

TED processed database

NOTES & CODEBOOK

Version 2.2, 2016-09-15

Thank you for your interest in Tenders Electronic Daily (TED) processed data¹. Before beginning your work with the data, please read the notes and codebook below. They are necessary for drawing correct conclusions from the data.

1. COMMUNICATION

1.1. The Commission is interested in the results of research on public procurement. We would be grateful to receive any output based on the data (e.g. papers, reports, links to applications) at GROW-G4@ec.europa.eu.

1.2. We recommend citing the dataset in the following format:

TED csv dataset (YYYY-YYYY), Tenders Electronic Daily, supplement to the Official Journal of the European Union. DG Internal Market, Industry, Entrepreneurship, and SMEs, European Commission, Brussels. Available at <https://open-data.europa.eu/cs/data/dataset/ted-csv>. Version 2.1. Accessed on YYYY-MM-DD.

1.3. To support the exchange of ideas, especially between practitioners and academics, the Commission hosts an [open wiki](#) with ideas for research questions and existing examples of reuse related to this dataset. This website can be a useful inspiration for instance if you are a student looking for a thesis topic.

1.4. While spreadsheet programs (such as Excel) may be able to open a single year of data, they are not powerful enough to manage datasets with multiple years. We recommend using [specialized statistical programs](#), some of which are also available for free (e.g. [R](#) and [RStudio](#)).

2. RELIABILITY & COVERAGE

2.1. The data is provided "as is". The source of the data is unverified output from contracting authorities or entities across Europe. It is not uncommon for data to be input incorrectly (for examples see presentations below) or be missing, and thus great care must be taken with data management and interpretation. Please

¹ The "raw" TED data in XML is available from the [Publications Office of the European Union](#). If you are interested in the XML data, please visit <https://open-data.europa.eu/en/data/dataset/ted-1>. All disclaimers which relate to TED data also apply to the TED processed database and vice versa.

note that due to resource constraints the European Commission is regrettably not able to provide support in analysing the data.



Improving data
quality in OJ/TED



Estimating the Value
of OJ/TED

However, we are currently taking steps to clean historical data (mainly names of entities and values) to broaden opportunities for analysis, using both advanced techniques such as machine learning and manual cleaning. **If you are considering investing significant resources into data cleaning for your project, please contact us at the email address above, as our activities may have synergies.**

2.2. The data comes from the European Economic Area, Switzerland, and the former Yugoslav Republic of Macedonia² and covers the time period between 2006/01/01 and 2015/12/31. The number of countries covered has increased throughout the years, generally in line with their accession to the single European market.

The data includes selected fields from contract notices and contract award notices (see section 4 below). The number of fields has been limited to avoid having excessively large files with high hardware requirements. This is the case especially for free-text descriptions

2.3. The notices generally fall under the [EU public procurement directives](#), with the exception of procurement by European institutions, which procure according to the [Financial Regulation](#) of the EU (see "cae_type" description in section 4).

2.4. Generally, the data consists of notices above the [procurement thresholds](#). However, publishing below threshold notes in TED is considered good practice, and thus a non-negligible number of below threshold notices is present as well.

2.5. The data is stored in separate files, with two files per year: one with contract award notices and one with contract notices³ (see below). This separation is done to allow analyses of segments of the data without excessive hardware requirements. For analysis across years (or forms), the individual files must be merged.

2.6. The data is in comma separated value (CSV) format and is encoded as UTF-8.

2.7. Older data has lower quality, because the data collection structure was less developed (see "XSD_version" description in section 4). Furthermore, on 17th

² Macedonian public procurement law obliges publication of call for tenders above "€500,000 for supplies and services, and €2 million for works in the Official Journal of the EU or in a respective business or technical magazine broadly available to international experts". Some authorities take advantage of the possibility to use the Official Journal, i.e. TED.

³ For brevity, throughout this text, the "contract notice" category also covers the special case when a utility periodic indicative notice is used as a call for competition.

September 2008, the [common procurement vocabulary was changed](#)⁴. For these reasons, it may often be best to only use data from 2009 onwards.

3. STRUCTURE & INTERPRETATION

3.1. The data comes from [public procurement standard forms](#)⁵, which are filled in by contracting bodies and sent as notices for publication to TED. The variables in the data directly correspond to the fields in the forms. **If you are unsure how to interpret a variable, your first step should be to find it in the standard forms.**

3.2. **The data has multiple levels** which are represented on one line of data. For this reason, some of the information is repeated. There are three levels in procurement notice data:

- **contract award notices (CANs)**, which are filled in standard forms 3, 6 or 18. The column "ID_notice_can" is a unique identifier (ID) of a CAN.
- **contract awards (CAs)**, which is the fifth section of a CAN standard form. Each CAN has one or more CAs. ID_award_ca is an ID of a CA.
- **contract notices (CNs)**, which is a filled in standard forms 2, 5 or 17. ID_notice_cn is an ID of a CN.

These levels serve different purposes. To give an example, a CN informs on a future purchase (“The ministry would like to buy furniture”); a CAN generally informs on the result of the procurement (“The ministry has bought furniture”); and the three individual CAs, nested within the CAN, inform about the specific detail (“The ministry has bought a chair from company A”; “The ministry has bought a table from company B”; “The ministry has bought a cupboard from company B”).

For many types of analyses, it is enough to only work with the CAN files (which contain the CAN and CA levels of the data).

3.3. In a file with CANs, each row begins with the information from a CAN, including on CA(s). When a CAN has multiple CAs, then the information from the non-CA parts of the notice will be repeated. For example, the purchase from the previous paragraph would be represented in the database in the following manner:

Table 1

ID_notice_can	description	ID_award	description
201501	furniture	123	chair
201501	furniture	456	table
201501	furniture	789	cupboard

The same type of duplication will also occur when merging data from CAN and CN level (which is done by using the FUTURE_CAN_ID column). For example,

⁴ There is a many-to-many matching between the old and the new CPV, so they cannot be aligned in a simple manner.

⁵ The standard forms according to which the data has been collected have been established by the [Commission Implementing Regulation \(EU\) No 842/2011](#) and before that the [Commission Regulation \(EC\) No 1564/2005](#). Older data is based on the annexes to the relevant procurement directives.

if our CAN above was preceded by two CNs, the merged database would have the following structure:

Table 2

ID_notice_can	description	ID_award	description	ID_notice_cn
201501	furniture	123	chair	201442
201501	furniture	456	table	201442
201501	furniture	789	cupboard	201442
201501	furniture	123	chair	201466
201501	furniture	456	table	201466
201501	furniture	789	cupboard	201466

Which level of data to use depends on the question asked: some fields vary at the CA level (for instance the "number of bids"), some at the CAN / CN level (for instance "type of procedure"). **Which field varies at which level depends on where in the form it is located. This can be found out by looking at the codebook below or the form in question (i.e. whether it is in "section V", in case of the CA level).**

Once you know which level of the data you are interested in, the easiest way to select it is to use the "remove duplicates" command (available in all statistical software as well as spreadsheet programmes) on columns with the different IDs.

For example, if we want to know "How many contract awards in table 1 were related to buying chairs?", we can simply count the chairs in Table 1 and see that there is, indeed, just one. On the other hand, if the question is "How many notices in Table 1 announced the purchase of furniture? ", then we should remove lines with duplicate observations of ID_notice_can and after counting the remaining lines we will find the correct answer – one.

Understanding the structure of the data is crucial. If you do not feel 100% at ease with the explanations above, please review them once more. Doing so going through the data may also help.

- 3.4. The data includes also notices which were published and then cancelled. This is indicated by the value of column "cancelled" being "1". For most types of analyses, you will probably want to drop these notices. Information about cancellation is reliably available only from 2011 onwards.
- 3.5. To verify the contents of a notice or have a qualitative look at what is being procured, use <http://ted.europa.eu/TED/search/search.do> (in the Scope search field select "Archives"). To search for a specific notice from the data, the "ID_notice" value can be entered into the "Document number" field, with a small change in the format: the ID_notice value (e.g. "201251112") must be changed to Document number (e.g. "51112-2012"). The public TED archives contain only the last five years of data.

4. CODEBOOK

Below, we give basic descriptions of the available variables. The codebook for contract award notices and contract notices is provided separately, even though many of the columns are present in both datasets.

In case of doubt, please refer to the [public procurement standard forms](#). **Quotation marks indicate direct quotations from the standard forms.** Please note that the exact names from the standard forms might have been slightly different in different versions of the forms.

When a field does not come directly from the standard forms, but was added to the notice on the basis of a calculation, we include the code "[ADDED]" in the Notes section.

4.1. Contract Award Notice

This section covers fields in files containing "CAN".

Table 3

Variables	Notes
Notice metadata	
ID_NOTICE_CAN	Unique identifier of the contract award notice
YEAR	Year of publication of the notice
ID_TYPE	standard form number
DT_DISPATCH	The date when the buyer dispatched (sent) the notice for publication to TED.
XSD_VERSION	Version of the XML schema definition used by the Publications Office of the EU to publish the data. Higher versions mean better average quality of data. The lowest version is "2.0.5", the highest "2.0.8"; notices before 2006 are of the lowest quality and do not have version information. [ADDED]
CANCELLED	1 = this notice was later cancelled [ADDED]
CORRECTIONS	Number of later notices which corrected or added information to this notice (see standard form 14). [ADDED]
Contracting authority or entity identification	
CAE_NAME	"Official name"
CAE_NATIONALID	"National ID" e.g. VAT number for utilities
CAE_ADDRESS	"Postal address"
CAE_TOWN	"Town"
CAE_POSTAL_CODE	"Postal code"
ISO_COUNTRY_CODE	"Country"
Various CAN level variables	
CAE_TYPE⁶	Type of contracting authority. The values are the following: 1 "Central government" 2 "Armed forces" 3 "Local authorities"

⁶ Please note that the values for this variable are more diverse than those in the current standard forms, as they were used also for coding values from their older versions (i.e. "armed forces" was used in standard forms up to 2003).

	<p>4 "Water, energy, transport and telecommunications sectors"</p> <p>5 "European Union institution/agency"</p> <p>5A "other international organisation"</p> <p>6 "Body governed by public law"</p> <p>8 "Other"</p> <p>9 "Not applicable"</p> <p>N "National or federal Agency / Office"</p> <p>R "Regional or local Agency / Office"</p> <p>Z "Not specified"</p> <p>The distinction between 5 and 5A has been [ADDED] on the basis of data not included in the standard forms.</p> <p>Please note that procurement by "European Union institution/agency" will generally not be covered by public procurement legislation, but by the Financial Regulation of the EU. Thus, it may be appropriate to exclude them from analyses dealing with the procurement directives. Similarly, it might be appropriate to exclude these observations for analyses of national level procurement, since the responsibility for this procurement lies at the EU level.</p>
MAIN_ACTIVITY⁷	(The classification corresponds to COFOG divisions.)
B_ON_BEHALF	This indicates either a central purchasing body or several buyers buying together (i.e. occasional joint procurement).
TYPE_OF_CONTRACT	Type of contract. The values are the following: W "Works" U "Supplies" S "Services"
TAL_LOCATION_NUTS	The Nomenclature of Territorial Units for Statistics (NUTS) code placement of the "Main site or location of work, place of delivery or of performance"
B_FRA_AGREEMENT	"The notice involves the establishment of a framework agreement"
FRA_ESTIMATED	<p>Whether there are indications that this notice is actually about a framework agreement, even though it has not been marked as such by the buyer (i.e. the buyer possibly forgot to mark the field). Indications are the following:</p> <p>K "The keyword 'framework', in the appropriate language, was found in the title or description of the notice."</p> <p>A "Multiple awards were given per one lot, which is legally admissible only in case of framework agreements and dynamic purchasing systems."</p> <p>C "Consistency across notices: the contract notice which preceded this notice was marked as a framework agreement."</p> <p>The use of these indications depends on how important it is to not misclassify frameworks in your analysis. One possible approach is to assume that the notice has been misclassified as a framework when at least two of the indications above are present. [ADDED]</p>

⁷ For standard forms related to the 2004 procurement directives this field was regrettably multiple choice which makes analysis difficult. For the 2014 procurement directives only one option is possible.

B_DYN_PURCH_SYST	"The notice involves contract(s) based on a dynamic purchasing system"
CPV	The main Common Procurement Vocabulary code of the main object of the contract
ADDITIONAL_CPV1-4	The main Common Procurement Vocabulary of the additional object(s) of the contract. The first four listed in the notice.
B_GPA	"The contract is covered by the Government Procurement Agreement"
LOTS_NUMBER	The number of lots for a given CAN. This value is based on the number of unique "Lot No" values included in the heading of section V of the CAN. This information is available only since 2009. [ADDED]
VALUE_EURO	CAN value, in EUR, without VAT. If the value was not present, the lowest bid is included.
VALUE_EURO_FIN_1	CAN value, in EUR, without VAT. If a value field is missing, this columns looks for it in all other fields from which it could be taken (see detailed explanation in Annex I). [ADDED]
VALUE_EURO_FIN_2	Generally the same value as VALUE_EURO_FIN_1, but – if available – overwritten by human-made estimates of values for large value contracts which seemed to be incorrect. ⁸ These estimates are indicative and the Commission holds no responsibility for their correctness or usage. [ADDED]
TOP_TYPE	Type of procedure. The values are the following: ACN "accelerated negotiated" ACR "accelerated restricted" AWP "award without prior publication of a contract notice" COD "competitive dialogue" NOC/NOP "negotiated without a call for competition" NIC/NIP "negotiated with a call for competition" OPE "open" RES "restricted"
CRIT_CODE	Award criteria. The values are the following: L "Lowest price" M "Most economically advantageous tender"
CRIT_CRITERIA	Information on award criteria. The field is an unstructured text field.
CRIT_WEIGHTS	Information on award criteria weighing. The field is unstructured text.
B_ELECTRONIC_AUCTION	"An electronic auction has been used"
NUMBER_AWARDS	The number of CAs for a given CAN. [ADDED]
Award metadata	
ID_AWARD	unique contract award identifier
Winning bidder identification	
WIN_NAME	"Official name"
WIN_ADDRESS	"Postal address"
WIN_TOWN	"Town"

⁸ As explained in the presentations in the beginning of this document, typos in large value contracts can severely bias aggregate statistics even at national level. For this reason, the value of some large value contracts has been manually corrected throughout the years, e.g. on the basis on the information available in the notice description, contacting the buyer, or searching online resources.

WIN_POSTAL_CODE	"Postal code"
WIN_COUNTRY_CODE	"Country"
Various CA level variables	
CONTRACT_NUMBER	"Contract No"
LOT_NUMBER	"Lot No", an identifier of a lot.
TITLE	"Title"
NUMBER_OFFERS	"Number of offers received"
NUMBER_OFFERS_ELECTR	"Number of offers received by electronic means"
AWARD_EST_VALUE_EURO	Estimated CA value, in EUR, without VAT.
AWARD_VALUE_EURO	Total final CA value, in EUR, without VAT. If the value was not present, the lowest bid is included.
AWARD_VALUE_EURO_FIN_1	CA value, in EUR, without VAT. If a value field is missing, this columns looks for it in all other fields from which it could be taken (see detailed explanation in Annex I). [ADDED]
B_SUBCONTRACTED	"The contract is likely to be subcontracted."
B_EU_FUNDS	"The contract is related to a project and / or programme financed by European Union funds"
DT_AWARD	"Date of contract award"

4.2. Contract Notice

This section covers fields in files containing "CN".

Table 4

Variables	Notes
Notice metadata	
ID_NOTICE_CN	Unique identifier of the contract notice
YEAR	Year of publication of the notice
ID_TYPE	standard form number
DT_DISPATCH	The date when the buyer dispatched (sent) the notice for publication to TED.
XSD_VERSION	Version of the XML schema definition used by the Publications Office of the EU to publish the data. Higher versions mean better average quality of data. The lowest version is "2.0.5", the highest "2.0.8". [ADDED]
CANCELLED	1 = this notice was later cancelled [ADDED]
CORRECTIONS	Number of later notices which corrected or added information to this notice (see standard form 14). [ADDED]
FUTURE_CAN_ID⁹	The publication ID of the CAN which followed this notice. This ID is used to link the CN and CAN datasets (by putting the FUTURE_CAN_ID equal to the ID_NOTICE_CAN). [ADDED]
FUTURE_CAN_ID_ESTIMATED	Whether the "future" publication ID submitted in the notice was estimated (corrected) for the purposes of this dataset, for instance because of a straightforward typo. This is useful mainly as an indication of differences compared to the TED website. 1 = estimated. [ADDED]
Contracting authority or entity identification	
CAE_NAME	"Official name"
CAE_NATIONALID	"National ID" e.g. VAT number for utilities
CAE_ADDRESS	"Postal address"
CAE_TOWN	"Town"
CAE_POSTAL_CODE	"Postal code"
ISO_COUNTRY_CODE	"Country"
Various CN level variables	
CAE_TYPE¹⁰	Type of contracting authority. The values are the following: 1 "Central government" 2 "Armed forces" 3 "Local authorities" 4 "Water, energy, transport and telecommunications sectors" 5 "European institution/agency" ¹¹

⁹ This field is actually based on a link made in a CAN (section IV.3.2), where CNs are indicated as "previous publications". For technical reasons, we provide this information in the opposite manner, i.e. as "future publication" of a CN. Please note that the values in this field reflect any link made between a CN and CAN, no matter in which section of the "previous publication" it was included.

¹⁰ Please note that the values for this variable are more diverse than those in the current standard forms, as they were used also for coding values from their older versions (i.e. "armed forces" was used in standard forms up to 2003).

	<p>5A "other international organisation" 6 "Body governed by public law" 8 "Other" 9 "Not applicable" N "National or federal Agency / Office" R "Regional or local Agency / Office" Z "Not specified"</p> <p>The distinction between 5 and 5A has been [ADDED] on the basis of data not included in the standard forms.</p> <p>Please note that procurement by "European Union institution/agency" will generally not be covered by public procurement legislation, but by the Financial Regulation of the EU. Thus, it may be appropriate to exclude them from analyses dealing with the procurement directives. Similarly, it might be appropriate to exclude these observations for analyses of national level procurement, since the responsibility for this procurement lies at the EU level.</p>
MAIN_ACTIVITY ¹²	(The classification corresponds to COFOG divisions.)
B_ON_BEHALF	This indicates either a central purchasing body or several buyers buying together (i.e. occasional joint procurement).
TYPE_OF_CONTRACT	Type of contract. The values are the following: W "Works" U "Supplies" S "Services"
TAL_LOCATION_NUTS	The Nomenclature of Territorial Units for Statistics (NUTS) code placement of the "Main site or location of work, place of delivery or of performance"
B_FRA_AGREEMENT	Y if "The notice involves the establishment of a framework agreement" is selected or "Framework agreement with a single operator" is selected or "Framework agreement with several operators" is selected.
FRA_ESTIMATED	<p>Whether there are indications that this notice is actually about a framework agreement, even though it has not been marked as such by the buyer (i.e. the buyer possibly forgot to mark the field). Indications are the following:</p> <p>K "The keyword 'framework', in the appropriate language, was found in the title or description of the notice." C "Consistency across notices: at least half of the contract award notices which followed this notice were marked as framework agreements."</p> <p>The use of these indications depends on how important it is to not misclassify frameworks in your analysis. One possible approach is to assume that the notice has been misclassified as a framework when both of the indications above are present. [ADDED]</p>
B_FRA_SINGLE_OPERATOR	Y "Framework agreement with a single operator" N "Framework agreement with several operators"
FRA_NUMBER_OPERATOR	"Number of participants to the framework agreement"

¹¹ For technical reasons (different structure of notices), notices from the European Investment Bank and the European Bank for Reconstruction and Development are not included in the export.

¹² For standard forms related to the 2004 procurement directives this field was regrettably multiple choice, making analysis difficult. For the 2014 procurement directives only one option will be possible.

S	envisaged"
FRA_NUMBER_MAX_OPERATORS	"Maximum number of participants to the framework agreement envisaged"
B_DYN_PURCH_SYST	"The notice involves contract(s) based on a dynamic purchasing system"
CPV	The main Common Procurement Vocabulary code of the main object of the contract
ADDITIONAL_CPV1-4	The main Common Procurement Vocabulary of the additional object(s) of the contract. The first four listed in the notice.
B_GPA	"The contract is covered by the Government Procurement Agreement"
LOTS_NUMBER⁶	The number of lots for a given contract notice. Please note that according to the directives, not dividing a contract notice means not using lots, and thus in these cases the variable will have value of 0. Value of 1 is a user imputed mistake. This value is based on the number of Annexes B of a CN. [ADDED]
LOTS_SUBMISSION	"Tenders may be submitted for:" - A "all lots" - O "one lot" - M "multiple lots"
B_VARIANTS	"Variants will be accepted"
VALUE_EURO	CN value, in EUR, without VAT. If the value was not present, the lowest bid is included.
VALUE_EURO_FIN_1	CN value, in EUR, without VAT. If the value field is missing, the framework value is used instead. (see explanation in Annex I.). [ADDED]
VALUE_EURO_FIN_2	Generally the same value as VALUE_EURO_FIN_1, but – if available – overwritten by human-made estimates of values for large value contracts which seemed to be incorrect. ¹³ These estimates are indicative and the Commission holds no responsibility for their correctness and usage. [ADDED]
B_OPTIONS	"Options"
B_RENEWALS	"This contract is subject to renewal"
DURATION	"Duration of the contract, framework agreement or dynamic purchasing system" in months (see explanation in Annex II).
CONTRACT_START	"Duration of the contract or time limit for completion"; "Starting"
CONTRACT_COMPLETION	"Duration of the contract or time limit for completion"; "Completion"
PROCEDURE	Type of procedure. The values are the following: ACN "accelerated negotiated " ARC "accelerated restricted" AWP "award without prior publication of a contract notice" COD "competitive dialogue" NOC/NOP "negotiated without a call for competition"

¹³ As explained in the presentations above, typos in large value contracts can severely bias aggregate statistics even at national level. For this reason, the value of some large value contracts has been manually corrected throughout the years, e.g. on the basis on the information available in the notice description, contacting the buyer, or searching online resources.

	NEC/NEG “negotiated with a call for competition” OPE “open” RES “restricted”
ENV_OPERATORS	"Envisaged number of operators"
ENV_MIN_OPERATORS	"Envisaged minimum number"
ENV_MAX_OPERATORS	"and (if applicable) maximum number"
CRIT_CODE	Award criteria. The values are the following: L “Lowest price” M “Most economically advantageous tender”
CRIT_CRITERIA	Information on award criteria. The field is an unstructured text field.
CRIT_WEIGHTS	Information on award criteria weighing. The field is unstructured text.
B_ELECTRONIC_AUCTION	"An electronic auction has been used"
DT_APPLICATIONS⁶	"Time limit for receipt of tenders or requests to participate"
B_LANGUAGE_ANY_EC	"Language(s) in which tenders or requests to participate may be drawn up - Any EU official language"
ADMIN_LANGUAGES_TENDER	"Language(s) in which tenders or requests to participate may be drawn up - Official EU language(s):"
ADMIN_OTHER_LANGUAGES_TENDER	"Language(s) in which tenders or requests to participate may be drawn up – Other:"
B_RECURRENT PROCUREMENT	"This is a recurrent procurement"
B_EU_FUNDS	"The contract is related to a project and / or programme financed by European Union funds"

**ANNEX I – CALCULATION OF VALUE_EURO_FIN_1
(AND AWARD_VALUE_EURO_FIN_1)**

(Note: all values below are taken in EUR and without VAT.¹⁴)

1. We take the sum of awards, which sums up:
 - 1.1. the total final value of the award (V.4)¹⁵,
 - 1.2. if a value of a given award is not available, then the value of the lowest offer (V.4),
 - 1.3. if neither of these is available, then the highest offer (V.4),
 - 1.4. if the above is missing,
 - A) but the section “Official name” in section V.2.3. is not empty (as this may indicate that no winner was chosen for this award), the “initial estimated value of the award” (V.4) is used instead.
 - B) and “Official name” in section V.2.3. is also empty, this value is treated as 0 for the calculation of the sum.
2. If the above is not available, or the notice is a framework agreement or a dynamic purchasing system and the sum of awards above is higher than value in the Object of the Contract (II.2.1)¹⁶, or the sum of awards – including multiplication by number of months or years – is the same as the Object of the Contract value, or there are two or more award values which are exactly the same as the Object of the Contract value¹⁷, we take the Object of the Contract value of the notice:
 - 2.1. The value of the contract (II.2.1),
 - 2.2. if it is not available, then the value of the lowest offer (II.2.1),
 - 2.3. if neither of these is available, then highest offer (II.2.1).
3. If the above is not available, the CAN has at least one non-empty “Official name” in section V.2.3., and all of the CNs in the “previous publication” (IV.2.1) of this CAN are followed only by this one “CAN”, then the best value for the CN¹⁸ is taken, being:
 - 3.1. The first existing value (estimated, minimal, maximal) in “Estimated value of the contract notice” (II.2.1)
 - 3.2. if none of these values are available, the first existing value (estimated, minimal, maximal) “Estimated total value of purchases for the entire duration of the framework agreement” (section II.1.4) in the CN is taken.

¹⁴ If information is missing on whether a value includes VAT or not, the information is taken from other fields in the same form (i.e. II.2.1 or V.4). If all fields are missing, we assume that VAT is excluded.

¹⁵ If annual or monthly values are given (see bottom of field V.4), they are ignored (unless they are the same as the object of the contract value, see point 2). This approach has been chosen because while the forms clearly say that the number of months/years should be given only when a monthly/annual value was submitted, in reality it seems that users tend to submit the duration of their contract into this field regardless of whether the value was monthly/yearly.

¹⁶ This condition is included because framework agreements and dynamic purchasing systems may have several contract awards for one lot, in which case summing up the contract awards overestimates the value. The second part of the condition is added to cover cases when a CAN is used to report on new contracts awarded *within* an already existing framework agreement and to keep the estimate conservative.

¹⁷ This condition may indicate that a notice value was mistaken for an award value and included multiple times.

¹⁸ Or a periodic information notice (SF4) used as a call for competition.

When there were multiple CNs, then the value of the lowest one is taken¹⁹.

Reminder: As discussed in point 1.2, the quality of (value) data submitted by contracting authorities is often low. In most cases, the rules listed above are not sufficient for relying on the values of the notices without further checking their reliability.

ANNEX II – CALCULATION OF DURATION

1. Duration in months (CN II.3),
2. If not available, then the duration in days divided by the average length of the month (30.4) (CN II.3).
3. If not available, then the period between the day of starting and day of completion of the contract divided by 30.4 (CN II.3).
4. If not available, then the duration of the framework agreement (CN II.1.4) in months.
5. If not available, then the duration of the framework agreement (CN II.1.4) in years multiplied by the number of months (12).
6. If not available, then the latest date of completion of a lot minus the earliest day of starting of a lot lots, divided by 30.4 (CN Annex B, 4)).

The final value is rounded to two decimal places.

ANNEX III – OVERVIEW OF FILE SIZES

The table below allows checking whether the files were downloaded correctly.

File name	Size (KB)
TED_CAN_2006.csv	106,789
TED_CAN_2007.csv	139,152
TED_CAN_2008.csv	161,543
TED_CAN_2009.csv	179,871
TED_CAN_2010.csv	212,452
TED_CAN_2011.csv	230,763
TED_CAN_2012.csv	244,804
TED_CAN_2013.csv	248,008

¹⁹ Multiple CNs are caused most often by a buyer accidentally uploading two versions of the same notice. Thus, the sum of all CNs is not an appropriate estimate. The lowest value is taken as a conservative estimate.

TED_CAN_2014.csv	261,228
TED_CAN_2015.csv	274,312
TED_CAN_2009_2015.csv	1,651,430
TED_CN_2006.csv	50,333
TED_CN_2007.csv	54,708
TED_CN_2008.csv	58,599
TED_CN_2009.csv	60,303
TED_CN_2010.csv	63,825
TED_CN_2011.csv	66,566
TED_CN_2012.csv	66,975
TED_CN_2013.csv	69,833
TED_CN_2014.csv	70,030
TED_CN_2015.csv	72,420
TED_CN_2009_2015.csv	469,946

ANNEX IV – VERSION HISTORY

Updates in version 2.2 (2016-09-15)

- Correction of a technical error because of which the "fra_agreement" columns were empty for contract notices.
- Addition of a new column "fra_estimated".
- Addition of new columns "b_fra_single_operator", "fra_number_operators, fra_number_max_operators" for contract notices.
- "b_fra_agreement" for contract notices is now marked as "Y" also when a value is present in "b_fra_single_operator".
- Minor change in the calculation of "VALUE_EURO_FIN_1": when taking the lower of the values (e.g. for "lowest offer"), it now takes the objectively smaller one, not the one which was entered by the contracting authority in the "smaller value" field.
- Minor change in the calculation of "VALUE_EURO_FIN_1": when looking for values in contract notices, periodic information notices (SF4) used as a call for competition are also taken into consideration.
- Addition of several manual corrections for "VALUE_EURO_FIN_2" for France in 2013.
- Ensuring that the column names "Corrections", "Admin_languages_tender", and "Admin_other_languages_tender" are consistently used in all exports.

Updates in version 2.1 (2016-07-01)

- Correction of a technical error on the basis of which notices towards the end of a given year had a missing value for the “VALUE_EURO_FIN_1” and “VALUE_EURO_FIN_2” variables.
- Correction of a technical error where notices which were cancelled were included twice in the export – once marked as cancelled, once as not cancelled. Please note that cancellation is reliably available only for notices from 2011 onwards.
- Addition of a new condition in the methodology for “VALUE_EURO_FIN_1” and “VALUE_EURO_FIN_2” for frameworks and dynamic purchasing systems and of explicit assumptions on whether values include VAT or not (see Annex I).
- Addition of manual corrections for "VALUE_EURO_FIN_2" for 2015.
- Addition of a new column “Number of corrections / additional information”
- Addition of a new source of data for “Duration of contract” in contract notices, see Annex 2.
- Addition of number of lots for contract award notices. Available only since the end of 2009.
- Addition of notices published by EU institutions. While these notices are generally covered by the financial regulation of the EU, not by the procurement directives, they use the same standard forms. Furthermore, the category of “EU institution/agency of international organisation” has been split into two: “EU institution/agency” and “other international organisation”.
- Various minor updates in the documentation, including the addition of a version history and a list of file sizes to allow checking whether the files were correctly downloaded.
- Value_euro_fin_1_1 was renamed to award_value_euro_fin_1 in the exports, as used in the documentation.

Updates in Version 2.0 (2016-04-12)

- The export has been divided into files per year and type of notice.
- Contract notices have been added to the export.