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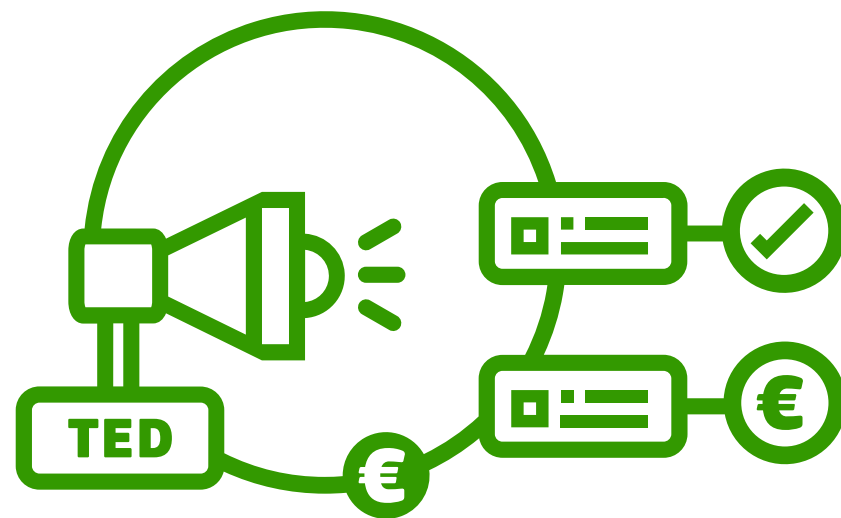
RETRIEVING NOTICES FROM TED PORTAL

Workshop on eForms for reusers of TED data

17 April 2024

Carmelo Greco – TED and EU public procurement

Publications Office of the EU



Agenda

- Download xml notices in bulk from the TED portal.
- Download the release calendar.
- Download notices in any format using direct links.
- Search API.
- Fair usage policy.
- Questions collected from the TED helpdesk
- Additional information
- Demo.

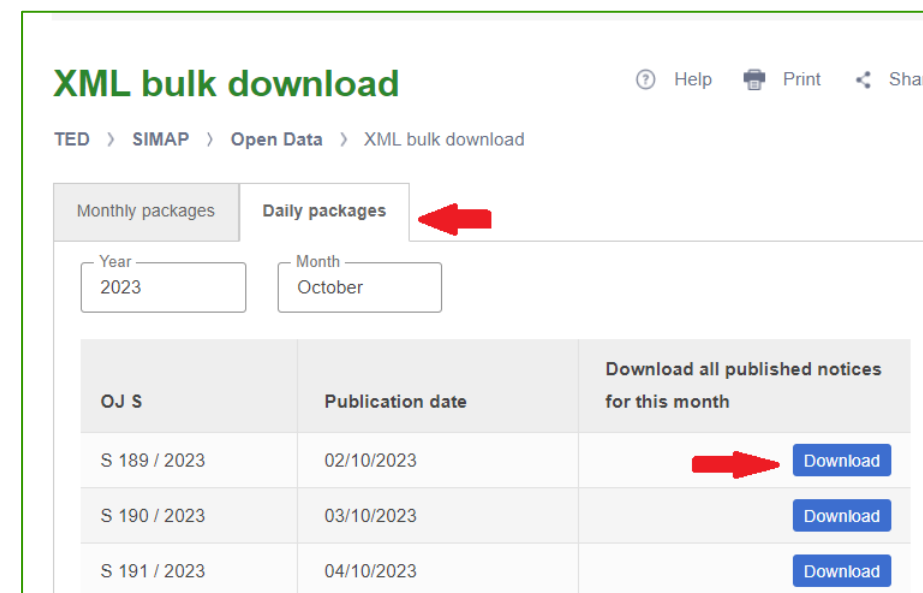
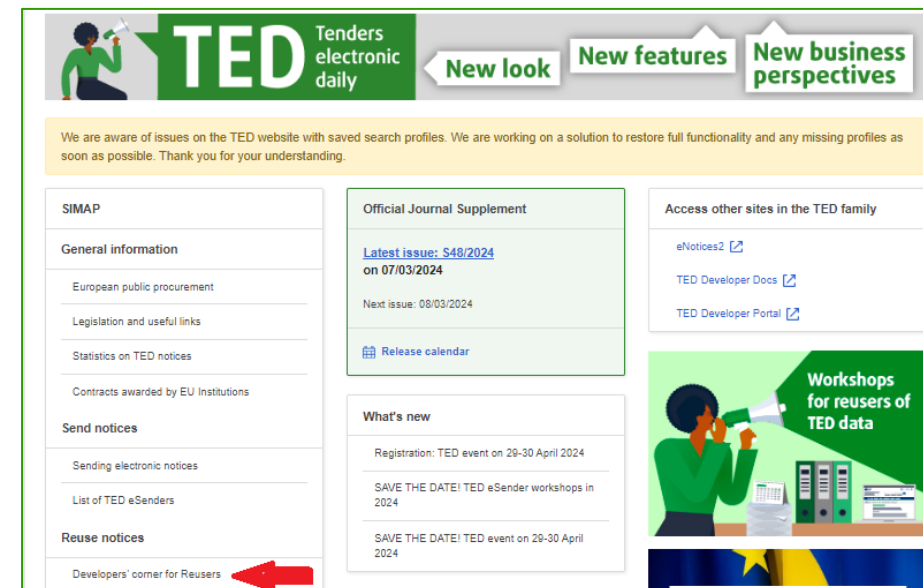
Download xml notices in bulk. (1/5)

- The user can download xml notices in bulk from the TED portal.
 - daily package: file containing all the notices in xml format for each day.
 - monthly packages: file containing all the notices in xml format for each month.
- **The daily and monthly packages can be downloaded using HTTPS.**
 - The user can download the packages using the user interface or using a direct link.
 - No need to sign in to download the daily or monthly packages.

Download XML notices in bulk. (2/5)

- **Download package via user interface**

- From the [Home](#) page, click [Developers' corner for Reusers](#).
- Navigate to the page to find the section describing how to [Download XML notices in bulk](#)
- Click [XML bulk download](#)
- From 'XML bulk download' page:
 - select the tab 'Daily packages' or 'Monthly packages'
 - select the year and the month
 - navigate to the page to select the package
 - click Download button to download the package



Download XML notices in bulk. (3/5)

- **Download packages using a direct link**

- URL format for **daily packages**:

- <https://ted.europa.eu/packages/notice/daily/{yyyynnnnnn}>
- where {yyyynnnnnn} is the OJ S number
- Example - Download the daily package of the OJ S 1 / 2024
- <https://ted.europa.eu/packages/daily/202400001>

- URL format for **monthly packages**:

- <https://ted.europa.eu/packages/notice/monthly/{yyyy-n}>
- where {yyyy-n} is the year and the month
- Example - Download the monthly package of January 2024
- <https://ted.europa.eu/packages/monthly/2024-1>

Download XML notices in bulk. (4/5)

- **File format of a daily package:**

- {yyyymmdd}_{yyyynnn}.tar.gz
 - Where {yyyymmdd} is the OJ S publication date and {yyyynnn} is the OJ S number
 - Example: daily package of the OJ S 1 / 2024
 - 20240102_2024001.tar.gz

- **File format of a monthly packages:**

- {yyyy}_{mm}.tar.gz
 - Where {yyyy} is the year and {mm} is the month
 - Example: monthly package of January 2024
 - 2024_01.tar.gz

Download XML notices in bulk. (5/5)

The XML packages contain XML files numbered in two ways:

- for the “new” eForms notices the XML files have 8 digits followed by the year (e.g. 00654321_2022.xml)
- for the “old” TED schema notices the XML files have 6 digits followed by the year (e.g. 123456_2022.xml)
 - Note - Only EU institutions could publish TED schema notices, but no later than 30/06/2024, and only the following type of notices: call for expression of interest; contract award; contract modification and corrigendum.

Download the release calendar. (1/2)

The user can download the list of annual releases from the TED portal.

- **Download the release calendar via user interface**

- From the [Home](#) page, click 'Release calendar' from the menu 'Official Journal Supplement'
- From 'Release calendar' page, select the option 'Download annual release' to download the 'Release calendar' of a specific year in a specific format.
- Click Download button to download the file.

The screenshot shows the TED portal interface. At the top, there's a search bar and navigation links. A green banner reads 'Transparency in public procurement'. Below this, the 'Official Journal Supplement' section is highlighted with a red arrow pointing to the 'Release calendar' link. The 'Release calendar' page is shown below, with a 'Monthly Releases' table. On the right, the 'Download annual releases' section is visible, with a red arrow pointing to the 'Download' button.

Release calendar

TED > Release calendar

Monthly Releases

Month: December Year: 2023

OJ S	Publication date
S 232 / 2023	01/12/2023
S 233 / 2023	04/12/2023
	05/12/2023
	06/12/2023
	07/12/2023
	08/12/2023

Download annual releases

Format: XLS

Year: 2024

[Download](#)

	A	B
1	OJS Publication date	
2	1	02/01/2024
3	2	03/01/2024
4	3	04/01/2024
5	4	05/01/2024
6	5	08/01/2024
7	6	09/01/2024
8	7	10/01/2024
9	8	11/01/2024
10	9	12/01/2024
11	10	15/01/2024
12	11	16/01/2024

Download the release calendar. (2/2)

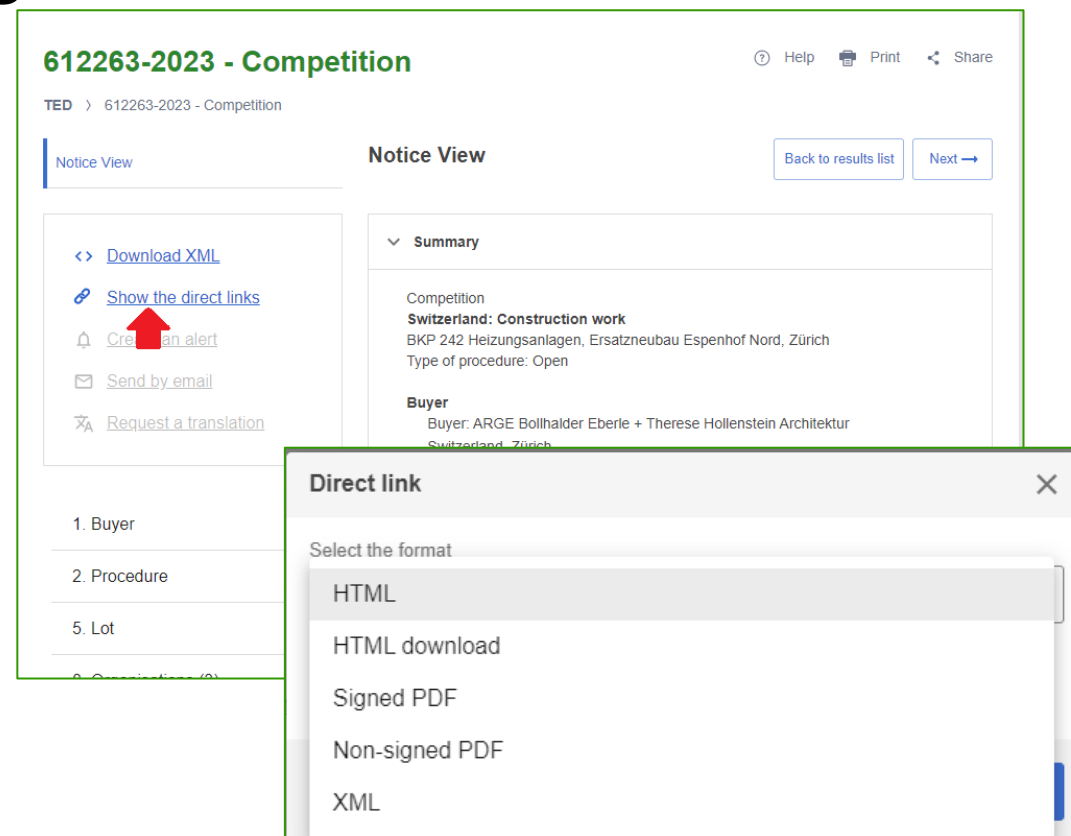
- **Download the release calendar using a direct link**
 - Format: <https://ted.europa.eu/{lang}/release-calendar/-/download/file/{format}/{year}>
 - where:
 - {lang} is the language
 - {format} can be : XLS, PDF, CSV
 - {year} is the year
 - Example: <https://ted.europa.eu/en/release-calendar/-/download/file/XLS/2024>

Download notices in any format using direct links ^(1/4)

- **A user can download a notice using direct link in the formats listed below and in any EU official languages:**
 - HTML
 - HTML download
 - Signed PDF
 - Non-signed PDF
- You can download notices using a direct link in XML format.
 - <https://ted.europa.eu/en/notice/{publication-number}/xml>

Download notices in any format using direct links (2/4)

- A user can download a notice in xml, HTML or PDF format and in any EU official languages using direct link
 - From any notice view page:
 - click 'Show the direct link'
 - A pop-up window lists the available formats of the direct links:
 - HTML
 - HTML download
 - Signed PDF
 - Non-signed PDF
 - XML



Download notices in any format using direct links (3/4)

- **Format of the URLs of the direct link:**

- <https://ted.europa.eu/{lang}/notice/{publication-number}/{format}>

- where:

- {lang} is the language
- {publication-number} is the publication number
- {format} can be :
 - html: to display the HTML download file
 - pdf: to download the notice as PDF
 - pdfs: to download the notice as signed PDF
 - xml: to download the notice as XML.

- **Direct link of the notice view page:** <https://ted.europa.eu/{lang}/notice/-/detail/{publication-number}>

- **Backward compatibility:**

- Example :

- Former URL <https://ted.europa.eu/udl?uri=TED:NOTICE:735065-2022:TEXT:EN:HTML>
- <https://ted.europa.eu/en/notice/-/detail/735065-2022>

Download notices in any format using direct links (4/4)

Example of direct link – Notice 76817-2024

- HTML:
 - EN: <https://ted.europa.eu/en/notice/-/detail/76817-2024>
 - FR: <https://ted.europa.eu/fr/notice/-/detail/76817-2024>
- HTML download:
 - EN: <https://ted.europa.eu/en/notice/76817-2024/html>
 - FR: <https://ted.europa.eu/fr/notice/76817-2024/html>
- Non-signed PDF
 - EN: <https://ted.europa.eu/en/notice/76817-2024/pdf>
 - FR: <https://ted.europa.eu/fr/notice/76817-2024/pdf>
- Signed PDF
 - <https://ted.europa.eu/fr/notice/76817-2024/pdfs>
 - <https://ted.europa.eu/nl/notice/76817-2024/pdfs>

Search API (1/7)

- **Swagger UI** - <https://ted.europa.eu/api/documentation/index.html>
- **Request URL** - <https://api.ted.europa.eu/v3/notices/search>

TED Search API

Introduction

This API provides multiple read-only operations on the TED website data. The endpoint Notice Search API can be used to search notices both TED schema notices and eForms notices. More information is available on the help pages of the TED website.

- [TED - Website](#)
- [Search API](#)
- [Contact](#)
- [APIv3.0000](#)

The API is accessible to the general public and can be utilized by anyone in accordance with the [term of usage](#).

Change logs

Version	Date	Changes
N/A	N/A	N/A

Public API search modes

This section describes the different search modes provided by the public search API. Each parameter of the search API is detailed in the OpenAPI documentation of the API.

Pagination mode

The pagination mode is the default mode of the public search API. This mode is stateless: the user can retrieve any result page, and not necessary in order. It also means that there is no mechanism to ensure consistency between two retrieved pages: if the user retrieves multiple pages and an OJS is released between two retrieved pages, then the user might miss some notices or have duplicated notices. Also, due to how Elasticsearch works internally, a limit on the number of retrievable notices for a given query has been put in place. This limit is described in the *Definition of limits* section.

The user must provide the following parameters to the API to paginate results:

- limit: the number of notices returned per page. For example, limit=10 means that 10 notices will be returned.
- page: the page number to retrieve. For example, page=1 means that the first result page will be retrieved.

Scroll mode

The scroll mode allows user to retrieve all notices for a given query, without limitations defined in section *Definition of limits*. With this mode, the user calls the search API to retrieve the first result page and a token. This token can then be included in the next query sent to the search API to retrieve the next result page. The user knows all notices have been retrieved once there is no more notice returned. The Elasticsearch point in time feature is used to ensure a consistency between all returned pages, which means that the user cannot miss notices or have duplicated notices. An Elasticsearch point in time is a freeze of the Elasticsearch instance at a specific time. If notices are added or removed during the lifetime of a point in time, the notices registered in the point in time don't change. The point in time has an expiration time. This expiration time is defined as the date of the next OJS release plus 24 hours. It means that the user has always at least 24 hours to retrieve all the notices for a given query.

The user must provide the following parameters to the API to retrieve results in scroll mode:

- paginationMode should be set to "ITERATION".
- limit: the number of notices to return for the next page.
- searchAfterToken: the token returned by the previous call to the search API. If this is the first call (i.e., to retrieve the first page), this parameter shouldn't be provided.

Definition of limits

Here is a definition of the different limits defined for the SEM (Search Engine Module) endpoints in the next sections:

- Maximum number of retrievable notices: this corresponds to the number of notices that can be retrieved once the user has queried all pages. For example, if the user retrieves all notices for a given query with page size 250, and the limit of retrievable notices is 100, it means the SEM will return no more notice after page 100 / 250 = 40, even if the query matches more than 100 notices.
- Maximum number of notices per page: if this limit is X, then it means the user can retrieve X or less notices per page, but not more than X notices per page.
- Maximum number of fields per page: the number of fields per page is defined as the number of notices per page multiplied by the number of fields retrieved for each notice. For example, with a limit of 250, the user is allowed to retrieve 50 notices per page and 4 fields per notice (50 * 4 < 250). However, they are not allowed to retrieve 100 notices per page and 4 fields per notice (100 * 4 > 250).

Search using pagination mode of public API

The pagination mode of the public search API has the following limits:

notice-search-v3 Notice Search API V3

POST **/v3/notices/search** Search for notices using expert search query

Search for notices using expert search query. More information about the query format and field names can be found on [this page](#)

Parameters

No parameters

Request body **required**

application/json



Search API (2/7)

- **Two search modes:**
 - Pagination mode: allows to retrieve up to 15000 notices for a given query, using pagination.
 - Iteration (scroll mode): allows to retrieve more notices
- **Response file:**
 - Contains the total number of notices that match the search, and a list of results.
 - Each result contains the fields indicated in the request.
 - Each item contains the list of URLs for the various formats and languages in which the corresponding notice is available.

Search API (3/7)

- **Search mode – Pagination**

- Allows to retrieve up to 15000 notices for a given query, using pagination.

- Limits:

- Maximum number of retrievable notices: 15k.

- Maximum number of notices per page: 250.

- Maximum number of fields per page: 10k.

In case a limit is reached, the search API will return an error to the user

Search API (4/7)

- **Search mode – Iteration (scroll mode)**

- Allows to retrieve all notices for a given query, without limitations. With this mode, the user calls the search API to retrieve the first result page and a token. This token can then be included in the next query sent to the search API to retrieve the next result page.

- Limits:

- Maximum number of notices per page: 250.
- Maximum number of fields per page: 10k.

In case a limit is reached, the search API will return an error to the user. There is no limit on the number of retrievable notices

Search API (5/7)

- **Request body of the notice search endpoint**

- **query**: Expert search query to filter and sort notices
- **fields**: Fields to return for each notice
- **page**: Result page number, used to paginate results
- **limit**: Maximum number of returned notices, used to paginate results.
- **scope**: Search scope (3 possible values: LATEST, ACTIVE, ALL)
- **checkQuerySyntax**: To check the syntax of the query.
- **paginationMode**: PAGE_NUMBER or ITERATION
- **iterationNextToken**: token returned by the previous call to the search endpoint to retrieve the next result page.

SEARCH API – Demo (6/7)

Search mode: pagination

Example - Find notices of the OJ S 18/2024 where the place of performance is Luxembourg; the result must contain the publication-number, the notice-title, the buyer-name and the form-type .

```
{
  "query": "(ojs-number=18/2024) AND (place-of-performance IN (LUX))",
  "fields": ["publication-number", "notice-title", "buyer-name", "notice-type"],
  "page": 1,
  "limit": 10,
  "scope": "ACTIVE",
  "checkQuerySyntax": false,
  "paginationMode": "PAGE_NUMBER"
}
```

```
curl -X 'POST' \
  'https://api.gamma.tedv2.spikeseed.cloud/v3/notices/search' \
  -H 'accept: */*' \
  -H 'Content-Type: application/json' \
  -d '{
    "query": "(ojs-number=180/2023) AND (place-of-performance IN (LUX))",
    "fields": ["publication-number", "notice-title", "buyer-name", "notice-type"],
    "page": 1,
    "limit": 10,
    "scope": "ACTIVE",
    "checkQuerySyntax": false,
    "paginationMode": "PAGE_NUMBER"
  }'
```

Response body

```
{
  "notices": [
    {
      "notice-type": "cn-standard",
      "publication-number": "562081-2023",
      "buyer-name": {
        "fra": [
          "Administration communale de Kehlen"
        ]
      },
      "links": {
        "xml": {
          "MUL": "https://gamma.tedv2.spikeseed.cloud/en/notice/562081-2023/xml"
        },
        "pdf": {
          "BUL": "https://gamma.tedv2.spikeseed.cloud/bg/notice/562081-2023/pdf",
          "SPA": "https://gamma.tedv2.spikeseed.cloud/es/notice/562081-2023/pdf",
          "CES": "https://gamma.tedv2.spikeseed.cloud/cs/notice/562081-2023/pdf",
          "DAN": "https://gamma.tedv2.spikeseed.cloud/da/notice/562081-2023/pdf",
          "DEU": "https://gamma.tedv2.spikeseed.cloud/de/notice/562081-2023/pdf",
          "EST": "https://gamma.tedv2.spikeseed.cloud/et/notice/562081-2023/pdf",
          "ELL": "https://gamma.tedv2.spikeseed.cloud/el/notice/562081-2023/pdf",

```

SEARCH API – Demo (7/7)

Search mode: iteration

Example - Find notices where the place of performance is Luxembourg; the result must contain the publication-number.

```
{
  "query": "place-of-performance IN (LUX)",
  "fields": ["publication-number"],
  "limit": 10,
  "scope": "ACTIVE",
  "checkQuerySyntax": false,
  "paginationMode": "ITERATION"
}
```

```
curl -X 'POST' \
  'https://api.gamma.tedv2.spikeseed.cloud/v3/notices/search' \
  -H 'accept: */*' \
  -H 'Content-Type: application/json' \
  -d '{
    "query": "place-of-performance IN (LUX)",
    "fields": ["publication-number"],
    "limit": 10,
    "scope": "ACTIVE",
    "checkQuerySyntax": false,
    "paginationMode": "ITERATION"
  }
.'
```

Response body

```
{
  "FRA": "https://gamma.tedv2.spikeseed.cloud/fr/notice/228214-2019/html",
  "GLE": "https://gamma.tedv2.spikeseed.cloud/ga/notice/228214-2019/html",
  "HRV": "https://gamma.tedv2.spikeseed.cloud/hr/notice/228214-2019/html",
  "ITA": "https://gamma.tedv2.spikeseed.cloud/it/notice/228214-2019/html",
  "LAV": "https://gamma.tedv2.spikeseed.cloud/lv/notice/228214-2019/html",
  "LIT": "https://gamma.tedv2.spikeseed.cloud/lt/notice/228214-2019/html",
  "HUN": "https://gamma.tedv2.spikeseed.cloud/hu/notice/228214-2019/html",
  "MLT": "https://gamma.tedv2.spikeseed.cloud/mt/notice/228214-2019/html",
  "NLD": "https://gamma.tedv2.spikeseed.cloud/nl/notice/228214-2019/html",
  "POL": "https://gamma.tedv2.spikeseed.cloud/pl/notice/228214-2019/html",
  "POR": "https://gamma.tedv2.spikeseed.cloud/pt/notice/228214-2019/html",
  "RON": "https://gamma.tedv2.spikeseed.cloud/ro/notice/228214-2019/html",
  "SLK": "https://gamma.tedv2.spikeseed.cloud/sk/notice/228214-2019/html",
  "SLV": "https://gamma.tedv2.spikeseed.cloud/sl/notice/228214-2019/html",
  "FIN": "https://gamma.tedv2.spikeseed.cloud/fi/notice/228214-2019/html",
  "SWE": "https://gamma.tedv2.spikeseed.cloud/sv/notice/228214-2019/html"
},
{
  "totalNoticeCount": 523,
  "iterationNextToken": "axLc7V2R1vexJOGTs51W0hN0muBsmkRdKn0cCpVamFgoIDQpLy7TmYiUhX1Q1eTrmvZVPhRX01qtQAIwRfAsqjZQqH9E9QRMVromersUOmYVnxPu24Kerm+EeEhKowvDz1ZTd4Sb31jFpY7vcRB8aKEjPQ77xZxYcto/Luxu92msH5Uzc dqCwJ9YydQwS5QemL6fABym/YpA9is9zA39IhT7b5nI2eJtB510vGR5Uf65NT+CT5yqgEomorPBizuixjRQpGSKxgi5CnHTVja9X BRp2PZCgBL SyaIr-f6K/aNwomHeUa7yH3Xu3Y1gwFhViUZKtOoMjC0hCy0ENDNBxaXjfb2Uqzy3oXr+77HC2Df1PZoHnV9rqQ3o/9N XUTer9KfdZ0Sk4e/SRE+mVwD2Z9C6A+pKy7I3mI1aqC13RxXXR6jwdekRozy4MpRqztGKec2GtjaBEa1N1oK8HpFHBw0mDg2PTpyC INLGTXPkYg+ny/J2nEmJYFGgzB1S0Q05UGodvTJQqaL2RJq/yZBb0Qd4fzT1DBQs2vx7osnIeo61VH6IP009IeNnc7+pCh5MCD0U xrkGcgygjPhMrfZTBKnPNYcn01401t0X82sqJAUG="
}
```

Download

Fair usage policy ^(1/2)

- To enable as many users as possible to access our services we defined HTTPS usage thresholds

Operation	Limits
Visualize or download notices from a single IP	600 visualizations or downloads in less than 6 minutes
HTTP Requests	700 requests in the last minute
Download daily or monthly Packages HTTPS Service	3 concurrent downloads

Fair usage policy (2/2)

The architecture of the TED portal has been designed as follows :

- The Web pages are fully powered by a CMS enabling a better and tailored user experience. This CMS is efficient within a specific range of loads.
- A dedicated public API to search notices and direct link to download their contents is efficient and scalable.

On this basis, **the Publications Office strongly recommends that technical users must use the public API** to benefit from performance and scalability and to leave CMS resources available to "human users".

Questions collected from the TED help desk

- **What time is the OJ S published ?**

- The daily OJ S editions are published from Monday to Friday , no later than 9:00.
- The XML daily packages are published from Monday to Friday , no later than 9:30.
- The annual release calendar can be downloaded from the page <https://ted.europa.eu/en/release-calendar>

- **What is the format of the publication-date retrieved from the API?**

- For eForms notice, the API returns the exact value of the XML.
 - Example : 92416-2024.
 - value in the XML : `<efbc:PublicationDate>2024-02-13Z</efbc:PublicationDate>`
 - Publication-date in the response file of the API : 2024-02-13Z
 - Note: As the time zone is wrong, it is planned to provide the publication date time zone of Luxembourg (e.g. 2024-02-13+01:00)
- For TED Schema notice, the API returns date with the time zone of Luxembourg.
 - Example : 89665-2024.
 - value in the XML `<DATE_PUB>20240213</DATE_PUB>`
 - Publication-date in the response file of the API : 2024-02-13+01:00

Additional information

- **Additional documentation** for TED reusers is also available on <https://docs.ted.europa.eu/reuse/index.html>

- **Register on the TED developer portal**

The Publications office recommends the reusers to register on the TED developer portal.

The OP will use the email addresses of the reusers for communication about service interruption, updates of the API or forthcoming events.

Link: <https://developer.ted.europa.eu>

THANK YOU



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