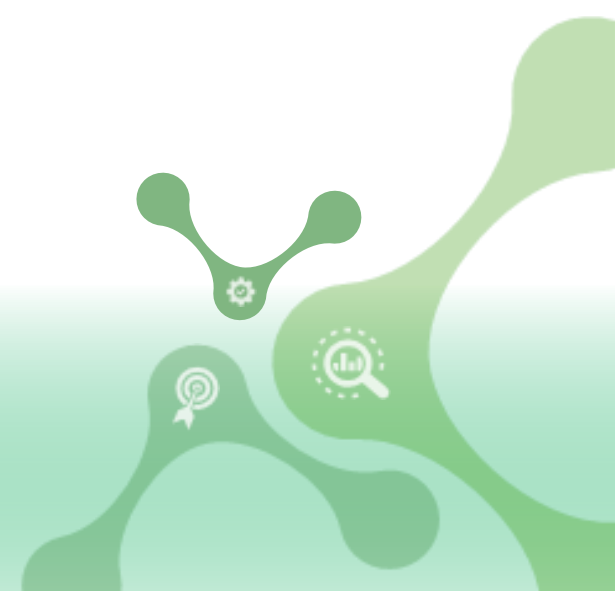


# TED Open Data

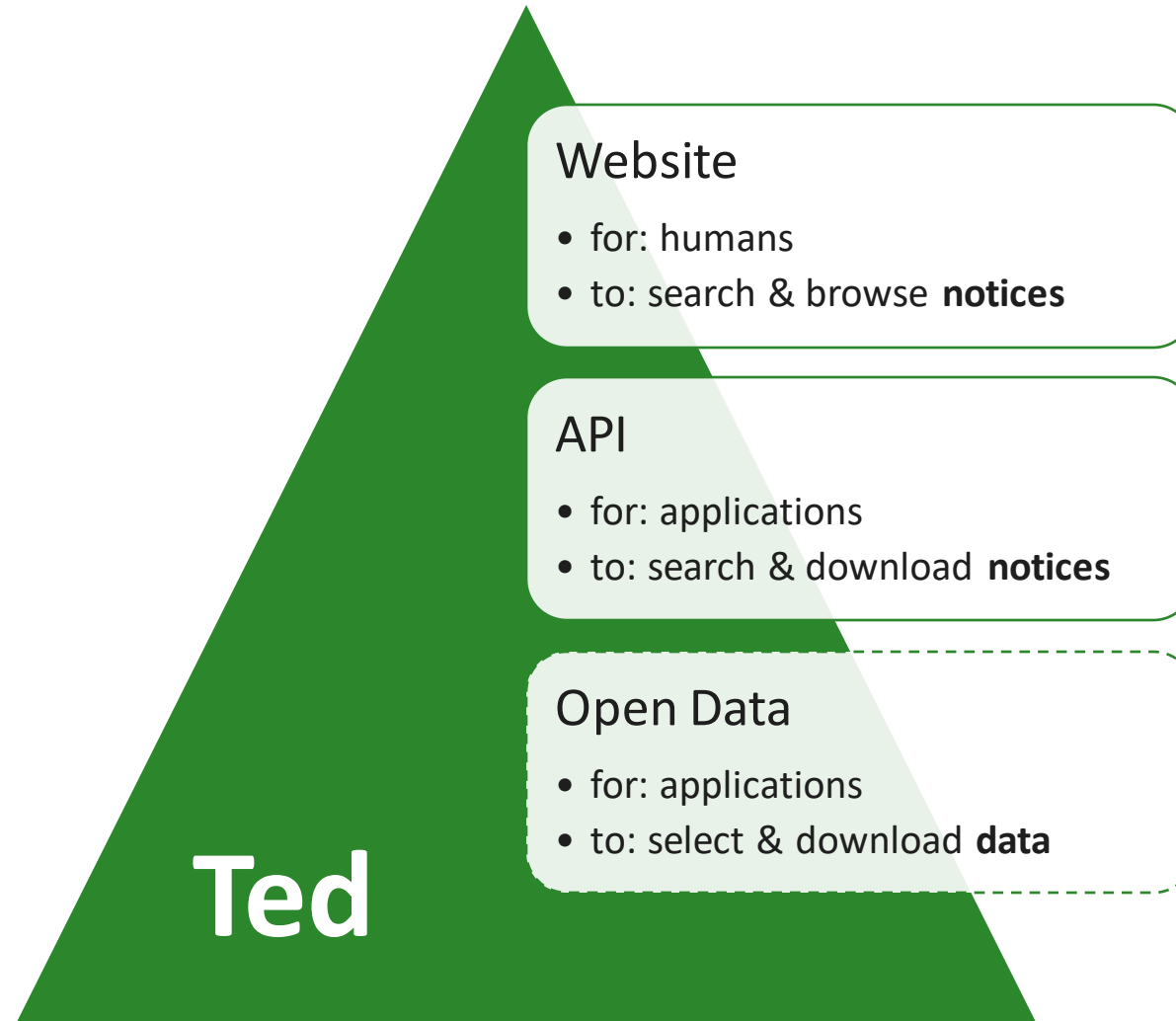
**Public Procurement Open Data Web Service**

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Publications Office of the EU



# TED Open Data



# Who is it for?

- The existing TED users and reusers:
  - Policy makers (EU Institutions, Member States)
  - Market analysis & business service providers
  - Potential tenderers
- Also opens TED data analytics to individuals:
  - Data analysts
  - Business consultants
  - Researchers, journalists etc.

# How is it different from TED API?

## TED API

- Search basic metadata only
- Download XML files (notices)

## TED Open Data

- Search any/all notice data
- Download Data (tables)
- Several formats (JSON, Excel, etc.)


# Advantages



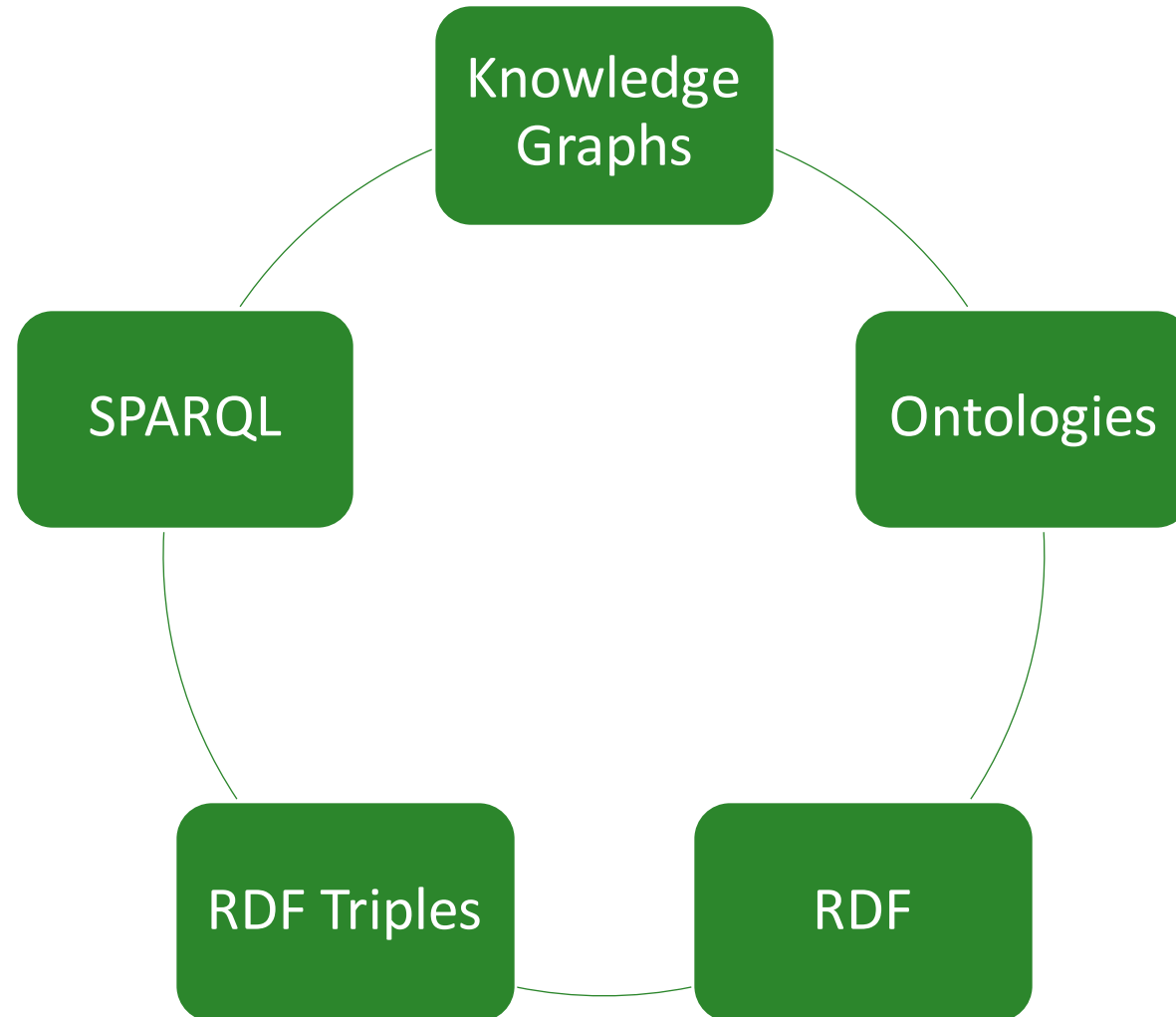
## TED API

- Must extract the data from XML
- Must cope with different XML schemas

## TED Open Data

- No need to extract notice data
  - No need to store notice data
  - One data format: the one you need
  - Get only the data you need
- 

# Technologies involved



# RDF Triple & SPARQL example

- “Mary had a little lamb” in RDF triples:
  - Mary **hasOwnershipOf** Lamb
  - Lamb **hasSize** “little”
- Question: “Who owns the little things?”

## SPARQL

```
SELECT ?who, ?what
WHERE {
    ?who hasOwnershipOf ?what.
    ?what hasSize "little".
}
```



## Result

who	what
Mary	Lamb

# Examples using eProcurement Ontology

Select all Notices

```
SELECT ?Notice
WHERE {
    ?Notice a epo:Notice.
}
```

Count all Notices published on 11 Sept 2023

```
SELECT (COUNT(?Notice) AS ?NoticeCount)
WHERE {
    ?Notice a epo:Notice ;
            epo:hasPublicationDate "20230911" .
}
```



# Examples using eProcurement Ontology

Select procedure titles of notices published on 11 Sept 2023; return only English language.

```
SELECT ?title
WHERE {
    ?notice a epo:Notice ;
            epo:hasPublicationDate "20230911" ;
            epo:refersToProcedure [ epo:hasTitle ?title ] .
    FILTER(LANG(?title) = 'en')
}
```

# Examples using eProcurement Ontology

**Count Notices published on 11 Sept 2023 by CPV. Show CVP codes in English, ordered by count.**

```
SELECT  (count(?notice) as ?noticeCount) ?classificationLabel
WHERE {
  # The following segment returns notices published at a certain date,
  # that refer to a procedure -> that have a purpose -> that is classified with a CPV
  ?notice a epo:Notice ;
          epo:hasPublicationDate "20230911";
          epo:refersToProcedure [
            a epo:Procedure ;
            epo:hasPurpose [
              a epo:Purpose ;
              epo:hasMainClassification ?Identifier ;
            ]
          ] .
  # For such CPV, return the labels in english
  ?Identifier a skos:Concept ;
              skos:prefLabel ?classificationLabel ;
              euvoc:status at:CURRENT .
  FILTER(LANG(?classificationLabel) = 'en')
}
GROUP BY ?classificationLabel
ORDER BY DESC(?noticeCount)
```

# Explore further...

- Read the [TED Developer Documentation](#)
- Try our examples:
  - [CPV distribution Example](#) + [live query](#)
  - [CPV hierarchy](#)
  - [Countries pivot table](#)
  - [Connecting with Python \(Jupyter Notebook\)](#)
- Try your queries in [SPARQL Query Editor](#)

# Data availability

- eForms notices
  - Forms 10 – 24, 29 ongoing (60% of eForms fields)
  - Will be added after Sep 2024
  - Remaining notice subtypes to be mapped next
  - Full availability: summer 2025
- TED-XML notices (legacy)
  - Currently available:
    - Contract award notices between Sep 2023 – Jan 2024
    - Historical data to be added Autumn 2024
  - Mapping and availability of remaining forms to follow

# Thank you



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