

Terms of Reference (TOR)

Red Flags Project: A risk approach to public procurement

Background

Public procurement is prone to inefficiency and corruption risks. New technologies, and the use of data analysis techniques offer valuable tools to improve the efficiency and transparency of public spending related to public procurement, and thus facilitate probity in the public market.

Recent work by the Observatorio del Gasto Fiscal, supported by the Open Contracting Partnership, revealed the importance of moving towards a regulatory framework for public procurement that encourages greater competition. In some public agencies, for example, excessive use of direct deals was detected, namely, a form of purchase that restricts open competition. In this modality, the purchases of the health sector stood out above all: of the ten public institutions that were most awarded via direct deal in 2017, half were from this sector. Under the same study, tenders with a single bidder were also analyzed. When reviewing the amounts involved in these purchases, the health sector stood out again: of the 20 services that spent the most on tenders with single bidders (according to amount), in 2017, 65% were from this sector.

Within this framework, the Observatorio del Gasto Fiscal and Espacio Público raise the importance of creating a “red flags” risk model from civil society in Chile with the objective of being able to detect in real time public procurement processes that may contain some type of deviation from what is considered normal together with generating aggregate risk indicators by institution. The “red flags” are a tool for monitoring the public market that gives clues or indications about the possibility of fraud. The existence of a flag network in a purchase process does not necessarily imply the existence of corruption, but it does indicate a greater risk. Examples of these could be: a shortage of offers, connections between suppliers, excessive use of contracting modalities that restrict competition, or an unreasonable deadline for submitting offers.

Internationally, several governments, academics and NGOs have assembled risk models of red flags. In the Chilean context, the central purchasing office (Central Purchasing Body, CPB), ChileCompra, developed a network flags risk model and shared it with interested civil society organizations, including the Observatorio del Gasto Fiscal and Espacio Público. Observatorio Fiscal has informed that although ChileCompra’s model details and algorithm have not been shared publicly in their entirety, its results may be re-created by civil society.

Objectives & Scope of Services

Observatorio del Gasto Fiscal and Espacio Público aim to use ChileCompra's contracting database to generate a "red flags" system in the public market, independent of the current Government, developed by civil society. This should take into account national and international best practice in this area, and would consist in the development of a new risk model that will complement and refine the ChileCompra model, from an independent, non-partisan and civil society perspective.

This red flags system will be used to understand the current risk situation in the public market in Chile. This system is intended to serve as a stepping step towards the ultimate goal of helping to boost real competition in the public sector and mitigating collusion risks in procurement.

The scope of the initial prototype will imply finalizing a model to analyze the behavior of public tenders; in later versions the rest of the purchase modalities such as direct deals and framework agreements will be implemented.

The services to be rendered are the following:

1. Develop a methodology for risk detection in public tenders

- a. Establish the data sources, variables and methodology that will be used to determine the risk in public tenders¹.
- b. Review the proposed model with ChileCompra and OCP to make it as robust as possible.
- c. Document the previously described process.

2. Implement the methodology

- a. Implement the risk detection algorithms derived from previously conducted investigations through the development of a software, making sure that they produce the intended results, through tests using data from historical and ongoing procurement processes. These algorithms should work independently from the microsite where results will be shown.

3. Publication of the results on a microsite

- a. Share mockups of the microsite with OCP.
- b. Publish a microsite showing results dynamically from the calculated risk indicators. This microsite should be updated frequently enough to capture changes in the data.
- c. Generate a section with an easily understandable summary of the red flags results for each of the public institutions.
- d. Generate a section that communicates the results of each public tender from January 2020 onwards, with a search function to look up specific public tenders.
- e. Allow users to completely download the results and the calculation details of the indicators.
- f. Generate an information gathering instance and discussion space with government entities such as Contraloría General de la República, Fiscalía Nacional Económica and ChileCompra. This could take place during COSOC meetings and should serve as a basis to reflect on findings and propose actionable reform to the Chilean procurement system.

¹ For reference: OCP's [red flags for integrity methodology](#) and [guidance on establishing key performance indicators](#).

4. Final documentation for users and blogpost

- a. Document the tool for users using simple text instructions and/or a short video to inform how to use the microsite and where to report findings.
- b. Publish a short blogpost on learnings and process carried out, as well as envisaged impact.

If more information regarding the other procurement modalities is necessary to expand the model, the project would be designed to be expanded to include other modalities, such as direct deals and framework agreement.

Deliverables, Timeline, & Resources

Observatorio del Gasto Fiscal is expected to deliver the following deliverables related to the services described above:

1. Documentation of the risk model by 30th March, 2020.
2. Source code of the risk detection algorithms, shared publicly under an open source license and a sample of the output of the risk detection algorithms by July 30th, 2020.
3. Microsite showing results of the risk model (aggregated by institution and detailed by public tender) by July 30th, 2020.
4. Final documentation and blogpost by August 30th, 2020.

All data analyzed must be public and released online under an open license. The code of the algorithm must be published online under an open source license², in order to be used by other interested stakeholders. The contractor must comply with all the legal requirements in Chile, particularly those related to personal data regulation.

Reporting

Observatorio del Gasto Fiscal will report to Nicolas Penagos, Head of Latin America at the Open Contracting Partnership. Any materials developed over the course of this project will be shared with the OCP in a timely manner.

Payment Schedule

The total value of the project is \$20,000. Payment will be against deliverable according to the following schedule, upon receipt of an invoice:

- Contract signature (by Feb 14h, 2020): \$8,000
- Source code of the algorithms and Microsite “Red flags for Chile’s Public Procurements” released publicly (by July 30th, 2020): \$10,000
- Final documentation and blogpost (by August 30th, 2020): \$2,000

The payments above include all taxes applicable.

² For reference: <https://choosealicense.com/>



Observatorio del Gasto Fiscal will be the leading organization for this project and will be the signatory of the contract with OCP. All payments will be transferred to their account. Observatorio del Gasto Fiscal must send to OCP the invoices paid to Espacio Público for the execution of this project to serve as evidence of their collaborative work.