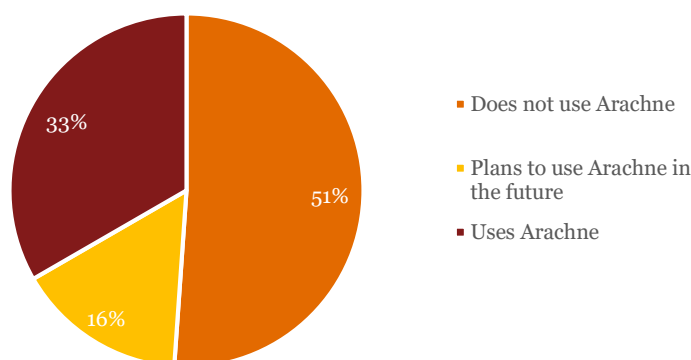
Source: PwC, based on a sample of 45 OPs

MAs mentioned the following difficulties regarding the use of Arachne:

- Data collection and accuracy issues;
- High number of false positives;
- Legislative barriers, in particular compliance with national data protection laws.

All interviewed MAs are aware of the existence and technical capabilities of Arachne. However, a number of issues were raised both by the MAs that are already using the tool, and by the MAs that are not using or planning to use it.

Authorities for eight OPs mentioned the incompleteness of the database as a reason of not using Arachne. More specifically, they refer to the fact that not all OPs and not all MS have provided data to the system and therefore the checks cannot be done against all the MS. This provides uncertainty in the results and reduces the added value of the tool when the checks cover several MS.

Authorities for six OPs mentioned outdated data. Arachne calculates risks for all MS every week, based on available data. However, part of this data is periodically uploaded by MAs.[29] It is not

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26 Arachne is available for OPs under ERDF, ESF, CF, YEI and FEAD, but not EMFF OPs at the moment of this analysis. Therefore, five EMFF OPs out of the sample of 50 OPs are excluded form analysis of Arachne usage in the sections below.

27 The data represented in this section was collected in October 2017- March 2018. The actual number of OPs that are using Arachne at the moment of publication could be different, potentially including OPs that were planning to use or had piloted Arachne at the time of the data collection.

28 This study does not assess the extent to which different functionalities of Arachne are explored by OPs in the sample and does not assess the completeness of the data that OPs have available when working with Arachne.

29 Data on their projects, contracts and expenses.

possible to automatically update the data. Moreover, different countries upload data at different times, making it difficult to assess whether the data is accurate.

Both of these issues affect risk indicators that use information coming from other OPs and MS. Other risk indicators are not influenced by data coming from other OPs and MS.

Linked to the issues of limited and outdated data, authorities of four OPs also highlighted that Arachne shows a large number of false positives for potential conflicts of interest, especially for checks of smaller companies. Arachne displays legal links between companies and persons, and is capable showing a potential conflict of interest. The numerous false positives undermines confidence in the results and reliability of the tool. One MA mentioned that the number of false positives was too large as scenarios and thresholds were not tailored to the country and could not be changed.

Apart from false positives and data issues, some MSs mention legislative barriers to the use of the system. This refers to the compliance of Arachne with the national data protection rules in three MS. Because of these legislative issues, Arachne was not used for five OPs. However, the compliance of Arachne with EU data protection legislation has been confirmed by the EC.

Additionally, some MAs see the implementation of Arachne as an additional administrative burden, suggesting that other available IT tools are already in use. Arachne aims at reducing the time required to collect data linked to a project or contract. Nevertheless, in order to work properly, the tool requires to be fed with a significant amount of information. One MA mentioned that this would be particularly time consuming for projects which were originally financed only with national budget, and later approved for ESIF co-funding: the person in charge would have to find back the necessary information, which would represent a cumbersome and time-consuming process.

There is a need for additional awareness-raising and training on the use and benefits of Arachne. In seven OPs, authorities stressed the need for additional training and coaching on how to use Arachne. Most of the concerns are related to the lack of understanding on how the tool works, its functionalities and capacity, as well as to the interpretation of the results. According to the interviewed authorities, specific training on Arachne for a wider group of users would allow better acceptance and uptake of the tool, as well as wider usage of all its functionalities. They suggest ways to increase interoperability of Arachne with other national IT tools and databases currently used. Most authorities have expressed the desire for additional EC guidance and trainings on the practical identification of fraud, including those to be detected by Arachne. However, the EC already provides two levels of trainings upon request. Many interviewees did not seem aware of this training offer.

4.2   *Use of alternative IT tools and databases*

Arachne is frequently used by authorities in combination with other IT tools. Most of the interviewed authorities of 45 OPs eligible to use Arachne are not willing to rely only on Arachne for risk scoring and red flagging.[30] In most OPs from the sample of 45 OPs (56%), MAs have in place national IT tools and databases that have similar functionalities to Arachne, although with a much narrower geographic scope. Both MAs that have implemented Arachne, and MAs that are planning to do so have such tools.

56%

MAs have in place national IT tools and databases that have similar functionalities to Arachne

In most OPs, national company and trade registers are used simultaneously to assess the relationship of companies and detect potential fraud related to conflict of interest (Figure 4). However, these registers do not provide information on links that companies have in other countries.

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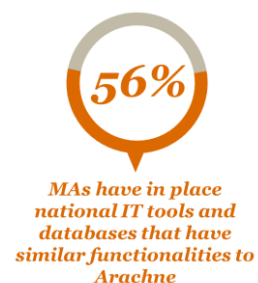
[30] Arachne is available for OPs under ERDF, ESF, CF, YEI and FEAD, but not EMFF.

Figure 4: Use of alternative to Arachne for company relationship check
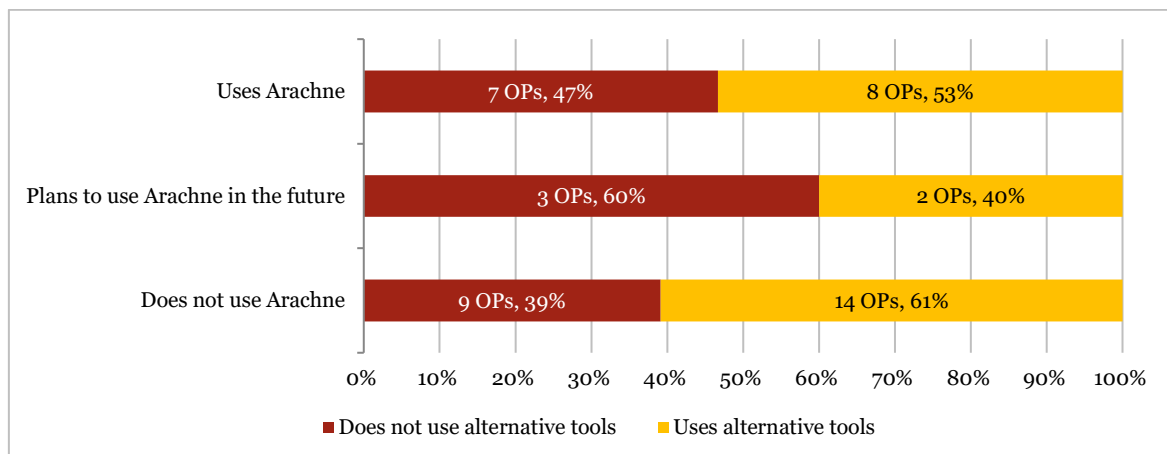
Source: PwC, based on a sample of 43 OPs

The additional IT tools include national company registers, fund monitoring systems, and procurement databases. These IT tools are used by authorities to detect several types of fraud on different stages of project lifecycle:

- **Company registers** are used for detecting risks of conflict of interest and manipulation of procurement procedures. They contain company details, structure of ownership and shareholders, and often contain data also on financial performance and company assets.
- **Procurement databases** are used by authorities to identify risks of collusive bidding and manipulation of procurement procedures at the stage of project application.
- **Fund monitoring systems** are used for identification of double funding and manipulation of project costs at the stage of project implementation.

For most of the OPs of the sample, these tools cover one MS only and are managed by the respective bodies at the national level. However, no cross-border, regional or European tools were found to be used by authorities that can replace Arachne's EU coverage. Despite the variety of IT tools and databases at national level across MS, there is no indication on the synergies or common databases covering several national tools or combining functionalities of tools of different MS. Most of the MAs implementing Arachne do not have a single IT tool or source of information for conducting risk scoring and checks. Moreover, existing national tools do not collect the data from other EU MS, making cross-country analysis limited.

Notably, 39% of the MAs that do not use Arachne (9 OPs) have no other data analytics or risk scoring tool to cover for the functionalities of Arachne, suggesting a gap in data analysis for those OPs.

4.3 Use of Arachne for the assessment of conflict of interest and identification of red flags

76%

MAs use alternative tools to Arachne to identify red flags

The self-assessed level of risk of conflict of interest does not change depending on whether MAs are using Arachne. One of the reasons authorities use Arachne is to identify potential conflicts of interest. However, based on the self-assessment of risks in the FRAs, there did not appear to be a direct correlation between the use of Arachne and decreasing risk of conflict of interest (see more in the Section 6.1. "Conflict of interest"). In most cases, when Arachne is not used, authorities consider alternative IT tools at the national level as adequate and proportionate replacement.

Authorities use Arachne for identification of red flags in combination with alternative tools. Arachne is used by authorities of the sample of OPs to check company relationships, but also as a tool to identify so-called red flags.

The analysis shows that while a third of MAs allowed to use Arachne are making use of its full functionalities, half use only limited functionalities, namely for identifying conflict of interest or fraud red flags. At the same time, most of authorities have in place other tools serving the same purpose. Three quarters of all interviewed MAs (73%) (33 OPs for a sample of 45 OPs) use alternative tools to Arachne to identify red flags. Only for 5 OPs MAs do not have any red flagging system in place (neither Arachne, nor an alternative red flag system) (Figure 5).

MAs rely solely on Arachne for red flags in only four out of the 50 OPs analysed.

Figure 5: Use of alternative to Arachne for red flags
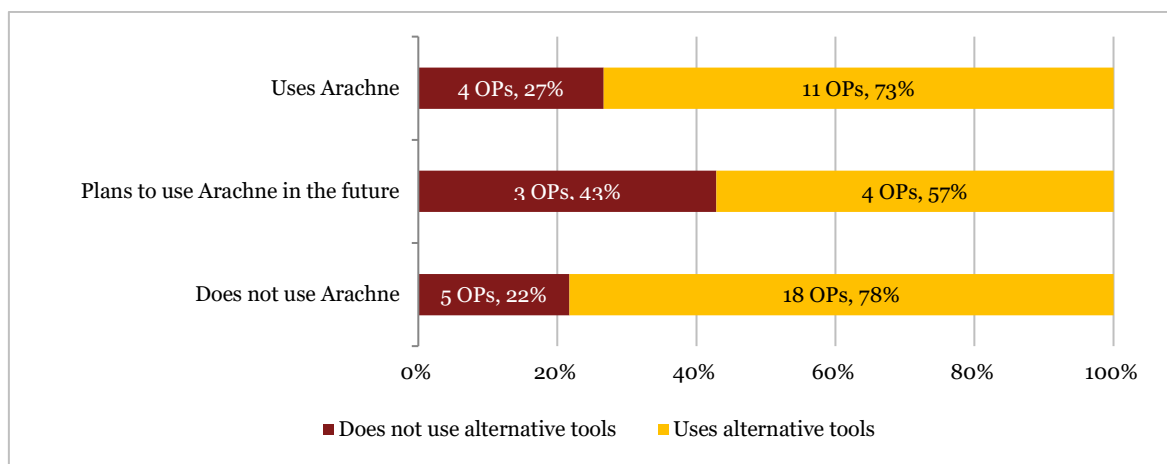
Source: PwC, based on a sample of 45 OPs

In 41 out of 50 OPs, MAs have integrated red flags into their anti-fraud system, including Arachne or other alternative tools to detect red flags. The analysis of the alternative tools to identify red flags reveals that 10 out of 50 MAs use only checklists as red flag indicators. Moreover, 13 MAs base their list of red flags on the EC-recommended list of red flags. Other MAs use a list of fraud indicators based on previous practice and internal procedures. Finally, 14 MAs have developed or planning to develop their own red flag tools (e.g. risk cards).

Risks cards

*Authorities in the Czech Republic use so-called "**risk cards" as fraud indicators or so-called "red flags,"** which contain indicators chosen based on internal guidelines. If during any phase of the project a risk is detected, it is documented in the risk card for the relevant project. During every phase of the project the risk cards are consulted, monitored and updated. Based on them, the risk of the specific project is quantified.*

Risk cards serve as indicators of future events. Before any control, the risk card of a given project is consulted to know on what areas a controller should focus on while performing desk-based and on-the-spot management verifications or other monitoring visits.

4.4 Arachne risk scoring tool

Arachne is an IT tool developed on behalf of the Commission and in close cooperation with MAs from three different MS. It aims at supporting MAs and IBs in their administrative controls and management verifications.

Using Arachne is optional for MAs, but it considered by the Commission as a good tool contributing to anti-fraud measures. Arachne can be used to identify fraud indicators (red flags) and risks at the stage of selection of applicants (mostly to check for conflict of interest), implementation of projects (public procurement and performance indicators) and for certification audit.

Red flags

Red flags can be defined as a set of circumstances that are unusual or vary from the normal activity, which may signal possible fraud or other irregularities. Red flags do not indicate fraud by themselves but provide possible warning signs of fraud or irregularities. Red flags are most commonly included in the fraud detection checklists of authorities for different stages of the project lifecycle.

Fraud checklists

Fraud checklists are used by authorities to run an assessment of a beneficiary or a process against fraud indicators. Checklists are one of the most common tools used by authorities across OPs to detect fraud.

Arachne uses risk indicators sorted into specific risk categories to help MAs and IBs to prevent and detect errors and irregularities in their OPs and in identifying the beneficiaries and contractors linked to these risky projects and contracts. All risk indicators in Arachne are grouped into seven categories:

1. Procurement: Risk indicators on the procurement process;
2. Contract management: Assessment of contract management aspects of the project and comparison to the peer group;
3. Eligibility: Verification of the eligibility period and potential incoherence with expenses;
4. Performance: Assessment of the coherence of activity sector ratios with the benchmark values;
5. Concentration: Cross-project and cross-operational program checks;
6. Reputational and fraud alerts;
7. Reasonability: Common sense checks of project data.[31]

Based on the feedback from authorities collected for this study, the two most used functionalities of Arachne are:

*   Assessment of companies' relationships as a measure used to mitigate risk of conflict of interest;
*   Summary of fraud indicators or so-called "red flags" used by authorities to detect fraud across different processes.

The section below provides an analysis of the use of Arachne for assessing companies' relationships and as a summary of red flags to detect risky operations or processes.

For the moment, Arachne is available for OPs under ERDF, ESF, CF, YEI and FEAD. Arachne was not available to EMFF OPs at the time of this analysis. Therefore, five EMFF OPs out of the sample of 50 OPs are excluded from analysis of the Arachne usage in the sections below.

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[31] More information on the risk categories inclused in Arachne, can be found at
http://ec.europa.eu/social/BlobServlet?docId=17743&langId=en

5. Summary of findings for sampled FRAs

This section examines the content of the sample of FRAs gathered as part of this study to analyse how Authorities assess the different categories of fraud and corruption risks, what measures they have in place, and analyses the extent to which the measures are proportional to the risk identified. Where relevant, it also refers to external indicators of fraud risk to challenge the self-assessment of risks, or to provide context to the findings.

The analysis of the fraud risks was performed for six risk categories, defined from the EC FRA template by grouping of recommended measures into logical groups. In this study we assess and compare the level of risks across the six categories of risks, as well as analyse what measures were used by authorities to mitigate those risks. The study also assesses the proportionality of measures put in place to the level of risks as assessed by authorities.

The current section analyses the overarching findings across all risk categories and measures applied for their mitigation.

The risks of fraud are high for the majority of the sampled OPs, according to the authorities. Authorities assess fraud risks to be high or medium for 64% of the sampled OPs.[32]

Authorities across the sample of OPs analysed the severity of risk of conflict of interest as the highest across six categories of risk. 83% of the authorities consider this risk to be high or medium.[33] The next two highest rated risks were avoidance or manipulation of procurement procedure and manipulation of project cost and quality (see figure below).

Figure 6: Level of fraud risks across risk categories
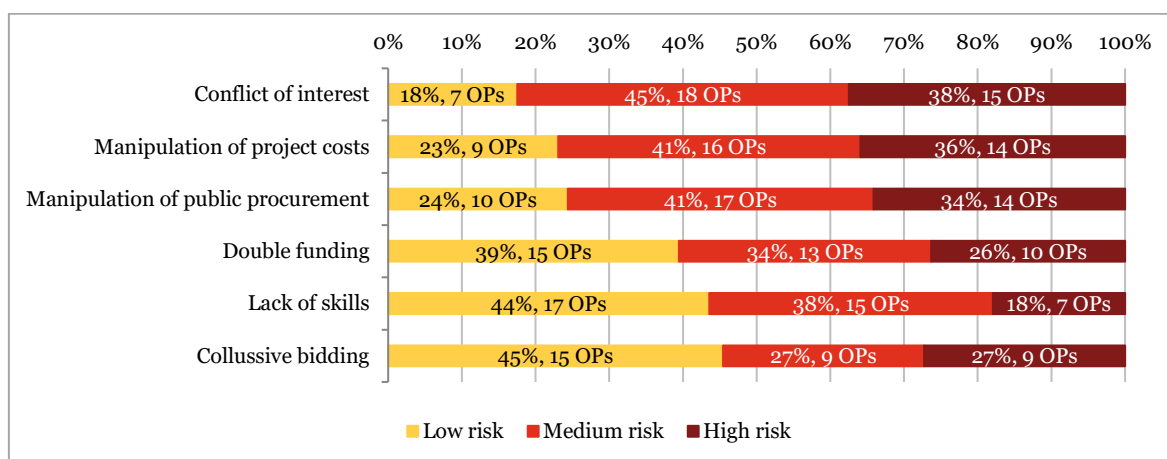
Source: PwC

At the other end of the spectrum, Authorities assessed risks related to lack of skills and collusive bidding to be the lowest across risk categories, with 56% and 55% of Authorities assessing these risks to be high or medium, respectively.

External corruption indicators should be taken into account when comparing fraud risks across MS. The widespread use of the EC FRA template means that many authorities are using the same structure and approach in assessing their fraud risks. However, the way authorities

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[32] 27 out of 42 OPs where data was collected. For eight OPs authorities did not assess risks or did not do so in a template sufficiently close to the EC one so that their assessment can be compared with the rest of the sample.

[33] In 33 out of 40 OPs. For 10 OPs authorities did not assess risks related to conflict of interest or did not do so in a template sufficiently close to the EC one so that their assessment can be compared with the rest of the sample.

implemented the tool varies substantially across OPs and therefore needs to be taken into account when interpreting the results. In this context, it is useful to compare authorities' self-assessed level of risks for the different risk categories against external corruption indicators for context.

Detection measures prevail among the anti-fraud measures across OPs. The assessment of the types of measures used by authorities to address different fraud and corruption risks show that most of the MAs focused their attention on detection measures (on average 64% of all measures per OP are detection).

Across the categories of risks, detection measures prevail in addressing risks related to avoidance and manipulation of public procurement, double funding, collusive bidding, and manipulation of project costs and quality. Prevention measures represent the majority of the controls for conflict of interest and lack of skills and anti-fraud culture.

Most authorities used the measures proposed in the EC FRA template and included them in their own FRAs. On average across different categories of risks, 59% of EC-recommended measures were put in place, although there is substantial variation among the risk categories. The highest share of EC-recommended measures were implemented for the lack of skills and anti-fraud culture, as well as for the double funding (70% and 63% of EC-recommended measures for these categories were used by authorities). On the lower end, authorities in the sample implemented fewer EC-recommended measures for collusive bidding and manipulation of the project costs (46% and 48% of EC-recommended measures) compared to other risk categories. For these two risks categories, one explanation may be the legal or administrative specificities of different MS: in some MS, Authorities do not have the power to implement the EC-recommended measures that involve placing obligations on beneficiaries.

The majority of fraud risks across the sample of OPs are well mitigated with proportionate controls in place. The majority of Authorities (65%) across the analysed OPs put in place proportionate measures to mitigate fraud risks.[34] Moreover, no OPs have a low average proportionality of measures addressing fraud. This suggests that Authorities put sufficient efforts in recognising the importance of anti-fraud activities and are well managing the fraud risks in their OPs.

The proportionality by risk category reflects some differences in the efforts of authorities to mitigate risks. Conflict of interest, manipulation of public procurement and manipulation of project cost are the risk categories most effectively mitigated by authorities across OPs, with all OPs having high or medium proportionality of measures. On the contrary, risks related to collusive bidding are less effectively mitigated, as only 38% of authorities achieved high proportionality for this risk category (Figure 7). This may be partly explained by the fact that many MAs do not have the mandate and legal power to impose requirements on beneficiaries and therefore cannot directly control that beneficiaries internally put proportionate anti-fraud measures. However, such requirements (e.g. that beneficiaries conduct background checks on third parties, that they benchmark prices, etc.) constitute strong measures that would increase the proportionality of the mitigation, especially in cases of high or medium risk.

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[34] Percentage of OPs for which Authorities have achieved "high proportionality" of the measures against the identified risks (average for all risk categories).

Figure 7: Proportionality of measures across risk categories
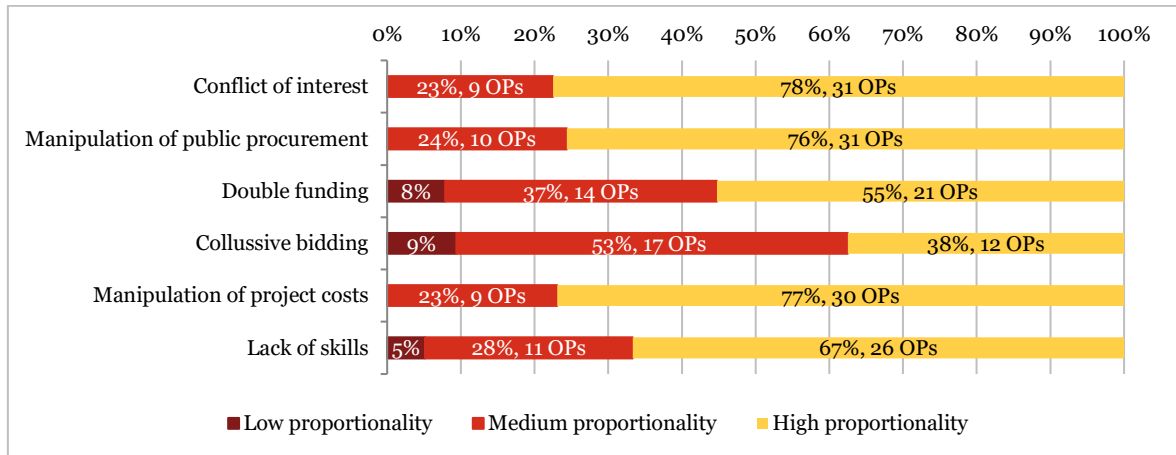
Source: PwC

The differences in the proportionality of measures put in place for different risk categories show that **authorities encounter more difficulties in mitigating risks of collusive bidding and double funding compared to other fraud risks**. Special attention from the EC on these risks areas, including guidance and assistance to MS, is thus recommended.

6. Risk categories and mitigating measures

6.1 Conflict of interest

Article 24 of the 2014 Directive on public procurement defines conflict of interest as "any situation where staff members (…) have, directly or indirectly, a financial, economic or other personal interest which might be perceived to compromise their impartiality and independence."[35] This risk category covers potential conflicts of interest **in specific institutions** e.g. MAs and CAs, as well as conflicts of interest at **specific stages** of the project cycle e.g. conflicts of interest within the evaluation board and undisclosed conflict of interests or bribes and kickbacks during implementation and verification of the project.

Level of risk

Most authorities in the selected OPs assess the risk of conflict of interest as high or medium. For 83% of the OPs, authorities assess the risk of conflict of interest to be high or medium. Compared to other risk categories, conflict of interest was more frequently assessed as a high risk than other categories across OPs in the sample.

83%

Authorities assess the risk of conflict of interest to be high or medium

Authorities in countries where perception of corruption is higher assessed the risks associated with conflict of interest as lower than authorities in other countries. When relating the self-assessed risk level for this risk category to the Transparency International MS-level CPI score, we identified a discrepancy (Figure 8). More OPs from the sample from MS with a low CPI (i.e. those in which corruption is perceived as a larger issue) assessed the risk of conflict of interest as low compared to the OPs from countries with a medium or high CPI (i.e. lower perceived levels of corruption). On the other end of the scale, OPs from more low CPI MS in the sample assess conflict of interest as a high risk than OPs from medium CPI countries.

This discrepancy indicates that authorities of the OPs from the low CPI MS may be underestimating the risk of conflict of interest by comparison with their peers.

Figure 8: Level of risk of conflict of interest per group of MS
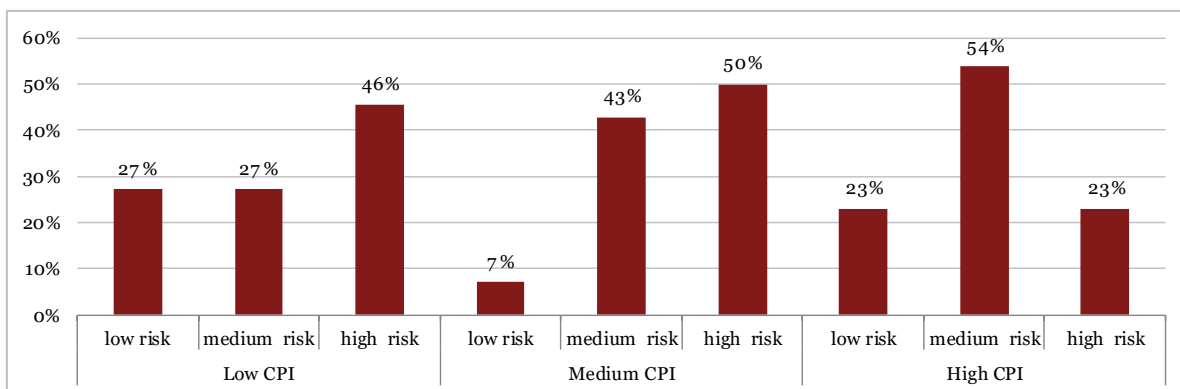
Source: PwC

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[35] Available at https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32014L0024

Use of EC-recommended measures

The EC recommends a set of 19 mitigation measures to address the risk of conflict of interest. These 19 measures are split between hard, soft and verification measures (see section 5 for more details). The largest number of EC-recommended measures (9) are soft measures, focusing on:

- Composition and rotation of evaluation boards;
- Trainings and awareness raising on ethics and integrity for personnel;
- Increased transparency (e.g. publication of calls for tenders);
- Multiple-stage approval of payments.

Seven out of 19 measures suggested by the EC are hard measures, emphasising:

- Availability of conflict of interest policy, including declarations and conflict registers;
- Strong controls on bidding procedures for direct procurement;
- Use of applicable criteria to evaluate applications;
- Communication of results of evaluation to the bidders;
- Implementation and publication of whistle blowing mechanism.

Authorities from six of the selected OPs put in place all EC-recommended measures. The majority of other Authorities used a combination of EC-recommended and own additional measures.

In addition, three verification measures are recommended by the EC FRA template, highlighting the need for a secondary panel to review the decisions of primary evaluation panels and to verify that the procurement procedures were followed.

Most (13 out of 19) of the EC-recommended measures for conflict of interest described above are preventive, suggesting an important role for prevention mechanisms in fighting this fraud risk.

The EC-recommended measures least implemented by authorities include:

- MA ensuring that individuals are aware of the consequences of unethical behaviour;
- Rotation of members of evaluation committees;
- Publication of calls for tenders and communication of evaluation results to all the beneficiaries;
- Measures related to requirements for beneficiaries to implements elements of conflict of interest policy;
- Reviews of tendering processes and payment process.

The findings below reflect the most significant trends in the usage of EC-recommended and additional measures for tackling the risk of conflict of interest.

Use of additional mitigation measures

Authorities in the sample of OPs commonly use additional hard and soft measures to mitigate high risk and additional tailored hard and verification measures when the risk is low. The share of EC-recommended measures implemented is at similar level for the OPs with different level of risks (on average, 64% of EC-recommended measures across all OPs). In most cases, authorities have replaced some EC-recommended measures that were not implemented with additional measures that vary in focus and scope (Figure 9). Moreover, the type of those additional measures used by authorities is linked to the level of risk. Notably, OPs with high risk of conflict of interest implement slightly fewer EC-recommended soft and hard measures compared with OPs with medium and low risk for this category, but compensate for it with additional measures of soft and hard types.

Figure 9: Average number of additional measures per OP for conflict of interest
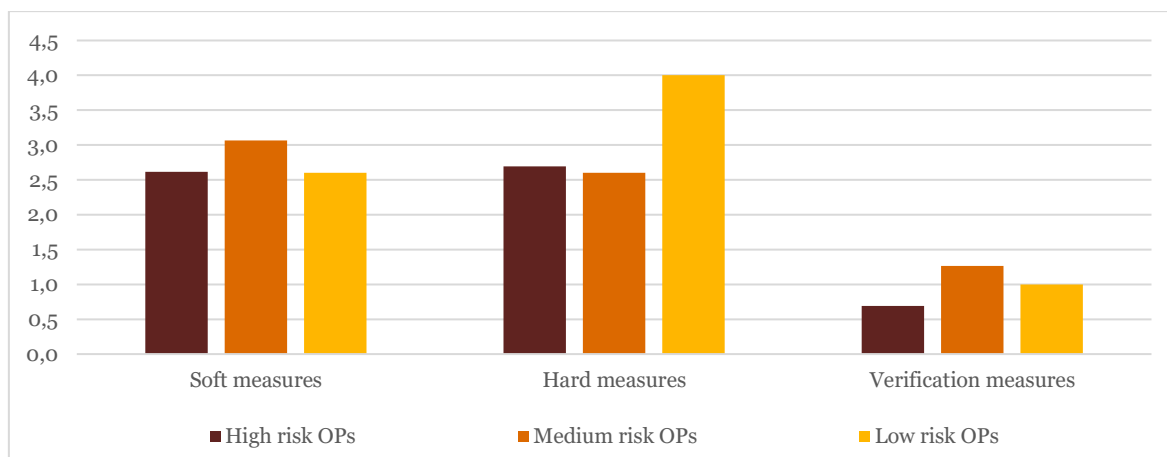
Source: PwC

In the OPs with high risk of conflict of interest, authorities in the sample OPs commonly put in place additional soft measures mainly targeting awareness raising and capacity building efforts, and processes enhancing the transparency and segregation of duties. Other examples of additional soft measures include the development of internal complaints mailbox, publishing the minutes of evaluation meetings and appointment of the responsible person or body that approves the appointment of evaluators.

Additional hard measures in the OPs with high risk of conflict of interest often put additional controls on the members of evaluation committees by ensuring:

- Sufficient technical knowledge of the members of evaluation committees;
- The same procurement information is shared with all potential beneficiaries for equality and fair competition purposes;
- Self-disqualification of the evaluation committee members from decision-making in case of conflict of interest;
- Periodic declaration of assets of the members of evaluation committee;
- Approval of the minutes of evaluation committee meetings.

The number of additional measures varies significantly per OP. The number of additional soft measures varies from 0 to 11 with the clear trend on the replacement of EC-recommended measures with additional ones in the OPs with high and medium risk. However, for some OPs, a high number of implemented EC-recommended measures is combined with a high number of additional measures.

In contrast, in OPs with low assessed risk, authorities put additional attention on the verification measures. This could be explained by the fact that, similarly to the group of high risk, authorities of OPs with low risk of conflict of interest implemented fewer EC-recommended verification measures and replace them by own additional verification measures. More specifically, this group of OPs on average has the highest share of EC-implemented soft and hard measures (67% and 75%, respectively), but the lowest share of EC-recommended verification measures (44%). Low share of EC-recommended verification measures for this group of OPs could be linked with the existence and effective use of own similar verification measures or with regulatory difficulties to implement some of the EC-recommended measures (e.g. focused on the implementation of measures by beneficiaries).

Additional verification measures for the OPs with high and medium risk include the potential use of Arachne for checking company relationships, preventive reviews carried out by authorities in the procurement process with respect to proper awarding criteria and appropriate functioning of committees, and use of independent audits.

Measures addressing the risk of conflict of interest focus on prevention across all OPs. The analysis reveals a strong focus on prevention for conflict of interest, among both EC-

recommended and additional measures. More than 70% of EC-recommended measures for conflict of interest (14 out of 19 measures) are prevention. Additional measures in place are similarly tilted toward the prevention side.

Conclusion on proportionality

The risk of conflict of interest is well-mitigated in most of the selected OPs. Most authorities in the sample have put in place proportionate measures to tackle the risk of conflict of interest. In all of OPs with low risk of conflict of interest, the proportionality of response is high. For none of the OPs that we reviewed was the proportionality low. There is room for improvement in mitigating conflict of interest risk among about a third of medium and high risk OPs. Lower proportionality was detected for the OPs with medium and high risk, which reflects the partial implementation of EC-recommended measures and their replacement with the additional measures that do not have the same focus and impact (Figure 10).

Figure 10: Proportionality for conflict of interest by level of risk
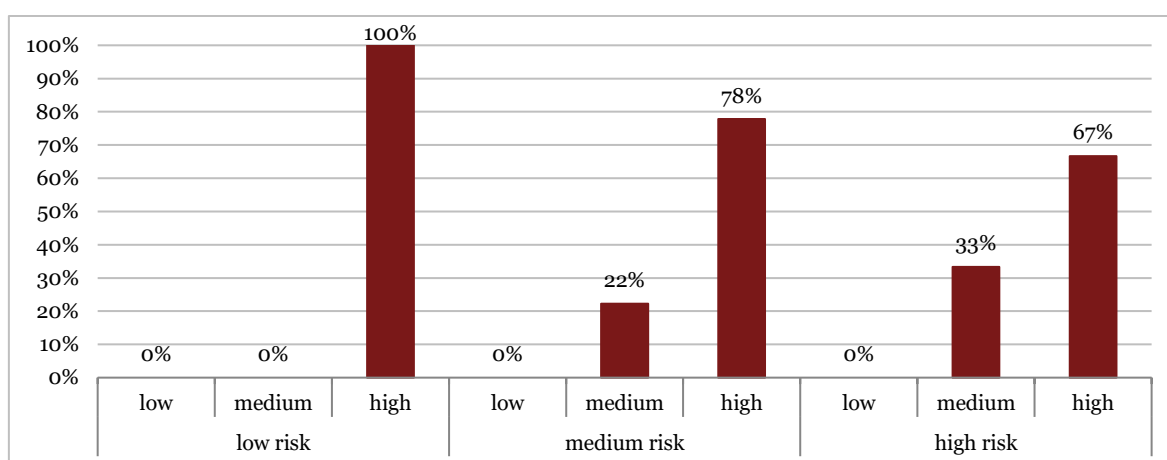
Source: PwC

In order to improve partial proportionality, Authorities should:

- *Ensure members of evaluation boards are regularly rotated;*
- *Have a secondary panel to verify the decision of primary evaluation board (for a sample of decisions at higher risk of manipulation);*
- *Ensure that beneficiaries put in place effective anti-fraud measures internally (e.g. conflict of interest policies and declarations, rotation of members of evaluation board, etc.);*
- *Organise regular trainings on ethics and integrity for all personnel of Authorities;*
- *Implement a whistle-blowing mechanism and a conflict of interest internal policy, with declarations for all personnel, and ensuring that these are followed;*
- *Strengthen the cooperation with other Authorities (e.g. police) for prevention of bribes and other unfair benefits.*

Proportionality is very high among MS with higher perceived corruption. The countries with the low and medium CPI, where the risk of conflict of interest was assessed as the highest, put in place proportionate measures to mitigate it. More specifically, in over 80% of the selected OPs in low and medium CPI countries, authorities put in place high proportionality measures to mitigate the risk. The OPs with medium proportionality, coming from MS with medium and high CPI, also have lower level of risks for conflict of interest, compared to other risks. Therefore, the high risk of conflict of interest for the selected OPs is effectively mitigated for most of the OPs (Figure 11).

Figure 11: Proportionality for conflict of interest by group of MS
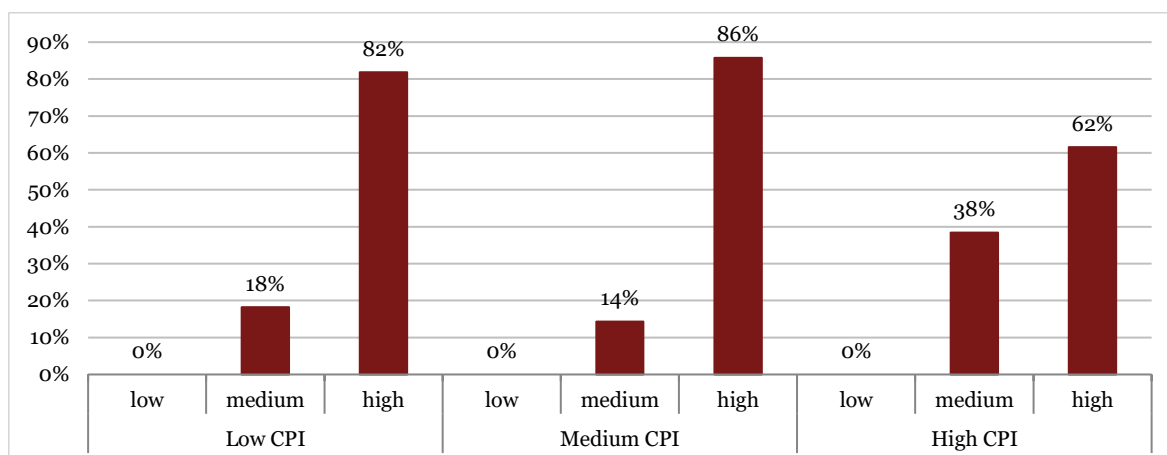
Source: PwC

6.2 Avoidance or manipulation of procurement procedures

This risk category refers to potential attempts by contracting authorities to undermine EU and national public procurement rules to give contracts to preferred suppliers. This can be done by manipulating the procurement process to favour one bidder over others, or by avoiding the procurement process altogether. This risk category includes a wide range of potential sub-risks, such as split purchases, unjustified single source awards, too restrictive selection criteria/tender specifications, irregular extension of the contract and lack of tendering procedure.

Level of risk

Risk assessment at OP level does not always correspond to indicators at MS level. Authorities assess risks related to the avoidance or manipulation of procurement procedures as high in 14 OPs, as medium in 17, and as low in 10. This is about average among risk categories. However, this self-assessment does not correspond closely to other indicators of avoidance or manipulation of procurement procedures at MS level. This implies that some authorities may be underestimating this fraud risk.

One common indicator of the manipulation of procurement procedures is a high number of procurement procedures that are awarded when only a single bid was submitted and not excluded.[36] A low number of bidders can be caused by several factors, including small markets, high administrative burden in the public administration, and lack of administrative capacity among contracting authorities. However, it can also be caused by biased tender specifications, failure to adequately publicise tender notices, or improperly excluding valid offers. The perception that these factors are in play can have negative consequences: potential bidders can withdraw from the public procurement procedure, if they believe that corruption may affect the attribution of the contract.

The EC's Single Market Scoreboard sets 20% as the threshold for a high number of single bid contracts. According to their 2016 data, 13 MS had had high rates of single bidder contracts. However, five out of the 10 OPs for which authorities assessed the risk of avoidance and

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[36] There is some variance in how this indicator is calculated based on TED data, ranging from 'only one offer received' on the narrow end to the broader sense of 'only one offer received and not excluded on technical grounds or based on exclusion or selection criteria.' See TED methodology notes at: http://data.europa.eu/euodp/repository/ec/dg-grow/mapps/TED_advanced_notes.pdf
See also Seventh Cohesion Report, p157-159, at: http://ec.europa.eu/regional_policy/en/information/cohesion-report/, and Fazekas M. (2017), Assessing the quality of government at the regional level using the public procurement data, at: http://ec.europa.eu/regional_policy/en/information/publications/working-papers/2017/assessing-the-quality-of-government-at-the-regional-level-using-public-procurement-data

manipulation of procurement procedures as low were from high single-bid MS, as were eight out of the 17 OPs that assessed the risk as medium.

Another important indicator of avoidance or manipulation of procurement procedures is the use of negotiated procedures without prior publication. In contrast to more common open and restricted procedures, a negotiated procedure without prior publication allows the contracting authority to award procurement contracts to a bidder through direct negotiation with the supplier, and without prior publication of a call for tenders. Because this approach is less transparent and less competitive than the alternatives, it is meant to be applied only when justified by a narrow set of conditions. As with single bid contracts, there are non-fraudulent reasons for the use of negotiated procedures without prior publication, like when there is only one or two possible suppliers, or when acquiring a piece of art; but a recurrent use of negotiated procedures without prior publication can also indicate attempts to avoid proper procurement procedures and may be an indicator of possible corruption in the attribution of contracts.

EC's Single Market Scoreboard sets 10% of all procurement procedures as the threshold for high use of negotiated procedures without prior publication, which using 2016 data would cover nine MS. Here as well, four of the 10 OPs for which authorities assess the risk of avoidance or manipulation of procurement procedures as low come from MS that make high use of negotiated procedures without publication, as did five of the 17 OPs for which authorities assessed the risk as medium.

Use of EC-recommended measures

The EC recommends 29 measures for mitigating the risk of avoidance or manipulation of procurement procedures, most of them focusing on detection of fraud. However, not all OPs involve direct procurement. For those OPs that do not, only a subset (20) of the 29 measures are applicable, presented in parentheses in the following.

Of the EC-recommended measures 21 (15) are verification, three (2) are hard, and five (3) soft. 22 (17) are detection and seven (3) prevention. This strong focus on verification measures to address these risks is unique to the risk of avoidance or manipulation of procurement procedures and the risk of manipulation of project costs and quality.

Most of the EC-recommended measures relate to second checks of the procurement procedure, for example by an internal audit function or by a second mechanism other than the selection panel, either for the MA or as requirements from the MA to beneficiaries.

There is a high level of adoption of the soft EC-recommended measures, particularly in high-risk OPs. The percentage of soft EC-recommended measures implemented is on average 53% for OPs in which authorities have identified risks related to avoidance or manipulation of procurement procedures as low. This is about average among risk categories. However, the percentage of soft EC-recommended measures implemented is on average 86% in OPs in which authorities assessed the risks as high.

Authorities of high-risk OPs have adopted many verification EC-recommended measures. For verification EC-recommended measures, the percentage of implemented measures is 31% in low risk OPs, and 49% among medium risk OPs, and 55% for high risk OPs. That said, it is important to note that the EC recommends a very large number (21, or 15 for OPs that do not use direct procurement) of verification measures for this risk category. This means that in high risk OPs authorities have implemented an average of 12 verification measures, or eight for EC-recommended measures without direct procurement.

MAs lack the mandate to implement some EC-recommended measures. Some of the EC-recommended measures that are not implemented in high risk OPs involve requirements on beneficiaries. These measures include, for example, the requirement that beneficiaries have an internal audit process, that they request the MA's approval for contract amendments, that they amend an original agreement above pre-defined thresholds, or that they have a secondary mechanism for specific processes.

Use of additional mitigating measures

Authorities have implemented additional measures that compensate for non-implemented EC-recommended ones. They have implemented mostly verification and hard additional measures, and only a few soft ones. This holds for all OPs, independently of whether authorities have assessed in their FRAs risks as low, medium or high.

Figure 12: Additional measures implemented by authorities
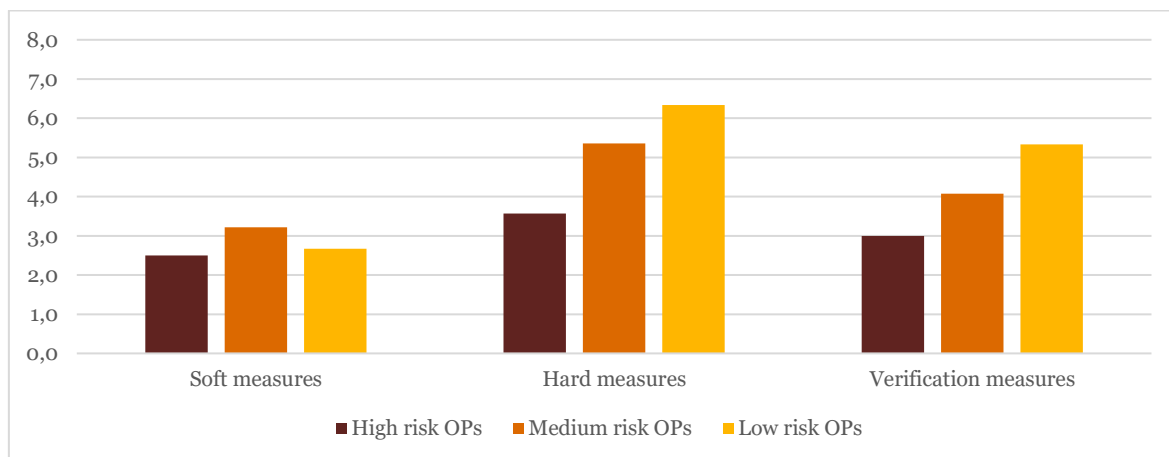
Source: PwC

This somewhat compensates that authorities have on average implemented less hard, and even less verification EC-recommended measures than soft ones. authorities have thus reached a distribution of soft, hard and verification measures close to the one achieved by the EC-recommended measures in the template.

Figure 13: Percentage of measures between soft, hard and verification categories [37]
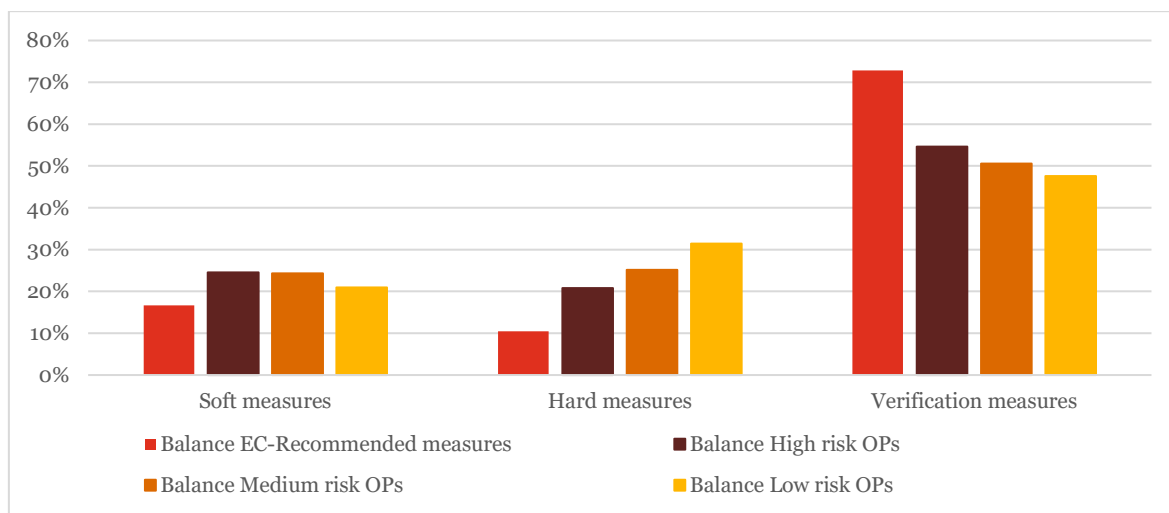
Source: PwC

This was done using other, additional measures with a similar focus.

All EC measures are recommended, not compulsory. However, a strong misalignment may be problematic. It may reveal a gap, for example of external checks in case no verification measure is implemented by authorities while the EC proposed several of them.

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[37] Balance refers to the share of total controls in one category or another.

Additional measures developed by authorities include:

- Checks by internal audit (within the IB or the beneficiary) of compliance with procurement regulation, including verification that the procurement order was not split to bypass rules on contracts above a certain threshold;
- Transparency of beneficiaries: the beneficiaries have a procedure to follow the procurement process, including the analysis of offers, results of the tender and contract amendments are published, etc.;
- Advance use of red flags and fraud indicators;[38]
- The existence of a "Commission of Tender Experts" giving the possibility to tenderers to revert to the Commission in case the procedure is perceived as flawed;
- The MA has pre-defined budgets based on a sound basis (e.g. market research) which is not disclosed;[39]
- Cooperation with tenderers:
  - At the request of the evaluators, applicants can be required to submit more information for an adequate assessment of their proposal. Such information can be attained either in writing or through a meeting with the applicant;
  - The MA ensures that in the ambit of procurement, the same information is conveyed to all potential beneficiaries for equality and fair competition purposes.

In line with the difficulty mentioned above regarding the lack of mandate and legal basis for authorities, they replaced in one OP the EC-recommended requirements to beneficiaries by recommendations, e.g. authorities recommend beneficiaries to have a secondary mechanism for specific processes, an internal audit procedure etc.

Conclusion on proportionality

Proportionality for this risk is high. For **all** analysed OPs, the nature and number of implemented measures is assessed as proportionate, high or medium, to the identified level of risk. In most OPs, proportionality is high. In OPs where the risks of avoidance and manipulation of procurement procedures were identified as a high risk, the proportionality is high for 12 out of 14 of them (in the two remaining OPs, it is medium). This is due to the fact that authorities have implemented a large number of EC-recommended ones and additional verification measures.

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[38] The use of red flags and fraud indicators is recommended in EC guidance documents. However, authorities in some MS have developed measures that can be considered as "additional" in that they are particularly innovative or advanced.

[39] The EC recommends, in the FRA template, that "The MA requires beneficiaries to compare the final price of products / services against budget and generally accepted prices for similar contracts. The MA should review the operation of these controls for a sample of beneficiaries." While similar, this measure can be considered as "additional" due to the direct use of market research by the MA.

In order to improve partial proportionality, authorities should:

- *Publish all contract information that is not sensitive;*
- *Rely on their background knowledge of beneficiaries and of previous fraud cases during the screening process;*
- *Ensure a transparent bid opening process, and adequate security arrangements for unopened tenders;*
- *Reinforce the bidding procedures, e.g. enforce the submission deadlines and review their operation for a sample of beneficiaries;*
- *Implement and publish a whistle-blowing mechanism for suspected fraudulent behavior;*
- *Review all contract awards by a secondary mechanism other than the selection panel to verify that procurement procedures have been followed;*
- *Require prior approval for all single source awards and amendments above pre-defined significant thresholds (both value and length) by secondary mechanism other than the procuring department;*
- *Perform a periodic review of a sample of winning bids against competition for any indications of prior knowledge of bid information;*
- *Regularly audit the operation of internal controls over procurement.*

6.3   Double funding

OLAF defines double funding as using deceit to get a project funded several times by different donors who are unaware of the contributions the others made.[40]

Level of risk

The self-assessed level of risk of double funding is medium. Compared to other risk categories, authorities in the sample of OPs assessed the risk of double funding as medium, rather than high.

Even though the Transparency International CPI does not specifically address the risk of double funding, an analysis of the level of risk across the three categories of scorers shows a tendency for medium scorings countries to self-assess their risk of double funding as high.

Use of EC-recommended measures

The EC FRA template recommends just one measure to address the risk of double funding. It has been implemented by just over half of all OPs, irrespective of their level of self-assessed risk. The control requires MAs to conduct cross checks of funding applications with the national authorities administering other funds, and with other relevant MS. In implementing this cross check, MAs have devised various strategies, including:

- Using data from their management information systems to keep track of various projects and expenses;
- Developing and using checklists used by MAs or IBs in order to increase the likelihood of identifying potential projects being double funded;
- Centralising all information about EU-funded projects within one database in order to check whether the project has already received funding nationally;
- Establishing cooperation with the tax authorities in order to conduct checks of tax returns;
- Requiring applicants to mention other sources of potential or received funding in the application process.

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[40] 2016 OLAF Report, available at https://ec.europa.eu/anti-fraud/about-us/reports/olaf-report_en

Use of additional mitigating measures

Beyond the above tools and procedures implemented in reducing the risk of double funding, authorities have implemented **additional hard and verification detection measures**, including the following:

- On-the spot checks in order to verify that the beneficiary has not received funding from other sources;
- Reviewing and stamping original receipts when beneficiaries are claiming expenses, such that these cannot be used for another future claim;
- Requiring applicants to sign a declaration of non-double funding.

Several OPs also implemented **soft measures** in order to strengthen awareness on the prohibition of double funding and creating a stronger anti-fraud environment. Controls include:

- Using prior knowledge or any indications of double funding during the selection of applicants;
- Publishing a declaration emphasising the prohibition of double funding during the selection of applicants.

The institutional setup within the country can be a further mitigation measure for the risk of double funding. In fact, in some countries where a sole MA is in charge of various OPs, the risk of double funding within that country is limited since the MA has an overview of all the funded projects. In some instances, when this was not the case, the establishment of a cross-OP committee has helped in ensuring that a general overview exists in terms of projects across the country. Finally, some MS mitigate this risk category by ensuring a clear demarcation is made between the various OPs in their country, such that funding for one project cannot be requested from more than one OP.

OPs having identified a higher risk of double funding have on average implemented more additional hard or verification measures, in line with the proportionality principle. On the other hand, OPs with a low risk implemented a greater number of additional soft measures.

Figure 14: Additional measures implemented by authorities depending on the level of risk for the OP
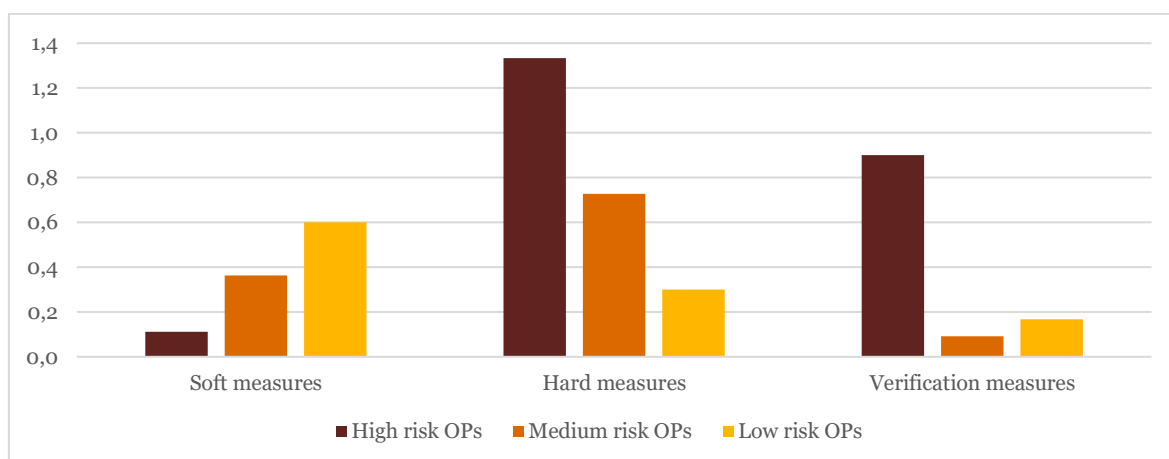
Source: PwC

Conclusion on proportionality

The proportionality of anti-fraud and anti-corruption measures of about **60% of high risk OPs were assessed as low or medium**. Indeed, several OPs with a high or medium risk of double funding have not implemented any controls to mitigate this risk, or rely on soft measures alone. On the contrary, for all low risk OPs, the proportionality of the measures implemented were assessed as medium or high.

In order to improve partial proportionality, Authorities should:

- *Include cross checks with the national authorities administering other funds, and also other relevant Member States in the screening process;*
- *Use dedicated IT tools that allow automatic check for potential double funding across OPs and Member States.*

6.4 Collusive bidding

Collusive bidding is defined as the manipulation by bidders of competitive procedures organised by a beneficiary to win a contract by colluding with other bidders or setting up fake bidders.[41]

Level of risk

51%

Companies in the EU suggest that the practice of collusive bidding are widespread in the EU

The self-assessed level of risk of collusive bidding is low compared to other risk categories. There was a roughly equal split among the OPs in our sample who self-assessed this risk category as low, medium, and high risk. As such, the risk of collusive bidding was assessed by the MAs in the sample as low more often than for other risk categories.

The self-assessed level of risk is somewhat at odds with the results of external measures, such as the Eurobarometer survey of business perceptions of corruption.[42] 51% of respondents to this survey reported that the practice of collusive bidding is widespread in the EU, similar to other kinds of fraud. Indeed, there is a disconnect at the national level between those MS where more businesses reported that collusive bidding was widespread, and the OPs from those MS that assessed the risk as high. This discrepancy indicates the possibility that authorities from high perceived corruption MS may be underestimating the risk of collusive bidding relative to their peers in low perceived corruption MS.

Use of EC-recommended measures

The EC recommends seven measures to mitigate the risk of collusive bidding. Six of them focus on detection of collusive bidding, of which five are verification and one is hard. This emphasis on stronger, detection-focused controls is appropriate given the difficulty of identifying collusive bidding in procurement procedures.

Three of these measures require beneficiaries to have measures related to the procurement process in place to:

- detect unusual relationships between third parties;
- detect persistently high or unusual bid data;
- verify the details of all tenderers submitting bids;
- systematic comparison of unit prices for standard goods and services against a benchmark.

Other EC-recommended measures put the burden on the MA to check whether companies participating in a tender are interlinked or whether subsequent to participating to a tender, a company becomes contractor or subcontractor of the winning tenderer.

[41] Fraud Risk Assessment, Annex 1 of "Fraud Risk Assessment and Effective and Proportionate Anti-Fraud Measures," available at: https://ec.europa.eu/sfc/en/2014/anti-fraud

[42] Businesses' attitudes towards corruption in the EU, Flash Eurobarometer 457, December 2017 at: http://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/Survey/getSurveyDetail/instruments/FLASH/surveyKy/2177

Authorities in high risk OPs in the sample implemented more EC-recommended controls than low- and medium-risk OPs.

On average, authorities that assessed the risk of collusive bidding as high implemented 64% of the EC-recommended measures. This is typical across risk categories. Medium and lower risk OPs in the sample implemented fewer EC-recommended controls, particularly the controls focusing on fraud prevention, e.g. training.

Figure 15: Percentage of EC-recommended measures implemented by type (detection and prevention) and assessment of risk
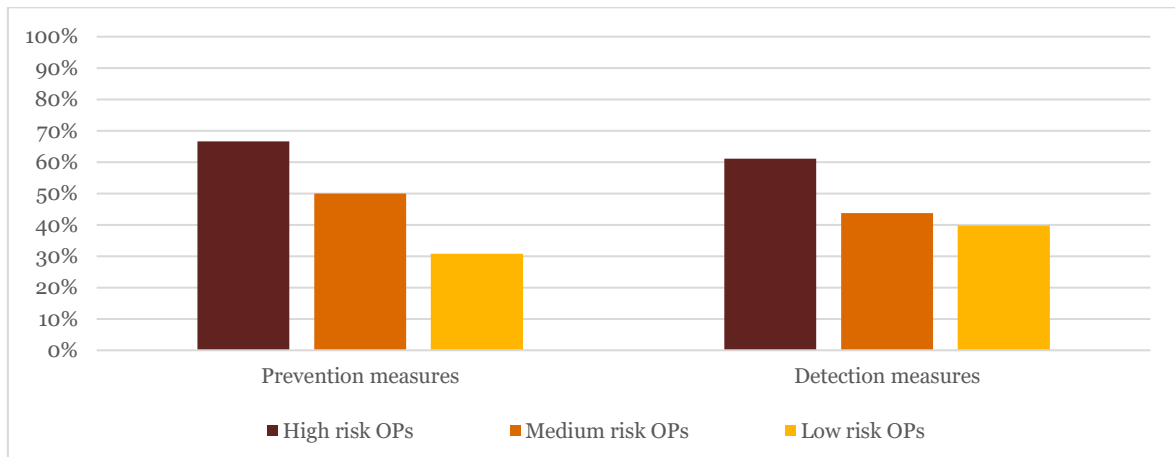
Source: PwC

Use of additional mitigating measures

Still, in order to further mitigate the risks, specifically for medium and high risk OPs, authorities have implemented the following additional measures:

- Development and implementation of a checklist including red flags used in conducting control of tenders;
- Collaboration with public procurement or competition authorities;
- Ad-hoc comparison of costs with other similar projects, when available.

Moreover, at the national level, some authorities consider changes in the legislative framework regarding public procurement as an added control to mitigate the risk of collusive bidding.

With regard to the whole pool of controls implemented, there is a tendency to follow the recommendation of the EC in the make-up of the type of measure implemented. As pictured in the graph below, MAs put an emphasis on the detection of collusive bidding through verification measures, while soft measures are the least used. This is appropriate given the risk category under analysis.

Figure 16: Percentage of measures between soft, hard and verification categories
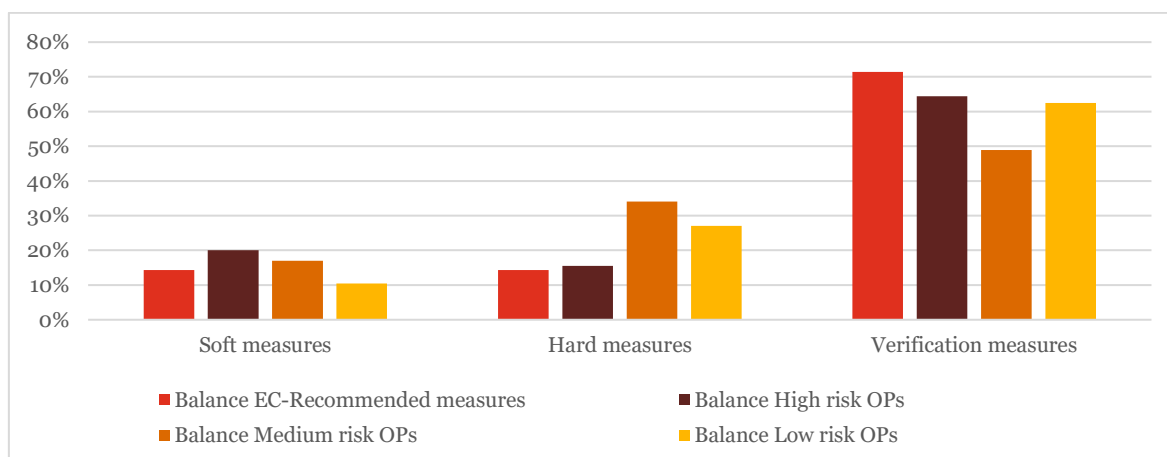
Source: PwC

This is similarly the case when comparing between the emphasis that is put on detection or prevention measures, as depicted in the figure below:

Figure 17: Percentage of measures between detection and prevention
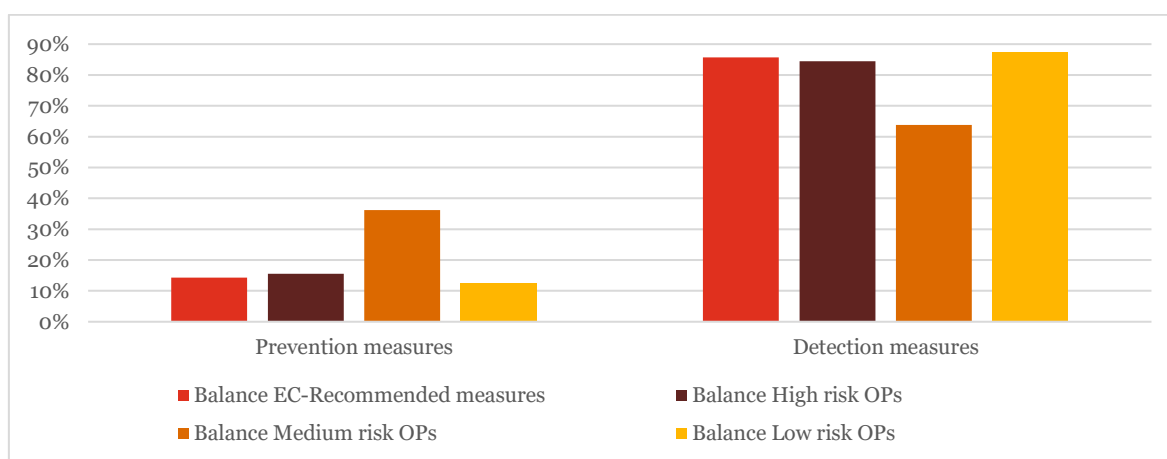
Source: PwC

For a few OPs, the additional detection measures implemented help to compensate for a lack of hard and verification EC-recommended measures among OPs where the risk of collusion was assessed as high or medium. However, the use of additional measures to address this risk category is comparatively limited.

Conclusion on proportionality

Proportionality for this risk category is low for high risk OPs. In fact, authorities in fewer than half of the OPs in the sample that assessed the risk of collusive bidding as high have put in place proportionate anti-fraud measures. In cases of partial proportionality, authorities did not put in place all EC-recommended measures, at times supplementing the missing EC-recommended measures with the additional measures. However, those measures do not, or only partially cover the scope of the EC-measures that are not implemented. Taking into account the high severity of the risk, this led to a partial proportionality of measures for a selection of high-risk OPs. Even among low and medium risk OPs, the assessment of the proportionality is medium for more than half of the cases.

In order to improve partial proportionality, Authorities in high and medium-risk OPs should:

- *Verifying the reasons behind possible single bidding and keeping a track of the beneficiaries involved in possible single-bidding;*
- *Provide training for concerned beneficiaries in preventing and detecting fraudulent behaviour within public procurement;*
- *Check whether companies that have participated in a tender subsequently became contractor or subcontractor of the winning tenderer;*
- *Require the beneficiary to complete background checks on all third parties (e.g. general website checks, companies' registration data etc.);*
- *Require beneficiaries to have controls in place to detect persistently high or unusual bid data (such as bid evaluators that have a knowledge of the marketplace) and to unusual relationships between third parties (e.g. rotation of contracts);*
- *Require beneficiaries to 'benchmark' price comparators for standard goods or services.*

6.5   Manipulation of project costs and quality

The risk category refers to cases where beneficiaries provide authorities with incorrect or false information related to project costs, results, or quality in order to receive a profit. The category comprises sub-risks such as amendment of existing contract, defective pricing, manipulation of cost claims, overstatement of quality or activities of personnel, false labour costs, labour costs are apportioned incorrectly to specific projects, and non-delivery or substitution of products.

Level of risk

Authorities assess risks related to manipulation of project costs and quality as high in 14 OPs, as medium in 16, and as low in nine. This distribution is average among risk categories.

Use of EC-recommended measures

The EC FRA template recommends 30 measures to mitigate the risks related to manipulation of project costs and quality. A large majority of these measures (24) are verification measures. More specifically, EC-recommended and verification measures could be split into two categories:

1. *Measures performed by beneficiaries*. This group of measures includes requirements set by MAs on beneficiaries to put in place a number of controls. These controls include measures to verify evidence of costs, review the invoices submitted for duplication or falsification, compare the price of products against the market prices, review the services against service specifications, etc.
2. *Measures performed by the MA*. The EC-recommended measures foresee that the MA conducts a number of checks on beneficiaries in order to verify whether the requested controls were implemented by beneficiaries. Similarly to the previous category, measures performed by the MA focus on periodic reviews of project outputs against costs, activity reports against project specifications. Moreover, measures suggest reviews of labour costs of beneficiaries and third parties in order to check for discrepancies between planned and actual activities, actual implementation team and the team proposed in the tender, salary and time spent on projects, verification of staff, social security details, overtime claims, etc.

In addition, EC-recommended measures for manipulation of project costs include 6 hard measures, targeted at:

- Prior authorisation of the MA in cases of significant changes of labour cost linked to change in personnel or contract amendments above pre-defined significant thresholds;
- Use of standard cost units by beneficiaries;
- Selective checks of work certificates to be provided on the completion of the contract;
- Publication of a whistle-blowing mechanism.

Most of the EC-recommended measures that are not put in place by authorities for this risk category relate to requirements to beneficiaries to put in place certain controls. In a lot of cases, authorities have no legal power to impose such controls on beneficiaries. Additionally, some resistance has been noticed in the uptake of the strict approval of amendments to the contract in case of exceeding the thresholds.

Three OPs from the pool of analysed OPs used all EC-recommended measures. Most Authorities put in place a combination of EC-measures with additional measures.

Authorities focus on hard and verification measures to address the manipulation of project costs and quality. The EC FRA template does not recommend any soft measures for addressing manipulation of project costs and quality. In the analysed OPs, authorities have implemented around 46% of EC-recommended measures (on average seven controls). In OPs with low risk of manipulation of project costs and quality, authorities are implementing fewer EC-recommended measures (on average 5 controls).

Figure 18: Share of EC-recommended measures used by OPs for tackling manipulation of project costs and quality
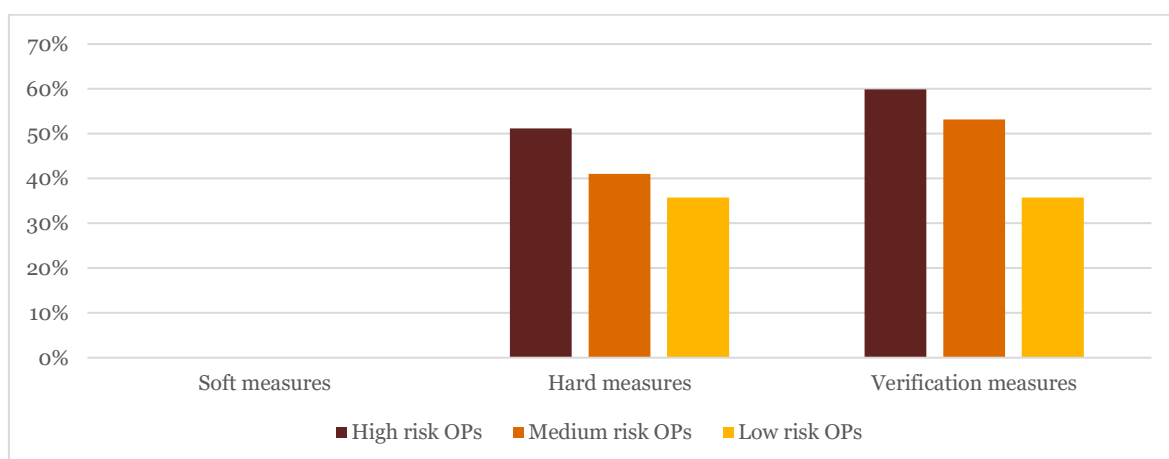
Source: PwC

Use of additional mitigating measures

In the majority of the analysed OPs, authorities have put in place additional measures replacing EC-recommended ones that were not implemented. The focus of additional measures vary depending on the level of risks, as assessed by the authorities. In the OPs with high level of risks, authorities' additional measures are mostly verification and hard ones. Authorities in the high risk OPs also used more soft controls than authorities in medium and low risk OPs. In OPs with low risks related to manipulation of project costs and quality, authorities put emphasis on additional hard measures (Figure 19).

Figure 19: Typology of additional measures for the risk of manipulation of project cost and quality
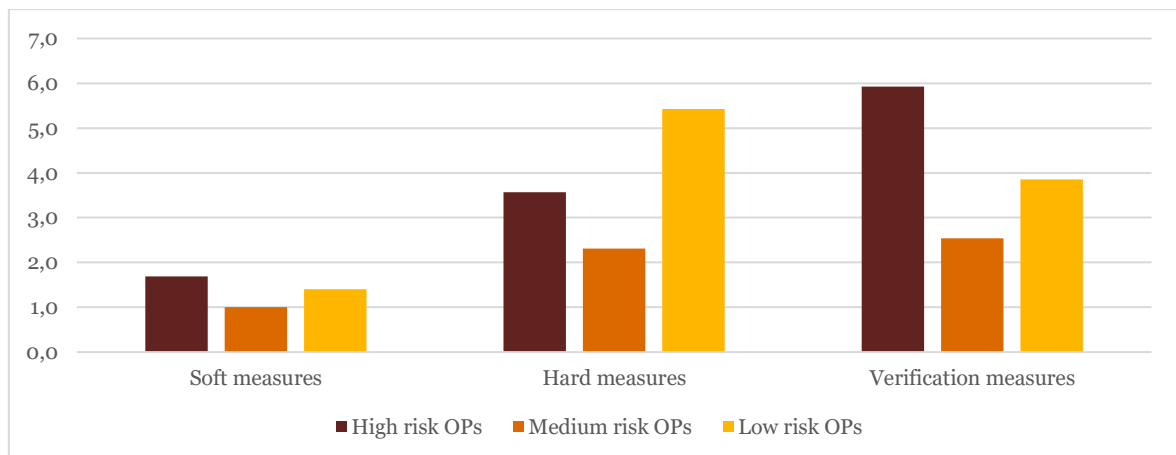
Source: PwC

Authorities of the OPs with high risks associated with manipulation of project costs put in place some **additional soft measures** focusing mostly at:

- Replacement of requirements to beneficiaries by recommendations to implement certain checks and controls
- Relevant body informs beneficiary on acceptance of works;
- Implementation of complaint mechanisms by beneficiaries.

Additional hard measures for the manipulation of project costs include:

- Appointing the responsible person at the beneficiary side for the supervision of the contract;
- Budget including the work units with unit prices is binding for beneficiaries;
- Requirements for IBs to perform checks on beneficiaries;
- Double control in the phase of justification and verification with a clear division of functions among them;
- Setting up a limit of working hours for a beneficiary;
- Resolving the amendment by the same granting body that issued the resolution prior to the specific instructional procedure;
- Use of IT tools for identification of double claims.

Additional verification measures suggested by authorities emphasise the use of additional on-the-spot checks by the IBs or MAs to detect potential manipulation of cost claims, working time, execution of works and services, payment of lump-sums, etc. In most cases, hard and soft additional measures used for mitigating risks related to manipulation of project costs are similar to the EC-recommended measures. However, authorities have modified them to better reflect the controls they actually use. Most of these controls do not have the exact same coverage and impact as the EC-recommended measures, and are therefore considered as additional.

Authorities in the selected OPs are putting strong emphasis on detection measures, but also added some prevention controls. Most of the EC-recommended controls for this risk category are detection measures. In addition to these measures, authorities are also introducing some prevention measures to this category of risk. **Additional prevention controls** in general focus on the development of complaint mechanisms by the beneficiary, as well as provision of recommendation to beneficiaries by authorities to put in place controls and regular checks of project costs.

In OPs with medium risks of manipulation of project costs and quality, authorities put in place fewer additional detection measures. Assessment of additional measures reveals that in all OPs, regardless of the level of risk, authorities put in place similar amount of additional prevention measures. These measures are not replacing EC-recommended measures and are purely additional measures.

The number of additional detection measures, on the contrary, varies depending on the OPs level of risk. In OPs with estimated high or low risk, authorities put in place on average at least twice as many additional detection measures as in the OPs with medium estimated risks.

Figure 20: Focus of additional measures for risks related to manipulation of project cost and quality
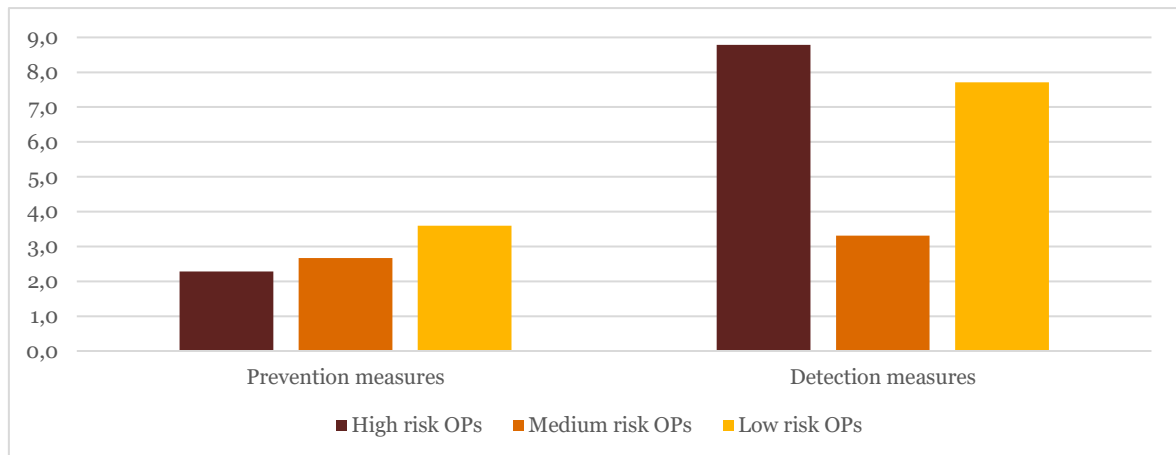
Source: PwC

Additional detection measures focus on on-the-spot checks by beneficiaries and authorities, setting up limitations for working hours, binding budget on the tender phase, appointment of a person responsible for the contract implementation and use of IT tools for the detection of falsified invoices.

Conclusion on proportionality

Mitigation measures put in place in the analysed OPs are proportionate. When comparing the proportionality of measures per OP to the assessment of the risks, it appears that for most of the OPs, authorities have put in place proportionate measures (Figure 21). This is equally applicable for all categories of risk. And although for about a quarter of OPs with medium and high level of risk, the proportionality of measures is partial (medium), it could be concluded that all selected OPs are on the right track with implementing proportionate response to risks of manipulation of project costs and quality.

Figure 21: Proportionality of manipulation of project costs and quality by level of risk
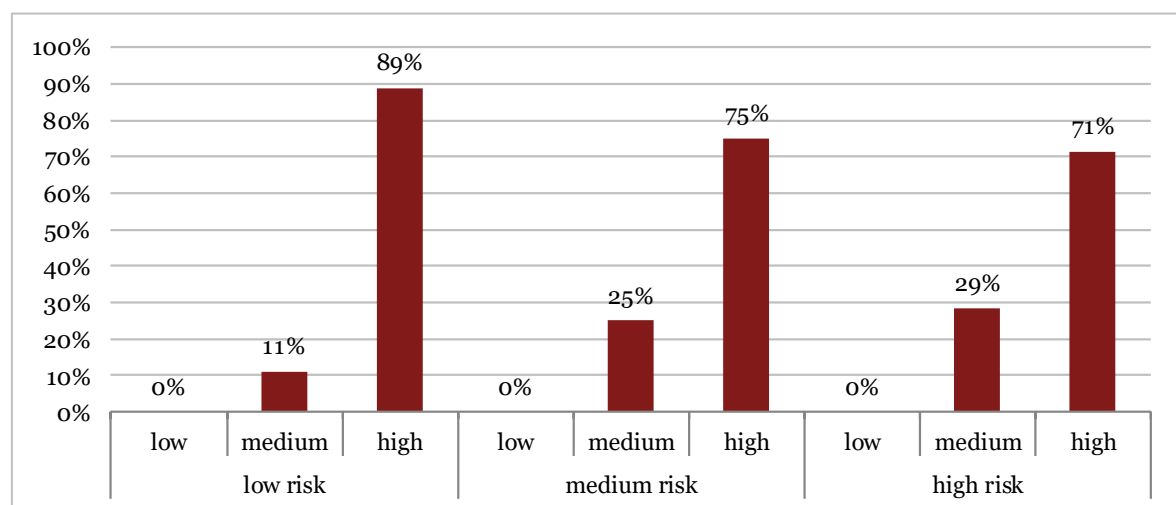
Source: PwC

In order to improve partial proportionality, authorities should focus on:

- *Requiring beneficiaries to put in place effective measures to control the costs and quality of projects (e.g. use of standard unit costs, compare the final price of products / services against budget and generally accepted prices for similar contracts, monitor invoices from suppliers against supporting documentation for indications that overtime is being claimed, review invoices for labour costs against evidence supporting actual salary costs incurred, perform a review of multiple submitted invoices with the same amount or same invoice number, etc.);*
- *Require beneficiaries and third parties to provide the evidences of cost control (e.g. evidences on existence of staff e.g. contracts, social security details, evidences that costs were incurred within project deadlines e.g. original invoices, bank statements, etc.);*
- *Conduct periodic reviews of the project outputs against the declared costs;*
- *Ensuring the amendments to the projects above pre-defined thresholds are justified and approved by a responsible body;*
- *Ensuring regular controls on a sample of projects.*

6.6   Lack of skills and anti-fraud culture

This section focuses on the activities undertaken to build capacity and an anti-fraud culture within authorities in charge of managing and certifying ESI Funds. It points out key findings related to the following areas:

- Elements of an anti-fraud culture;
- Trainings and other awareness-raising activities;
- Risks, mitigation measures and proportionality;
- Whistle-blowing policies;
- Single point of contact;
- Cross-country cooperation;
- Collaboration with civil society.

Anti-fraud culture

Almost all selected OPs display elements of an anti-fraud culture. All selected OPs have either tone from the top communications, mission statements, codes of conduct and/or training and awareness-raising activities at MA level. In a few OPs, codes of conduct were not developed at MA level, but the MA mentioned the national code or law applicable to all civil servants or the code of conduct of the institution it belongs to (e.g. code of the Ministry).

There are different interpretations at MA level of what constitutes a tone from the top communication or a mission statement. Some MAs consider their anti-fraud policy as a tone from the top communication, while others don't. Some MAs provide their tone from the top communication to staff during trainings, and some refer to national guidelines or documents from the institution they belong to. Similarly, MAs have different interpretations of whether the description of their objectives and responsibilities in national law or OP-level procedures can be considered as mission statements. More guidance from the EC could be useful in that regard.

86%

MAs' staff attend formal trainings or awareness raising activities on fraud and corruption

Trainings and other awareness-raising activities

Participation in training and awareness-raising events is high. The staff of most (86%) MAs attend formal trainings or awareness raising activities on fraud and corruption. An additional 6% plan to have such activities. These trainings are not always organised by the MA itself. They are sometimes organised by other public authorities, such as the AFCOS, the AA; sometimes by OLAF and, for 4 OPs in two MS, by Transparency

International. In one MS, there is a training package for everyone who works in the government, which includes training on anti-fraud and anti-corruption matters.

For one of the 4 OPs in where there are no training or awareness raising events, training materials on how to prevent fraud and how to investigate are available to staff. For the remaining 3 OPs, there is no other similar awareness-raising activity in place.

Level of risk, mitigation measures and proportionality

The EC recommends 9 measures to mitigate risks related to incomplete or inadequate processes due to a lack of the necessary skills. These measures are mostly soft (4) and verification (4), with almost as many focused on prevention (4) as on detection (5).

On average, authorities largely adopted EC-recommended measures. The average share of EC-recommended measures among all implemented measures is between 43% (percentage of verification measures adopted by authorities having assessed risks as high) and 100% (adoption of the one EC-recommended hard measure by authorities having assessed risks as low).

Figure 22: Adoption of EC-recommended measures by type of measure and level of risk
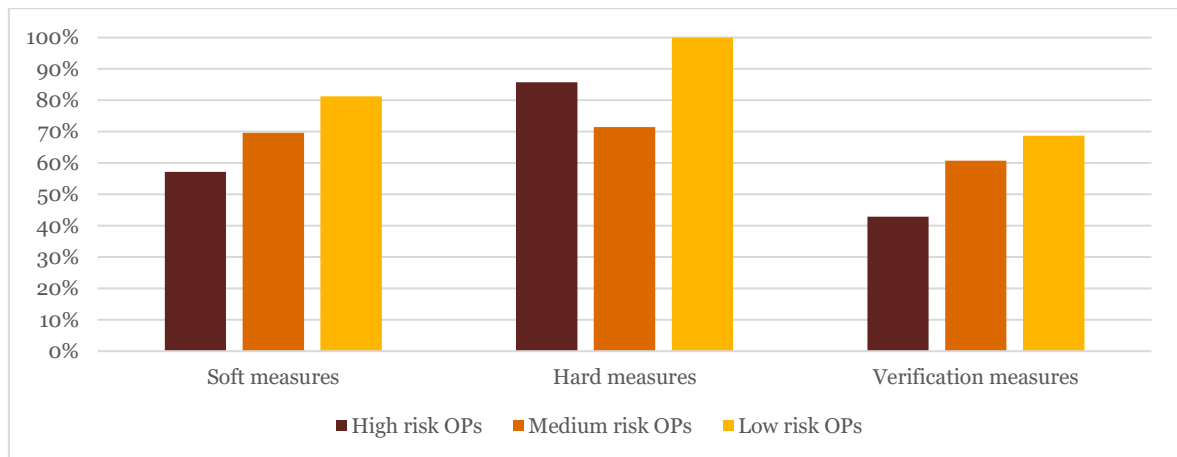
Source: PwC

OPs that identified the risks as high have implemented more additional measures than OPs that have identified this risk as low or medium.

Figure 23: Additional measures by type of measure and level of risk
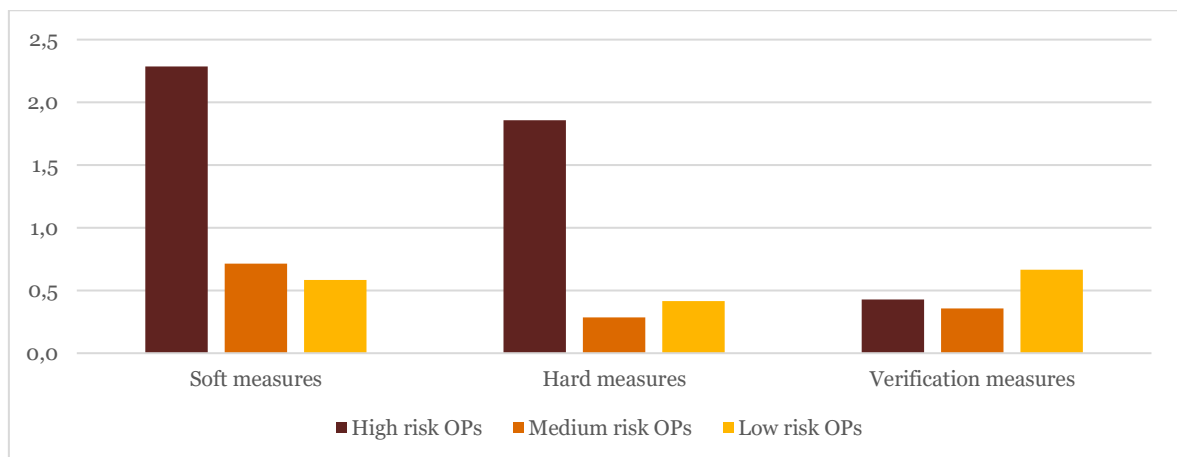
Source: PwC

These additional measures relate to:

• Strengthening the verifications, including:

- o Via a second check carried out by a different person;
- o Verification all expenses (not only a sample) before payment to beneficiaries;
- o Cross-checking data and on-the-spot checks to mitigate risks of expenditure duplication.
- Guidance and awareness-raising, e.g.:
  - o Supervision by the MA of IBs' checks, production of methodology, practices and guidelines to help them;
  - o The procedures relating to the examination of payment applications ensure adequate segregation of duties and are based on recognised good practices.
- Ensuring an adequate audit trail:
 - o For each segregated step of the process, evidence of the staff intervention is required;
  - o Log electronically which expenses have already been verification and which have been paid.

Overall, measures are proportionate to the risks. Proportionality is lower in a small number of OPs where authorities assessed risks related to this category as low or medium. In all OPs in which authorities have assessed the risks as high, proportionality is high or medium.

Figure 24: Proportionality in lack of skills and anti-fraud culture
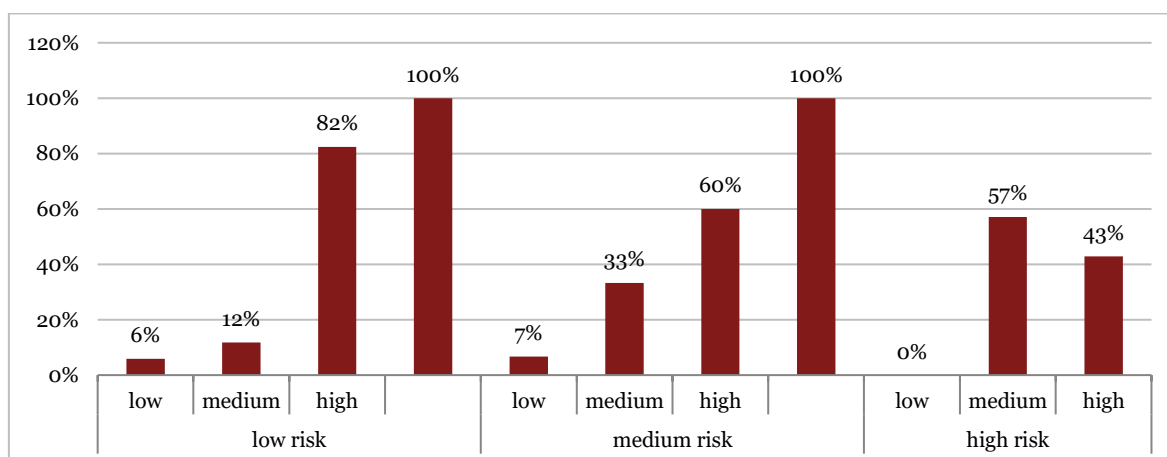
Source: PwC

In order to improve partial proportionality, Authorities should:

- *Review the adequacy of training and certification for CA and the availability of repeated training on fraud awareness;*
- *Review and approve the selection process of beneficiaries based on accepted best practices including an analysis of the level of fraud risk;*
- *Review expenditure certified by the CA, to ensure they have been performed in line with relevant guidelines and standards;*
- *Ensure a clear definition, allocation and separation of functions between and within the MAs and IBs;*
- *Ensure the availability of adequate procedures at the MA to monitor the effective implementation of the tasks delegated to the IBs.*

Whistle-blowing procedures

Whistle-blowing procedures are widespread. 80% of the selected OPs have a whistle-blowing procedure at MA level. An additional 6% (3 OPs) use a whistle-blowing procedure that exists at national level.[43] Finally, in one MS, MAs refer to the process in place at the AFCOS for the receipt of complaints concerning corruption and fraud.

Information on how to report on a potential fraud case, as well as opportunities for reporting, are often provided online, on the MAs' websites. Protection of the whistle-blower from sanctions is addressed via the possibility to report anonymously, either via technical (anonymous email, phone call or letter) or policy measures (the recipient of the information is obliged to keep name of the whistle-blower confidential).

These positive results need to be considered carefully. The existence of a whistle-blowing procedure does not mean it is efficiently implemented, or used. Other elements, such as the culture of the country, also plays a role. Furthermore, we did not assess whether the protection offered to whistle-blowers was sufficient.

Single point of contact

61%

Analysed OPs have a single person responsible for following-up on fraud issues

The EC "Guidance note on fraud risk assessment and effective and proportionate anti-fraud measures" recommends follow-up after a case has been handed over to the competent authorities for investigation. This follow-up would consist in a review of processes, procedures or controls related to the fraud case. This should ensure weaknesses are accounted for and remediated.

Responsibilities for following-up on fraud issues are allocated differently depending on the OP. 61% of the analysed OPs have a single person responsible for following-up on fraud issues. The "single point of contact" can also take the form of a group (dedicated department within the MA or sometimes self-assessment team) in another 27% of the OPs. The person or group is not always designated via a formal procedure.

Five out of the 6 OPs with no single point of contact belong to MS perceived as highly corrupt (low CPI score).

Cross-country cooperation

A few national authorities cooperate on a regular basis with peers from other MS. Authorities in one country mentioned that they made use of other countries' NAFS when developing their own.

Many MS participated in the international project "Cooperation in the Anti-Fraud Sector." Designed by the Italian AFCOS, and supported by the EU Programme Hercule III (2014-2020), the project aimed at improving the functioning of the anti-fraud systems at European and national levels by strengthening cooperation between the participating countries. This project focused on four key pillars:

1. Exchanging best practices and experiences, including regarding the methods of combating irregularities in ESI Funds;
2. Sharing national and international strategies to prevent fraud against the EU's financial interests;
3. Disseminating knowledge;
4. Building a network of contacts and knowledge between Anti-Fraud Coordination Service (AFCOS), law enforcement and other investigative authorities.

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[43] An additional MA referred to a national whistle-blowing procedure. However, the OP was not included in the above percentage since it was not clear whether such national procedure was actually used by the MA.

The project was launched in 2014 and ended in 2016. It gathered 16 participating countries, and resulted in suggestions to improve the prevention of fraud against the EU budget, as well as strengthened relationships between national AFCOSs.

Collaboration with civil society

Direct collaboration with civil society is rare. Of the sample of OPs covered for this study, only four MAs from two MS work directly with external, civil society organisations, namely the ones mentioned above as receiving training from Transparency International. This may be due to authorities not seeing it as part of their mandate. None of the interviewed authorities mentioned they were using "Integrity Pacts."[44]

Integrity Pacts

Integrity Pacts were developed as a tool for preventing corruption in public contracting. An Integrity Pact is both a signed document and approach to public contracting which commits a contracting authority and bidders to comply with best practice and maximum transparency. A third actor, usually a civil society organisation, monitors the process and commitments made with maximum transparency. All monitoring reports and results are made available to the public on an ongoing basis.

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[44] See https://www.transparency.org/whatwedo/tools/integrity_pacts/5

7. Key lessons

The following are some of the key takeaways from this study of anti-fraud and corruption measures in the implementation of ESI Funds.

Anti-fraud and anti-corruption efforts are more formalised and systematic in the 2014-2020 programming period

New legislative requirements to address fraud and corruption in ESI Funds for the 2014-2020 programming period have catalysed a number of changes at MS level that have resulted in a more formalised and more systematic approach. The FRA process is one example. A number of authorities had in place some form of fraud risk assessment process prior to 2014, often in the context of a broader risk assessment. Using the FRA template helped to put more focus on fraud and corruption risks, and created clear links between identified risks and specific mitigating measures. And of course, going through this process, and having the list of EC-recommended mitigation measures at hand did contribute to some authorities adopting new controls, or improving existing ones. In this way, the EC effort to increase the focus on anti-fraud and corruption among ESI Funds authorities in the 2014-2020 programming period has had a significant positive impact.

The mitigating measures implemented are generally proportionate to the self-assessed risks

The obligations of Article 125(4)(c), and thus a primary focus of this study, is that OP authorities put in place measures proportional to the identified fraud and corruption risks. Based on the analysis of the sample of FRAs, we concluded that overall, authorities are implementing mitigation measures that are proportional to the self-identified risks. In fact, the team identified just a handful of instances where the measures in place were considered truly inadequate to the risks. This highlights the effort put in place by authorities in order to conduct a fraud risk assessment and mitigation of identified risks through appropriate controls.

Proportionality was lowest for collusive bidding and double funding

Of the 6 risk categories analysed, collusive bidding and double funding were the two where there was the greatest room for improvement in terms of implementing proportional mitigating measures, particularly among high risk OP's in Member States with a low CPI score. Often, authorities implemented neither EC-recommended measures nor additional detection measures. As these risks are particularly difficult to detect, it is crucial to devise appropriate measures to reduce the level of risk assessed. Particularly, concerning collusive bidding, authorities did not impose rules on beneficiaries to control the procurement process to detect collusive bidding. Moreover, authorities often did not conduct checks themselves on companies and third parties participating in tenders. Concerning double funding, crosschecks were lacking in some high and medium risk OPs to identify identical projects funded under different OPs.

Some authorities may underestimate the risks during the self-assessment

A comparison between the self-assessed level of risk by authorities of the OPs in the sample and external indicators of potential fraud and corruption risks at the MS level, notably Transparency International's Corruption Perception Index, shows a discrepancy. This indicates that MS may be assessing the level of fraud risks differently. Indeed, there was an observed pattern of authorities in MS with moderate fraud risk indicators, and to a lesser extent those with low fraud risk indicators, assessing their risks as higher than countries with high risk indicators. This indicates that some authorities in countries with higher fraud risks are underestimating risks for fraud and corruption compared with authorities from countries with lower fraud risks.

If this were the case, it would have an impact on the conclusion on proportionality, which are dependent on the self-assessed level of risk. Concretely speaking, it would mean that the above analysis somewhat underestimates the proportionality of mitigation measures in low perceived risk

countries, and overestimates the risk in high perceived risk countries. It is unclear if there would be any net effect on the overall conclusion that across MS and risk categories, proportionality of measures is generally high.

Most authorities are using the EC's FRA template

Authorities are not required to use the EC's FRA template, which is put at their disposal. While they have to put in place risk-based anti-fraud measures, Article 125(4)(c) does not specify how to assess the risks (Authorities can refer to the Guidance note on the topic). Despite this, in virtually all of the OPs in the sample, authorities did conduct a proactive, wide ranging fraud risk assessment, and most of these used the Commission's template. Even among those authorities that did not use the template, elements of it are included in the tools they did use, indicating that it impacted their approach. Therefore, the study found that awareness of the EC FRA template is high among the relevant authorities at OP level.

Not all MAs conduct an FRA at OP level

The distribution of responsibilities between MAs and IBs varies substantially across OPs, including the responsibilities for anti-fraud and anti-corruption. Among those OPs that involve IBs, the split ranges from a few where the MA takes sole responsibility for the FRA to a handful in which all responsibility for the FRA is devolved to the IBs. Between these two extremes, there are different levels of involvement, including cases where all authorities complete an independent FRA, case where the MA compiles FRAs conducted at IB level, and cases where the MAs engage with IBs to provide support and guidance, but do not review or compile their output. As a result, there are a number of MAs where the FRA is never done at OP level.

A more inclusive FRA process leads to a better mitigation of fraud risks

The analysis of the FRA process and the associated level of fraud risks revealed that involvement of variety of authorities in the anti-fraud activities (MA, IBs, AA, CA, AFCOS and law enforcement authorities) leads to enhanced coordination of anti-fraud activities and reduces fraud risks. Authorities in the OPs with more inclusive FRA process report reinforced knowledge exchange and more targeted sharing of prevention and detection practices. Involvement of policy makers and practitioners of anti-fraud measures in the FRA process allows better targeting of fraud risks, as well as identification of specific measures that will be the most efficient for every taken fraud risk. Having all the relevant authorities involved in the FRA process, and agreeing on the potential risks and measures, leads to better coordination of their implementation in the future, clearer understanding of goals and reporting mechanisms as well as shorter feedback loops.

Therefore, the authorities with high identified fraud risks should reinforce their FRA team and involve wider range of relevant authorities in the discussions about potential fraud risks and relevant mitigating measures. This will, in a longer perspective, reinforce the coordination between different authorities and reduce fraud risks across all categories of risks.

There is a need for more communication to MS authorities on anti-fraud activities

Many authorities reported having difficulties understanding and interpreting all of the guidance on anti-fraud. For example, there was confusion about how to use the Commission's FRA template. A number of authorities did fill in the content of the cells as intended, including the scale for assessing risk, and the evidence on which to base the analysis. Uncertainty about how to use the outputs of the Arachne system is another issue, and may contribute to its limited uptake. Authorities also report difficulties to assess the amount and type of measures that would be considered proportionate for each given severity of risks. In order to support the authorities, the EC should developed a detailed guidelines on the scenarios of mitigation response to be applied for different risks levels.

A number of authorities indicated a desire for more concrete guidance on preventing and detecting fraud and corruption. In particular, there was a desire to have material focusing on concrete cases or past experiences with fraud and how it was identified and addressed. Several authorities mentioned that publishing real case studies would be helpful in explaining the risk assessed,

presenting the controls implemented that lead to the identification of fraud, and describing actions undertaken in order to prevent the repetition of such cases. Practical trainings or workshops on the ways and tools that were used to detect real cases of fraud could increase the capacity of authorities in prevention and detection of fraud.

Arachne, in its current form, is perceived by authorities in the sample as not entirely meeting their needs

Authorities in one third of OPs in the sample of eligible OPs are currently using Arachne to identify potential fraud risks. Roughly half of those that use it do so only in conjunction with other relationship checking and red flagging tools. Many said they only use the tool under specific circumstances. In order to overcome the current limitations of the tool, the following areas of improvement could be considered:

In order to improve the uptake of the tool, the following areas of improvement could be considered:

- Streamline the data entry process to reduce the administrative burden, e.g. by developing a tool for automatic data updates;
- Revise, expand, and distribute more detailed guidance on the indicators used for the cross-MS checks and current data availability per country. Because most risk indicators and checks are performed for the beneficiaries and projects operating within one MS, the lack of comprehensive up-to-date information across all MS has only a limited effect on the usefulness of the tool. However, it is perceived by authorities as a major shortcoming;
- Reinforce a functionality for users to unpin a red flag already seen and assessed as 'clean,' i.e. not reflecting an actual fraud risk, in order to reduce a number of false positives. This is particularly relevant for SMEs.

Many authorities have expressed strong interest in using an EU-wide risk scoring tool. However, the perception among MS is that the current version of Arachne is not meeting this need. This is problematic as the usefulness of the system is in part perceived to depend on the number of OPs and MS that regularly upload and update data to the tool.

Action Plan

In order to improve partial proportionality of measures, OP authorities of should focus their attention on the following measures, which we have identified as frequently lacking among high risk OPs with low proportionality:

Conflict of interest:
- Ensure members of evaluation boards are regularly rotated;
- Have a secondary panel to verify the decision of primary evaluation board (for a sample of decisions at higher risk of manipulation);
- Ensure that beneficiaries put in place effective anti-fraud measures internally (e.g. conflict of interest policies and declarations, rotation of members of evaluation board, etc.);
- Organise regular trainings on ethics and integrity for all personnel of Authorities;
- Implement a whistle-blowing mechanism and a conflict of interest internal policy, with declarations for all personnel, and ensuring that these are followed;
- Strengthen the cooperation with other Authorities (e.g. police) for prevention of bribes and other unfair benefits.

Avoidance or manipulation of procurement procedures:
- Publish all contract information that is not sensitive;
- Rely on their background knowledge of beneficiaries and of previous fraud cases during the screening process;
- Ensure a transparent bid opening process, and adequate security arrangements for unopened tenders;

- Reinforce the bidding procedures, e.g. enforce the submission deadlines and review their operation for a sample of beneficiaries;
- Implement and publish a whistle-blowing mechanism for suspected fraudulent behaviour;
- Review all contract awards by a secondary mechanism other than the selection panel to verify that procurement procedures have been followed;
- Require prior approval for all single source awards and amendments above pre-defined significant thresholds (both value and length) by secondary mechanism other than the procuring department;
- Perform a periodic review of a sample of winning bids against competition for any indications of prior knowledge of bid information;
- Regularly audit the operation of internal controls over procurement.

Double funding:
- Include cross checks with the national authorities administering other funds, and also other relevant Member States in the screening process;
- Use dedicated IT tools that allow automatic check for potential double funding across OPs and Member States.

Collusive bidding:
- Verifying the reasons behind possible single bidding and keeping a track of the beneficiaries involved in possible single-bidding;
- Provide training for concerned beneficiaries in preventing and detecting fraudulent behaviour within public procurement;
- Check whether companies that have participated in a tender subsequently became contractor or subcontractor of the winning tenderer;
- Require the beneficiary to complete background checks on all third parties (e.g. general website checks, companies' registration data etc.);
- Require beneficiaries to have controls in place to detect persistently high or unusual bid data (such as bid evaluators that have a knowledge of the marketplace) and to unusual relationships between third parties (e.g. rotation of contracts);
- Require beneficiaries to 'benchmark' price comparators for standard goods or services.

Manipulation of project costs and quality:
- Requiring beneficiaries to put in place effective measures to control the costs and quality of projects (e.g. use of standard unit costs, compare the final price of products / services against budget and generally accepted prices for similar contracts, monitor invoices from suppliers against supporting documentation for indications that overtime is being claimed, review invoices for labour costs against evidence supporting actual salary costs incurred, perform a review of multiple submitted invoices with the same amount or same invoice number, etc.);
- Require beneficiaries and third parties to provide the evidences of cost control (e.g. evidences on existence of staff e.g. contracts, social security details, evidences that costs were incurred within project deadlines e.g. original invoices, bank statements, etc.);
- Conduct periodic reviews of the project outputs against the declared costs;
- Ensuring the amendments to the projects above pre-defined thresholds are justified and approved by a responsible body;
- Ensuring regular controls on a sample of projects.

Lack of skills and anti-fraud culture:
- Review the adequacy of training and certification for CA and the availability of repeated training on fraud awareness;
- Review and approve the selection process of beneficiaries based on accepted best practices including an analysis of the level of fraud risk;
- Review expenditure certified by the CA, to ensure they have been performed in line with relevant guidelines and standards;
- Ensure a clear definition, allocation and separation of functions between and within the MAs and IBs;
- Ensure the availability of adequate procedures at the MA to monitor the effective implementation of the tasks delegated to the IBs.

Annex 1 Corruption Perception Indexes 2014-2017

The following table presents an overview of Transparency International's Corruption Perceptions Index[45] scores obtained by EU Member States (0 being "highly corrupt" and 100 "very clean"). The scores measure the perceived level of public sector corruption in each country.

No.	MS	Score 2014	Score 2015	Score 2016	Score 2017
1	AT	72	76	75	75
2	BE	76	77	77	75
3	BG	43	41	41	43
4	CY	63	61	55	57
5	CZ	51	56	55	57
6	DE	79	81	81	81
7	DK	92	91	90	88
8	EE	69	70	70	71
9	ES	60	58	58	57
10	FI	89	90	89	85
11	FR	69	70	69	70
12	EL	43	46	44	48
13	HR	48	51	49	49
14	HU	54	51	48	45
15	IE	74	75	73	74
16	IT	43	44	47	50
17	LT	58	59	59	59
18	LU	82	85	81	82
19	LV	55	56	57	58
20	MT	55	60	55	56
21	NL	83	84	83	82
22	PL	61	63	62	60
23	PT	63	64	62	63
24	RO	43	46	48	48
25	SE	87	89	88	84
26	SI	58	60	61	61
27	SK	50	51	51	50
28	UK	78	81	81	82
	Average EU	**64.2**	**65.6**	**64.6**	**64.6**

[45] See https://www.transparency.org/research/cpi/overview

Annex 2 Overview of risk categories and related sub-risks per FRA key process

Risk Category	Sub-risk (EC template)	Section of the FRA
1. Conflict of interest	**1.1** Conflict of interest within the evaluation board	Selection of applicants
	1.2. Undisclosed conflict of interest	Implementation and verification of operations
	1.3. Bribes and kickbacks	Implementation and verification of operations
	1.4. Conflicts of interest within the MA has undue influence on the approval of payments	Certification and payments
	1.5 Conflicts of interest within the CA has undue influence on the certification	Certification and payments
	1.6. Undisclosed conflict of interest	Direct procurement by MA
	1.7. Bribes and kickbacks	Direct procurement by MA
2. Avoidance or manipulation of procurement procedure or contract	**2.1**. False declarations by applicants	Selection of applicants
	2.2 Split purchases	Implementation and verification of operations
	2.3. Unjustified single source awards to avoid tendering	Selection of applicants Direct procurement by MA
	2.4. Lack of tendering process for favoured suppliers	Selection of applicants Direct procurement by MA
	2.5. Extension of existing contracts to avoid retendering	Selection of applicants Direct procurement by MA
	2.6. Leaking bid data	Selection of applicants Direct procurement by MA
	2.7. Manipulation of bids	Implementation and verification of operations
	2.8. Rigged specifications to favour certain bidders	Selection of applicants Direct procurement by MA
3. Double funding	**3.1**. Double funding	Selection of applicants
4. Collusive bidding	**4.1** Collusive bidding	Implementation and verification of operations
5. Manipulation of project costs	**5.1**. Defective pricing	Implementation and verification of operations
	5.2. 'Phantom' service providers	Implementation and verification of operations

Risk Category	Sub-risk (EC template)	Section of the FRA
	5.3. Single contractor double claims costs	Implementation and verification of operations
	5.4. Product substitution	Implementation and verification of operations
	5.5. Non-existence of products or operation not carried out in line with grant agreement	Implementation and verification of operations
	5.6. False, inflated or duplicate invoices	Implementation and verification of operations
6. Lack of skills	**6.1**. Incomplete / inadequate management verification process that does not give adequate assurance against fraud	Certification and payments Also applicable to MA
	6.2. Incomplete / inadequate certification process that does not give adequate assurance against fraud	Certification and payments Also applicable to MA

Annex 3
List of the 50 analysed OPs

No.	MS	OP
1	AT	Investments in Growth and Employment Austria
2	BE	Wallonia - ERDF
3	BG	Transport and Transport Infrastructure
4	BG	Environment
5	BG	Maritime and Fisheries
6	CY	Competitiveness and Sustainable Development
7	CZ	Transport
8	CZ	Competitiveness
9	CZ	Research, Development and Education
10	CZ	Maritime and Fisheries
11	DE	Nordrhein-Westfalen ERDF
12	DE	Mecklenburg-Vorpommern - ESF
13	DK	Educational and Entrepreneurial Growth
14	EE	OP for Cohesion Policy Funding
15	ES	Sustainable Growth ERDF
16	ES	Andalucía ERDF
17	EU	INTERREG EUROPE
18	EU	Baltic Sea
19	FI	Sustainable Growth and Jobs
20	FR	Regional programme Nord-Pas de Calais
21	FR	Réunion
22	EL	Attica
23	EL	HR Development, Education and Life Long
24	HR	Competitiveness and Cohesion
25	HR	Maritime and Fisheries
26	HU	Economic Development and Innovation
27	IE	Southern and Eastern Regional OP
28	IT	OP on Enterprises and Competitiveness
29	IT	OP on Governance and Institutional Capacity
30	IT	Maritime and Fisheries
31	LT	OP for EU Structural Funds Investments
32	LU	ESF
33	LV	Growth and Employment
34	MT	Investing in Human Capital
35	NL	West Netherlands ERDF
36	PL	Digital Poland
37	PL	Regional OP Mazowieckie Voivodship
38	PL	Food Aid
39	PT	Regional OP Norte
40	PT	Regional OP Centro

41	RO	Large Infrastructure
42	RO	Integrated Regional Programme
43	RO	Human Capital
44	RO	Maritime and Fisheries
45	SE	Upper Norrland
46	SI	OP for EU Cohesion Policy
47	SK	Quality of Environment
48	SK	Human Resources
49	SK	Food Aid
50	UK	ERDF Scotland