



# TEDective

A free and open-source solution to make  
European public procurement data explorable for  
non-experts

# What's Tenders European Daily?

- Publishes European public procurement data as XML since 2015. ~700k notices p.a. describing procurement processes totalling at least € 670 billion p.a. in value.
- Everything (above a certain threshold) that public institutions in the EU buy from whom for how much is in there.

## Search scope

 Current OJ S issue <sup>?</sup>  Active notices <sup>?</sup>  All notices <sup>?</sup> Statistics mode[▽ Expand all](#) [^ Collapse all](#)

## ^ Text

Find results containing

## ^ Business opportunities

More options

 Planning  Competition  Result

## ^ Subject matter of the contract

Common procurement vocabulary (CPV)

Type of contract

Place of performance

Total procurement value <sup>?</sup>

Minimum tender value

Maximum tender value

Currency

## ^ Procedure

Type of procedure

Languages in which tenders may be submitted

## ^ Date

Publication date <sup>?</sup>

Specific date



Date range



Search scope

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Active notices <sup>?</sup>

All notices <sup>?</sup>

Statistics mode

[Expand all](#) [Collapse all](#)

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# Problems with TED

You can't search by type of organization

No typo-tolerance

No ability to visualize the results beyond HTML, let alone the relationships between organizations

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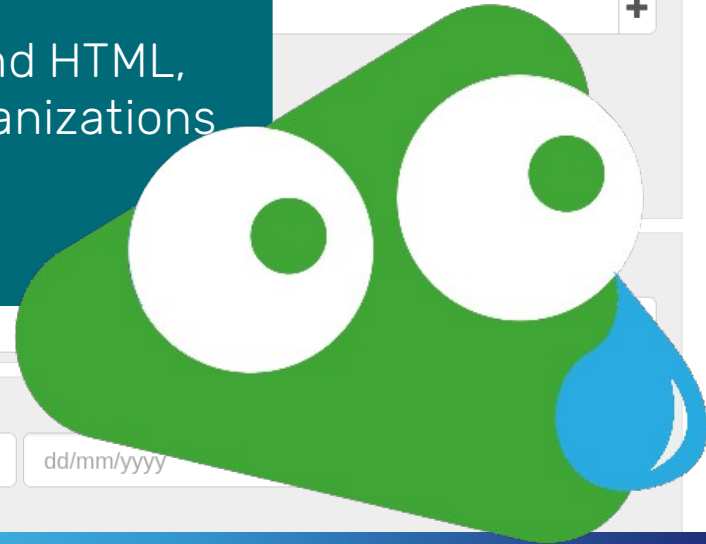


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# Why is TEDetective needed?

- There have been a number of attempts to make TED data more accessible.
- Yet, we weren't able to identify a single, freely accessible solution based fully on free software that allows you to explore European public procurement networks.

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- This is why we applied to last year's EU Datathon

# User journey

You might be a public servant who wants to know who buys what from *Microsoft Deutschland GmbH* to see how much money you could save by using free software instead?

Or you are a journalist, who want to investigate the recent purchases made by the Polish Border Guard.

**TE**Dective will allow anybody to explore European public procurement data.





KISS  
FOSS

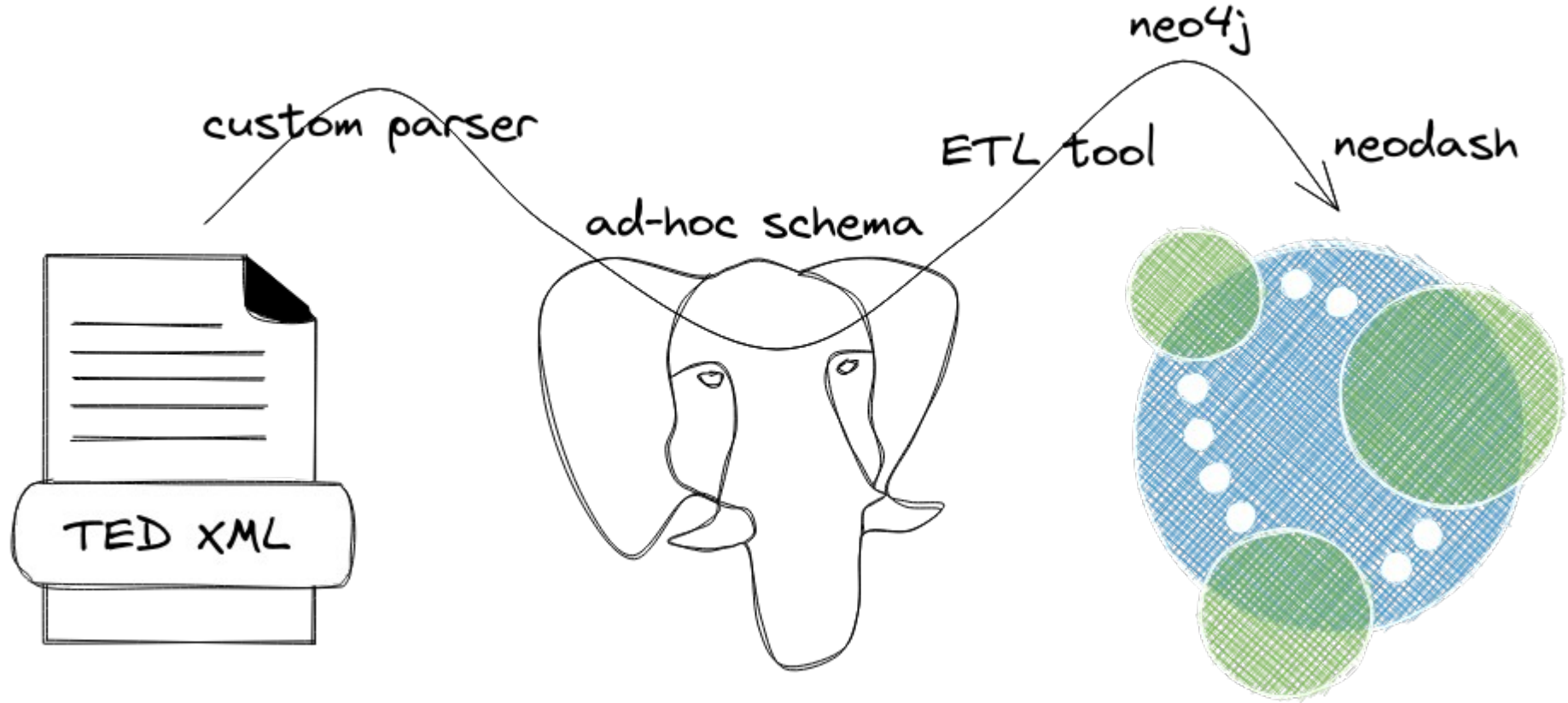
# KISS

...or keeping it simple

# FOSS

...with free and open-source software

# Architecture (1<sup>st</sup> Prototype)

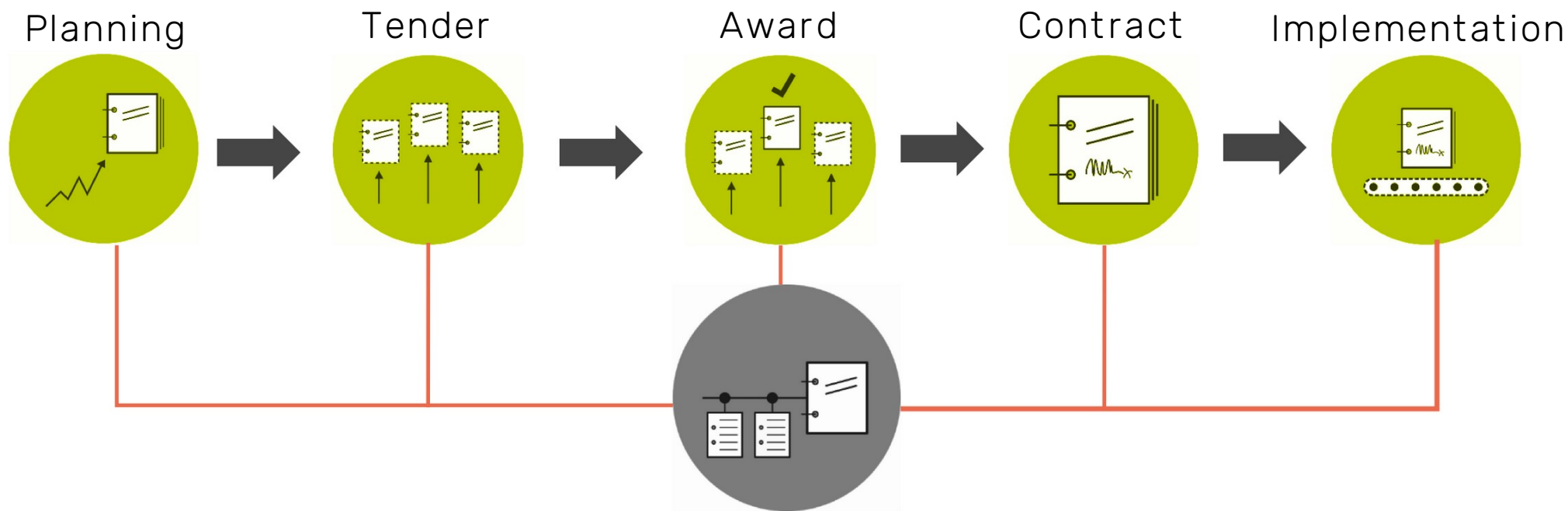


# DEMO

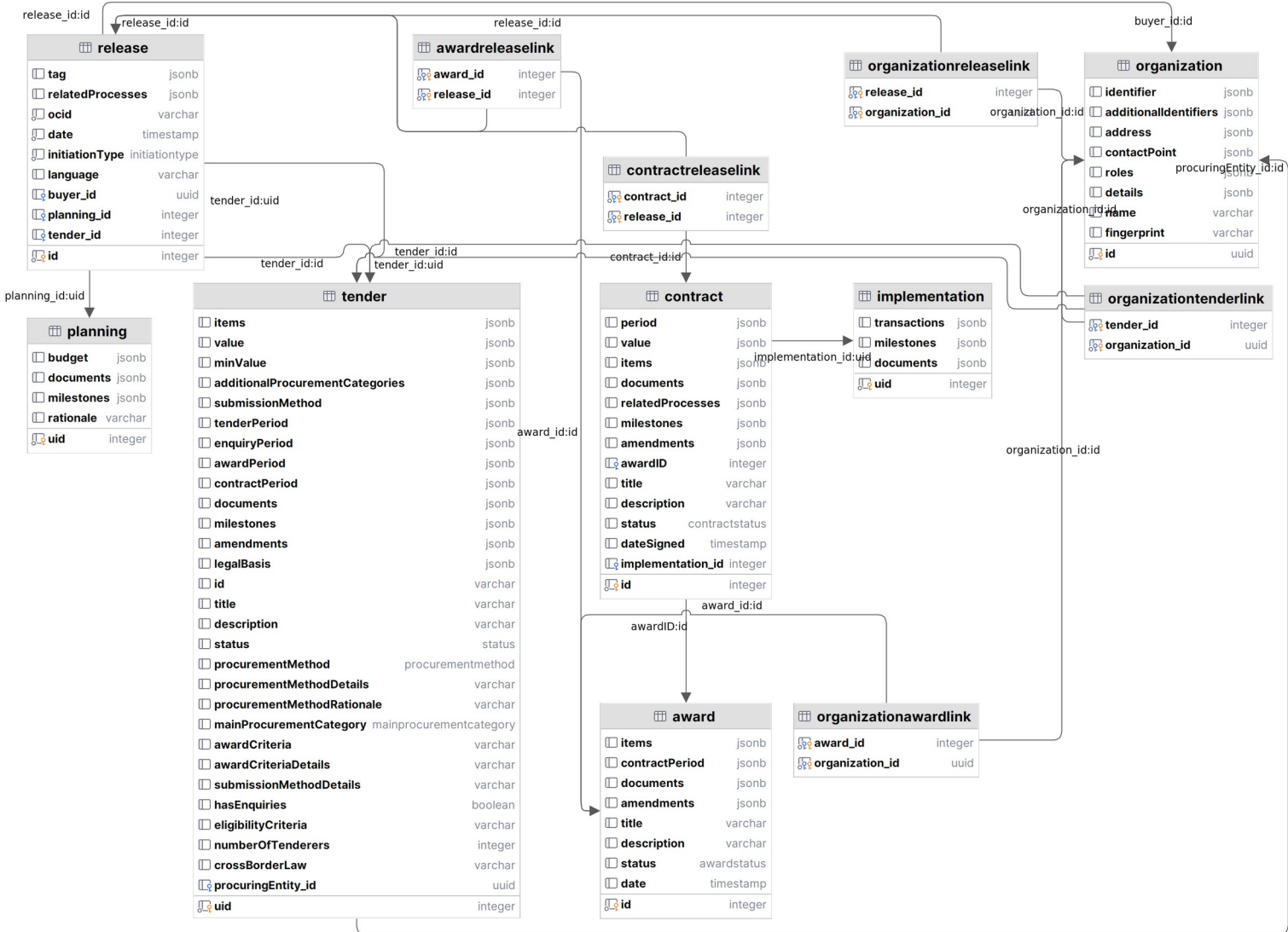
kind of...

# What's next? A short primer on OCDS

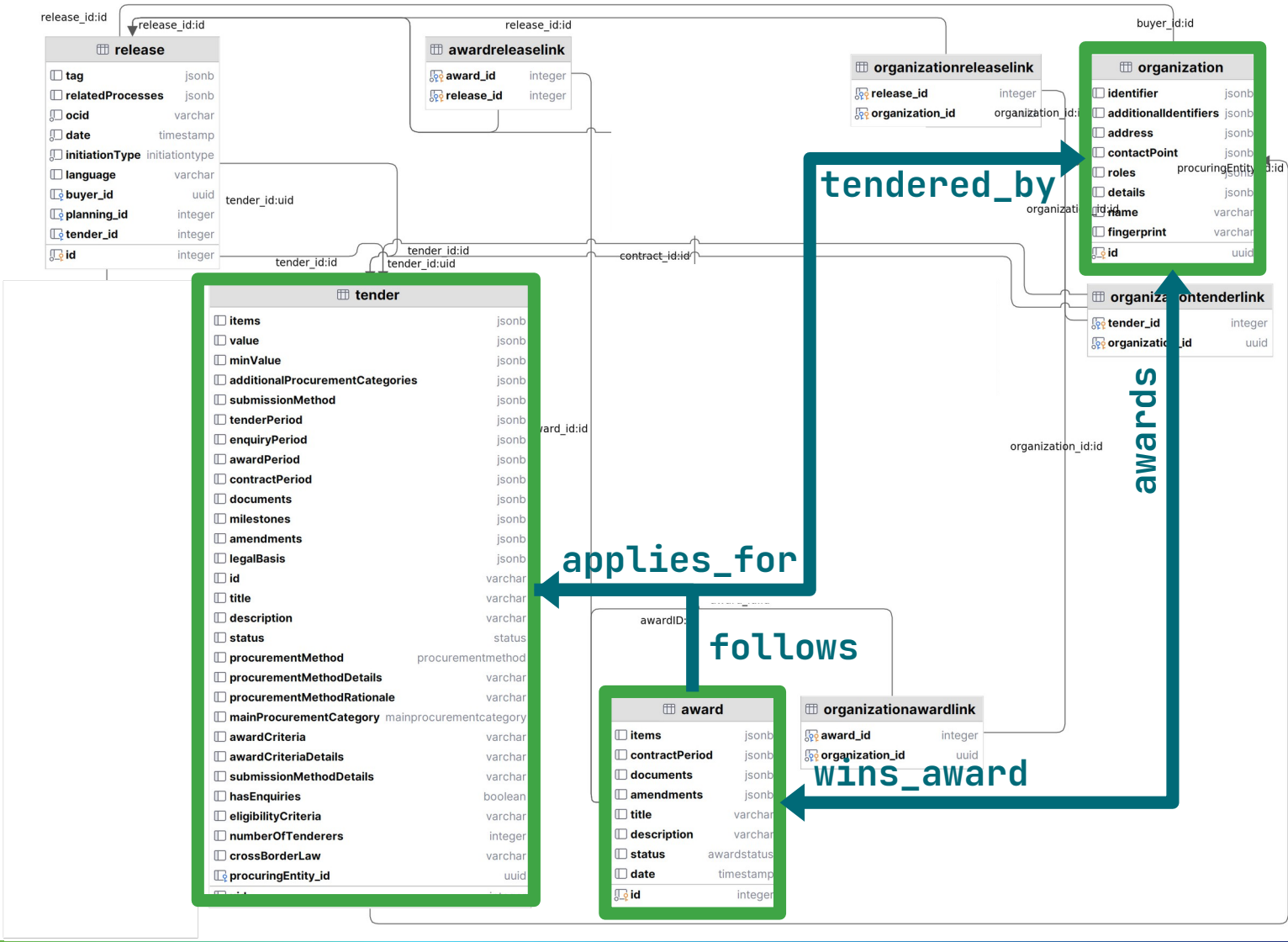
- At the core of TEDective is the Open Contracting Data Standard



# A more mature data model



# A more mature graph data model



# Architecture (WIP)

Backend

chooses data store  
depending on query

Frontend

custom parser

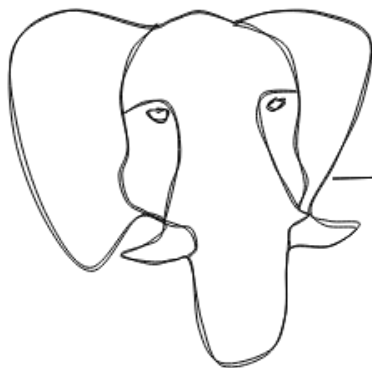


> OCDS Schema  
in PostgreSQL

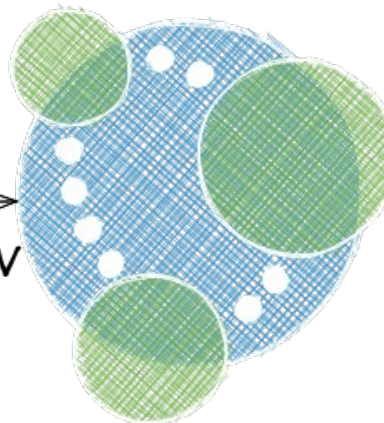
 **FastAPI**

 **SQLModel**

neo4j



import  
via CSV



Research phase

react-force-graph



 **sigma.js**

TED XML



# TEDetective's key characteristics



... is developed and released under a free and REUSE-compliant license so that others can use, share, study and improve it.

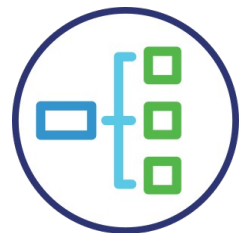


Software is made for people. TEDetective is and will be designed, maintained and monitored transparently and in close co-operation with all relevant stakeholders and user groups.

# TEDetective's key characteristics



We love interoperability! This is why we will offer bulk downloads of our cleaned and deduplicated data, compliance with [OCDS](#) and an [OpenAPI](#) interface.



Linked data is more interesting. Our aim is to connect cleaned and deduplicated TED data with other publicly available data sources.

# Enriching TEDetective



**OpenCorporates** would enrich the data on buyers and suppliers and link them to individuals.



**OpenSanctions** would allow us to highlight potentially sanctioned entities.



The **OffshoreLeaks** database by the ICIJ would highlight potential links to offshore companies.

# Future Challenges

The biggest challenge is cleaning and deduplicating the data:

- Public procurement data is complicated. Full implementation of the well-documented OCDS will help a lot!
- Currently, we make use of [RecordLinkage](#) for purposes of deduplication. However, more resources are needed to improve going forward. Of course, we'll publish the resulting weights and make sure that erroneous linkage can be reversed.



# How you can get involved

All the code <https://git.fsfe.org/TEDetective/tedetective>

To contribute via PR make an account first via <https://my.fsfe.org/register/linus>

Website <https://tedetective.org>

Email [tedetective@fsfe.org](mailto:tedetective@fsfe.org)

