

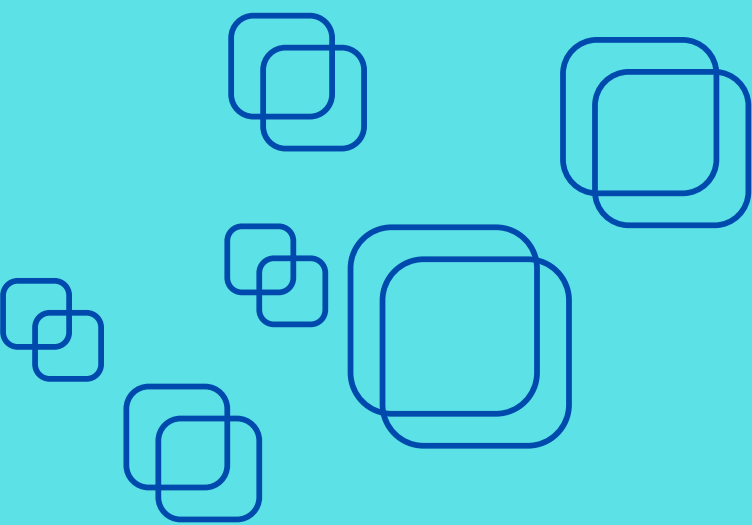


COrruption  
Risk Indicators in  
Emergency

Co-funded by the  
European Union



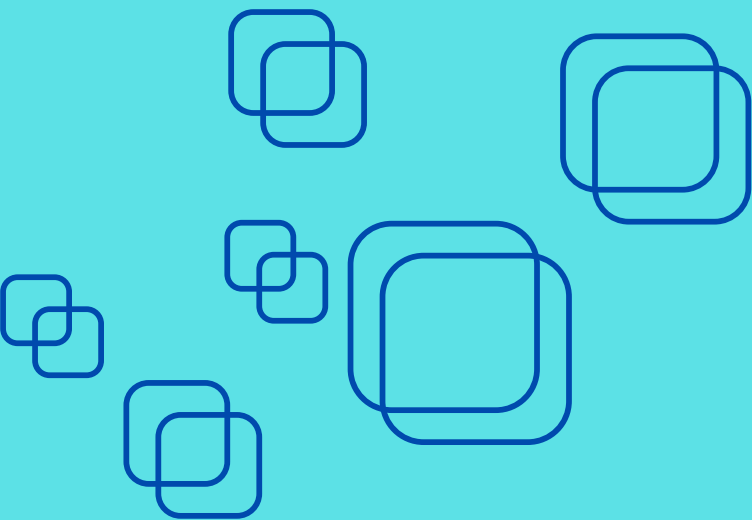
# CO.R.E. DATA PRINCIPLES FOR PROCUREMENT INTEGRITY UNDER EMERGENCY TIMES



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# CO.R.E. DATA PRINCIPLES FOR PROCUREMENT INTEGRITY UNDER EMERGENCY TIMES

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# MAIN CONCLUSIONS OF THE CORRUPTION RISK INDICATORS IN EMERGENCY PROJECT (CO.R.E. PROJECT)

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The COrruption Risk indicators in Emergency project co-funded by the European Commission (CO.R.E. project) [1] has analyzed the legal framework for public procurement, focusing particularly on transparency issues, procurement data availability and quality, thus identifying the role of data to promote integrity for public procurement in times of emergency.

More information and data on public contracts enhance integrity for public administration particularly during emergency times reaching the following main conclusions:



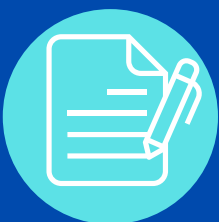
## **Emergency times weaken public integrity facilitating the disclosure of corruption**

Critical situations increase the risks of corruption during emergency times. Governments usually mobilize a considerable amount of public resources to react promptly to a crisis while supplies and providers become scarcer.



## **Transparency is a powerful tool to improve public integrity and to fight against corruption**

Transparency contributes to democratic quality and it works as a mechanism of good governance. It facilitates public administration accountability and control, but it can also contribute to strengthening public integrity. It is an effective means to prevent conflicts of interest and to combat corruption.



## **Transparency is not only a principle for public procurement, but also for open contracting**

Transparency is a public procurement principle that seeks to boost equity among bidders and promote competition among public tenders. It guarantees that contracts are awarded to the best offer generating expected results and, ultimately, facilitating integrity.

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[1] Grant Agreement Number: 101038790-CO.R.E.-ISFP-2020-AG-CORRUPT

Transparency is also a principle that underpins open contracting through which the procurement bodies can render accounts on public contracts. It helps thereby citizens have authentic as well as effective knowledge about the activity and the functioning of public procurement.



### **Transparency works proactively, reactively and collaboratively**

Transparency works eventually through different mechanisms.

Proactive transparency consists in the dissemination of information that could be of interest to citizens on public contracts.

Reactive transparency is based on the right of access to information at the request of any person whether they a bidder or not. They are not expected to have a specific interest regarding any specific public contract they are requiring information about nor be accredited to a particular authority.

Collaborative transparency is driven by citizens and civic entities that reuse public information with the aim of increasing public transparency and analyzing public information to allow contracting activity to be monitored and controlled.



### **Transparency requires data availability, interoperability and reusability**

For transparency to be an effective public procurement principle guaranteeing integrity and preventing corruption, data on public contracts must be available, interoperable, and reusable.

Available data stands for accessible information, of quality and open. Interoperable data must comply with some regulations, criteria and recommendations allowing information to be interchangeable and the interchangeable information ready to be used. Reusable information is disseminated in technical formats and under legal conditions making possible for citizens and entities the use of public administration information eventually improving transparency.

In this connection, and in our present era of Big Data, a key issue is that data will be in machine-readable formats to make easy its use and reuse.



### **Available, interoperable and reusable data on public procurement is insufficiently guaranteed in the European Union**

Member States in their various efforts have invested and created information systems for public procurement during the last decade. Although increasing the availability of information which is generally of quality, it remains varied and fragmented.

Member States disseminate public procurement data according to Directive 2014/24/UE of the European Parliament and of the Council of 26 February

2014 on public procurement regarding national public contracting and transparency regulations. However, transparency level on public procurement is significantly different across the European Union.

These differences are particularly obvious in relation to emergency contracts data.



### **Improving integrity in public procurement means the dissemination of data related to people competing in public tenders**

Conflicts of interest and corruption risks can be prevented as well as identified.

For that, it is necessary to connect the available data involving the contracting parties with elected representatives and also members of the public administration participating in the award process.

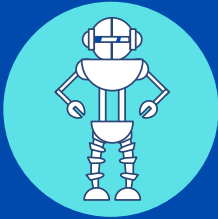
Personal data related to the people involved in public tenders and information of people responsible for the performance of contracts may not be disclosed neither on public procurement nor government open data webpages. However, details about positions and officials taking responsibilities for the contracting process in which possible incompatibilities between contractors and contractees may emerge from family relationships, service networks or common interests are of great interest. Such concern will help to identify the risks generated by conflicts of interest and corruption in public procurement especially during times of emergency.

Information about identity, civil status and other personal events are usually put down in the Civil Registry. However, access to civil registries is not indiscriminate and data is not usually reusable nor interoperable. Data on personal registers can be disclosed periodically and automatically to fulfil public purposes, although it is advisable a legitimate interest when enabling a massive or systematic consultation of the registry data.

Data about certain property rights is registered in the Land Registry. Regarding the reuse of data recorded in the Land Registry, any person looking for information is expected to follow some steps to attest their legitimate interest as a subject requiring to access the content of the registry. In response to this legitimate interest, the registrar should examine each application accordingly before transferring the required information as the ultimate reason for allowing the disclosure of information. In addition, the request for data must be within the purpose of the property registry, which is publishing information on ownership as well as providing legal certainty.

Although the Commercial Registry, where data about companies is kept, is a public registry, the information made available to a third interested party is usually for their exclusive use, non-transferable and confidential. The incorporation of the data contained in the registry information into personal computer files or databases for private consultation by natural or legal person,

even when the source of origin is stated, is usually prohibited. The only data accessible to any natural or legal person, whether or not an interested party, is the one that has already been disclosed by the official journals.



### Public procurement automatic data processing and analysis

During the last decade, different interesting public and civic initiatives have been developed to process, reuse and analyse public procurement data to improve transparency and to fight against corruption. In recent years, there has been constant work, both by institutions and by academia alongside civic entities, to develop more precise, more easily observable and compiled indicators.

As governments adopt digital strategies, they are beginning to take advantage of open data, big data and automated data analysis by using artificial intelligence to detect anomalies in public procurement (i.e. Arachne). In addition, civic entities are also using open public procurement data to drive projects (i.e., DIGIWHIST, OpenTED, Red Flags, Open Spending EU Vision, Public Procurement Indicators, Public procurement Due Diligence Tool, DATACROS, ¿Quién cobra la obra?).



### Exceptions to transparency

The procurement information should not be facilitated when its knowledge can cause harm to certain public or private interest or violate rights explicitly protected by the regulation in force (personal data, confidentiality of the information, intellectual property, public security, etc.). On this issue, public administrations need to consider whether the information should be made transparent. Emergency management is not generally stated by law as an exception to transparency.

Processing personal information is subject to the General Data Protection Regulation (GDPR). In particular all data processing should take into account the data protection principles. Moreover, it should be done according to legal bases contained and respecting rights of data subject stated in GDPR.



# EXPLANATORY MEMORANDUM

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## 1. PRINCIPLE OF AVAILABILITY

### EMERGENCY CONTRACTS DATA MUST BE AVAILABLE

Information on emergency public procurement must be complete, easily accessed, understandable, of quality and open, particularly, during emergency times.

Public procurement bodies should guarantee that all the information necessary to be known about an activity during emergency management is usually at citizens', bidders' and contractors' disposal. In particular, indispensable data for the supervision and control of the procurement activity involving public administrations during emergencies must be disseminated.

#### LIST OF MAIN VARIABLES USED TO GAUGE DATA AVAILABILITY [2]

Data that must be collected, ingested in the database, eventually analyzed and processed by the algorithm for the creation of the corruption risk indicators under emergency times

Tender Award Date	Contract Modification Amount
Tender Award Value	Contract Modification Date
Awarded Company	Contract Modification Presence
Company Dimension	Contract Modification Type
Contract Dimension	NACE
Contract ID	Outbreak Starting Date
Contract Subject	Participant Companies
Contract Value	Presence of Award Notice
Contracting Authority	Tender Publication Date
CPV	Contract Starting Date
Contract End Date	Amount Paid by the Contracting Authority
Contract Expected End Date	XML Validation to detect errors

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[2] These variables were extracted from the document *Corruption Risk Indicators in Emergency Guidelines for data collection and data analysis*

## **2. PRINCIPLE OF ACCESSIBILITY**

### **EMERGENCY CONTRACTS DATA MUST BE EASILY ACCESSED**

Information on emergency public procurement must be organized and disseminated on open data portals according to international standards. Portals must be designed to help developers create platforms able to organize huge amount of data useful to prevent corruption. Public contracting bodies should build specific open emergency data websites where data can be automatically downloaded.

Databases of emergency procurement should include search bars facilitating the identification of data about a certain person, company or contract. They are supposed to allow data access be connected to cross-reference tools and other records on public contracting.

The information must be suitably organised and under management systems that facilitate its localisation. In addition, reachable information should be findable at different levels considering distinct receivers. At a first level, the information must be disseminated in a concise fashion accompanied by graphics to be easily understood by all citizens. At a second level, the possibility of accessing complete information on public procurement must be given when the data is presented in a more detailed way.

In particular, data from civil, property and companies registries should be automatically accessible at least by antifraud and integrity agencies in order to identify civil status and other relevant personal circumstances revealing kinships or possible conflicts of interest within the public interest. It serves also to know about acts and contracts related to ownership and other beneficial rights over real ones which may allow us localize cases of unfair enrichment due to corrupt actions; and to be aware of acts related to businesspersons, such as business name and personal name, domicile, administrators, mergers, company dissolutions and liquidations, and annual accounts.

## **3. PRINCIPLE OF QUALITY**

### **EMERGENCY CONTRACTS DATA MUST BE OF QUALITY**

State members should improve the quality of information on their management systems and of their data governance mechanisms to guarantee data quality. As a consequence, the available data of higher

quality increases the probability of information being correct, reliable and certified.

#### **4. PRINCIPLE OF CONTINUOUS UPDATES**

##### **EMERGENCY CONTRACTS DATA MUST BE CONTINUOUSLY UPDATED**

Procurement data must be continuously update and at least once a month. Information about last update must be clearly stated.

In a very dynamic environment as public procurement is, and for preventive purposes, non-updated data are quickly useless.

#### **5. PRINCIPLE OF UNIQUE IDENTIFICATION**

##### **CONTRACTORS AND CONTRACTS UNIQUE IDENTIFIERS**

Public bodies should use unique identifiers to pinpoint bidders, contractors, and contracts to facilitate the traceability of the information. Traceability of contracts is a key issue in data exploration for any purpose.

Public bodies should promote an international standard to easily identify bidders, contractors, and contracts.

#### **6. PRINCIPLE OF INTEROPERABILITY**

##### **EMERGENCY CONTRACTS DATA MUST BE INTEROPERABLE**

Data about emergency contracts should be shared and integrated by different webpages, servers, and applications at different levels of the public administration.

State members should boost the definition and use of common European public contracting data standards to lead the functioning of the European market to a more transparent, reliable, trustworthy and interoperable environment during emergency times.

#### **7. PRINCIPLE OF OPENNESS**

##### **EMERGENCY CONTRACTS DATA MUST BE OPEN**

Open information seeks to guarantee that the citizens and entities can easily use public information without technical impediments, legal obstacles

or glitches that may end up hindering as well as making its reuse difficult for the creation of services as well as innovative information during emergency crisis.

State members should promote the definition of a European public contracting data standard to lead the functioning of the European market to a more open and reusable environment. This standard could be based on or inspired in the international Open Contracting Data Standard (OCDS). Therefore, it is strongly recommended that the European institutions design a licence standard for the reuse of data on public contracts to prevent corruption in times of emergency.

## 8. PRINCIPLE OF INTEGRITY

### EMERGENCY PROCUREMENT NEEDS SPECIFIC INDICATORS FOR INTEGRITY

The analysis of data about emergency procurement requires the design and the use of specific indicators to improve public integrity. It is necessary to identify what kind

#### ELEMENTARY INDICATORS [3]

- Red flag 1:** Winning rate across the crisis
- Red flag 2:** Awarded economic value across the crisis
- Red flag 3:** Contract economic deviation across the crisis
- Red flag 4:** Contract length deviation across the crisis
- Red flag 5:** Winner's share of issuer's contract across the crisis
- Red flag 6:** Communication default across the crisis
- Red flag 7:** One-shot opportunistic companies over the crisis
- Red flag 8:** Pre-existing contracts modified after the crisis
- Red flag 9:** Lengthy contracts
- Red flag 10:** Inconsistent companies across the crisis
- Red flag 11:** Inconsistent contract objects across the crisis
- Red flag 12:** Small companies winning big contracts across the crisis
- Red flag 13:** Direct contracts to anonymous companies across the crisis
- Red flag 14:** Companies registered in tax havens
- Red flag 15:** Companies flagged in the national anti-money laundering alert system

[3] The indicators were extracted from the document *Methodology for the Data Analysis*, Deliverable Working Paper 4.3.

of data is considered relevant for the construction of these indicators, their availability and possible problems to collect them.

## **9. PRINCIPLE OF DATA PERSONALISATION**

### **GOVERNMENTS MUST PROVIDE INFORMATION ABOUT PUBLIC OFFICIALS, EMPLOYEES, BIDDER AND CONTRACTING COMPANIES PARTICIPATING IN PROCUREMENT IN TIMES OF EMERGENCY**

Member States should guarantee access to data about contracting authorities, public officials and budget information, elected members registers, contracting bans, public officials declarations of interests, and eventually public officials as well as public employees previous activities in the private sector. It is also their responsibility to officially declare the gifts or benefits obtained from private subjects under the exercise of an institutional agenda, public employees authorisations of second activities (incompatibilities) and equity increases (tax data, property registration). The data on these particulars should be published in open and machine-readable formats.

Member States should also guarantee the interconnection facilitating and/or permitting the cross-checking of the data on people who participate in the contracting process with data from other sources – especially with public procurement data, to prevent conflicts of interest between the individuals who participate in the contracting process and the contractors.

Member States are expected to share registry information involving economic operators participating in public procurement procedures.

Therefore, with a degree of caution, such legitimate interest could be claimed for processing data found on the Internet with the purpose of preventing the abuse of entrusted power for private gain. The data controller should explain and justify the reasons why the intended processing would be permitted. Consultation with the competent data protection authority should also be considered.

Access to public registries, especially Commercial Registry (closely and directly related to procurement issues), should be open, free and easily accessed to foster the use and also the reuse of data for the prevention and fight against corruption promoting simultaneously integrity for public procurement. However, a proper balance between maximum transparency and protection of privacy must be achieved.

## **10. PRINCIPLE OF PERSONAL DATA FAIR USE**

### **PERSONAL DATA PROCESSING AS A MISSION CARRIED OUT FOR THE PUBLIC INTEREST TO PREVENT CORRUPTION IN EMERGENCY TIMES**

Processed personal data involving the personnel of the contracting authorities at the service, including bidders and contractors, should constitute a specification of the legal bases legitimizing the data processing covered by the GDPR. It fulfills a mission carried out in the public interest, or in the exercise of the public powers conferred on the person responsible for the data processing. Processed personal data related to emergency public procurement may be implemented by integrity agencies and anti-corruption offices for the prevention and fight against corruption.

The European institutions or each Member State should adopt a regulation which explicitly states the processing of the personal data concerning the personnel at the service of the contracting authorities, bidders and contractors, guiding the entities whose social objective is the prevention and fight against corruption. This authorisation will constitute a specification of the legal basis legitimizing the data processing provided in the GDPR with the purpose of satisfying legitimate interests pursued by the person responsible for the processing.

## **11. PRINCIPLE OF ARTIFICIAL INTELLIGENCE TRUSTWORTHY USE**

### **PROMOTE A TRUSTWORTHY USE OF ARTIFICIAL INTELLIGENCE DURING THE AUTOMATIZATION OF DATA ANALYSIS**

The automatization of data analysis and, particularly, the use of artificial intelligence has to be trustworthy. According to the European Commission, it should comply with the law, fulfill ethical principles and be robust.

Nowadays, AI is a fundamental tool to process big data on public procurement considering its most common characteristics referred in our research as the 3Vs (i.e., Volume, Velocity and Variety).

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[4] The information about the use of artificial intelligence to process data on public procurement was extracted from the document Methodology for the Data Analysis, Deliverable Working Paper 4.3.

The CO.R.E. project explores both open-source software and cloud infrastructure to be able to deal with not only big data, but also big data in emergency scenarios when Quickness is a crucial issue. By doing so, a backend system has been developed resulting in a data pipeline which intelligently extracts data from the official government open data portals (e.g., ANAC, the Italian Anticorruption Authority both for CIGS or traditional tenders, and SMARTCIGS, simplified tenders; and also other government open data webpages from Ireland, Portugal and Spain).

Hence, in the case of Italy, based on the National Italian Law 190/2012, for instance, we rehydrate the collected data making it more transparent, reliable and informative while respecting confidentiality and proprietary rights legally shielded. Finally, we produce a series of indicators whose results will be stored separately with the purpose of feeding a web frontend, that is to say, a dashboard designed for the CO.R.E. project. The access to the CO.R.E. dashboard will be open and free allowing any user to examine the risk of corruption both through the red flags, which are named elementary indicators, and the CO.R.E. synthetic indicator of corruption risk which aggregates data at various geographical levels.

## 12. PRINCIPLE OF PARTICIPATION

### PARTICIPATION OF CIVIL SOCIETY PROMOTES CORRUPTION PREVENTION UNDER EMERGENCY TIMES

Civil society can strongly collaborate with the public interest on the prevention of corruption under emergency times.

Governments must promote citizen participation in the reuse of data to prevent corruption under emergency times.



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## Universitat Oberta de Catalunya | Oficina Antifrau Project COrruption Risk Indicators in Emergency (CO.R.E.)

All information used in this document is extracted from empirical and theoretical research produced by the CO.R.E. Project funded by the European Union. The results have been analyzed and debated within a group of researchers from Perugia University, Villa Montesca Center of Studies, Info.Nodes, and Transparency International Portugal.

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