

REPORT Open Access TU Delft 2020

Date: 20-4-2021

TU Delft Library - Research Support / Team Analytics

This document reports on the results of the analysis of the Open Access (OA) figures for 2020 for TU Delft.

It consists of three parts. In the first part, the main results are reported. Next, an explanation on the use and content of the accompanying Excel report is given. Finally, the methodology and steps of the analysis are described.

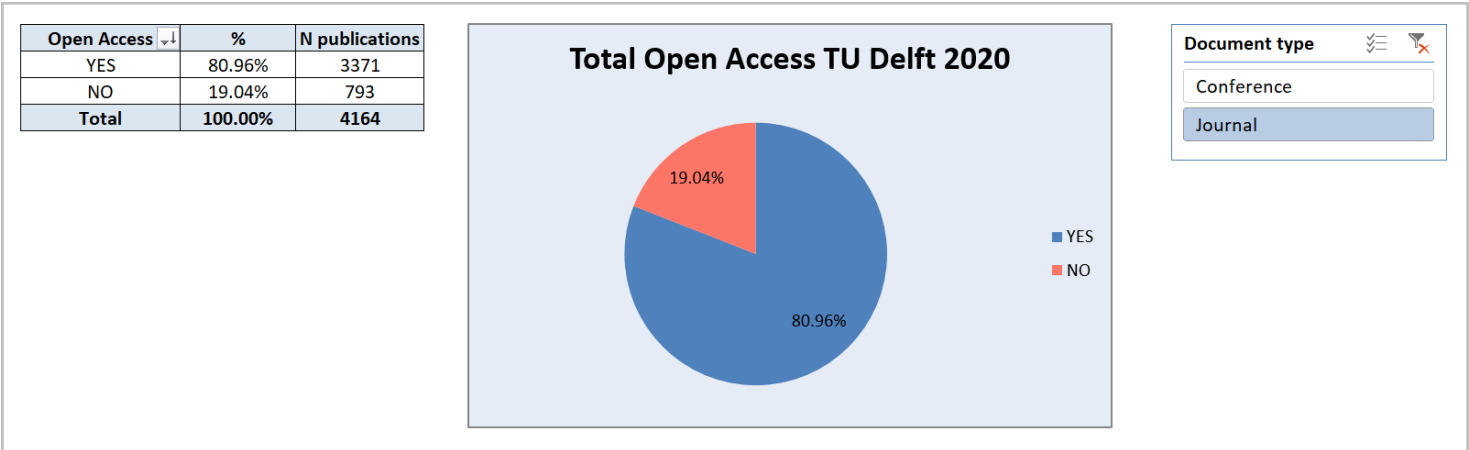
1 MAIN RESULTS

In this chapter the main results are reported.

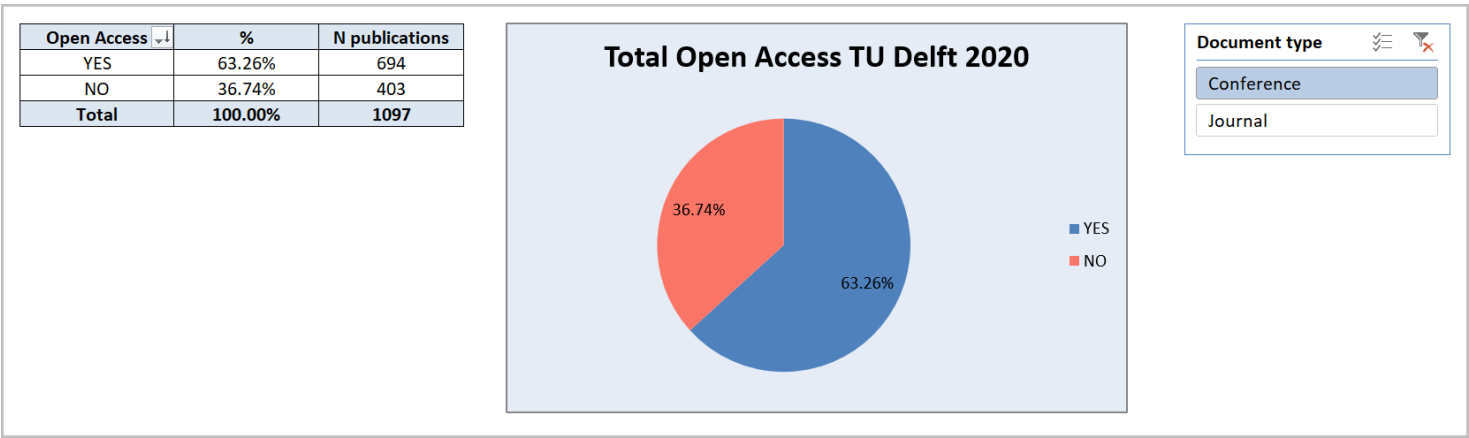
It should be noted that the figures reported here are based on an export from Pure on April 1st, 2021 and that publications have been checked for their Open Access status using several sources and specific criteria (see Chapter 3: methodology).

Some publications that were found to be non-Open Access at the time of this analysis still will become Open Access later on, e.g. after an embargo date has expired. And publications that had neither a valid ISSN nor a valid DOI might end up being classified as non-Open Access even though they actually could be Open Access. The figures and percentages presented in this report should therefore be considered as the minimum Open Access for TU Delft for 2020.

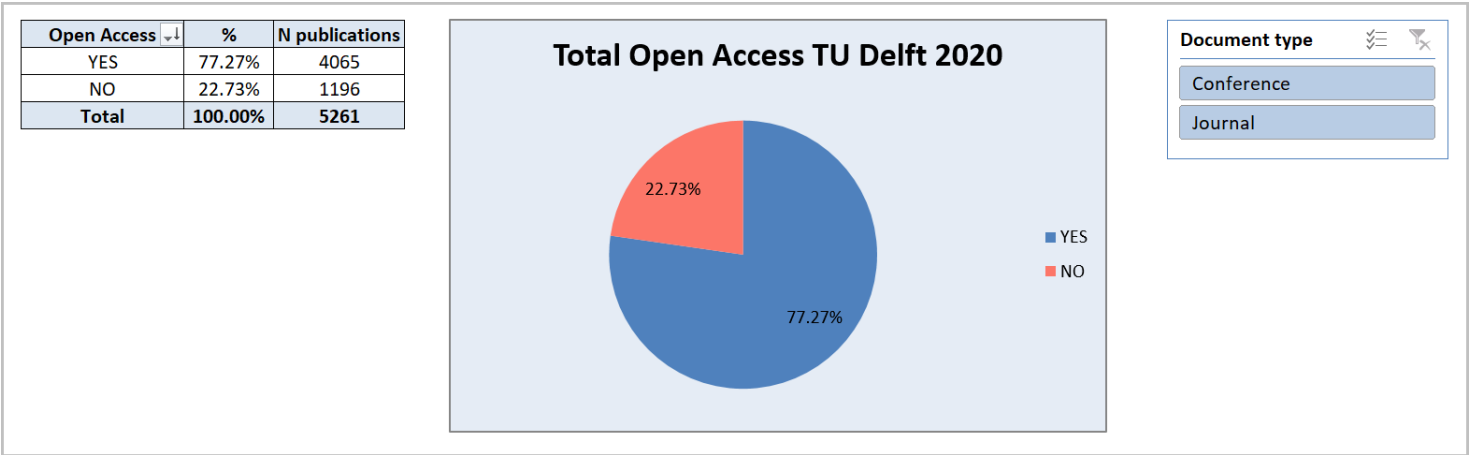
1.1 OA TU Delft Total: Journal articles



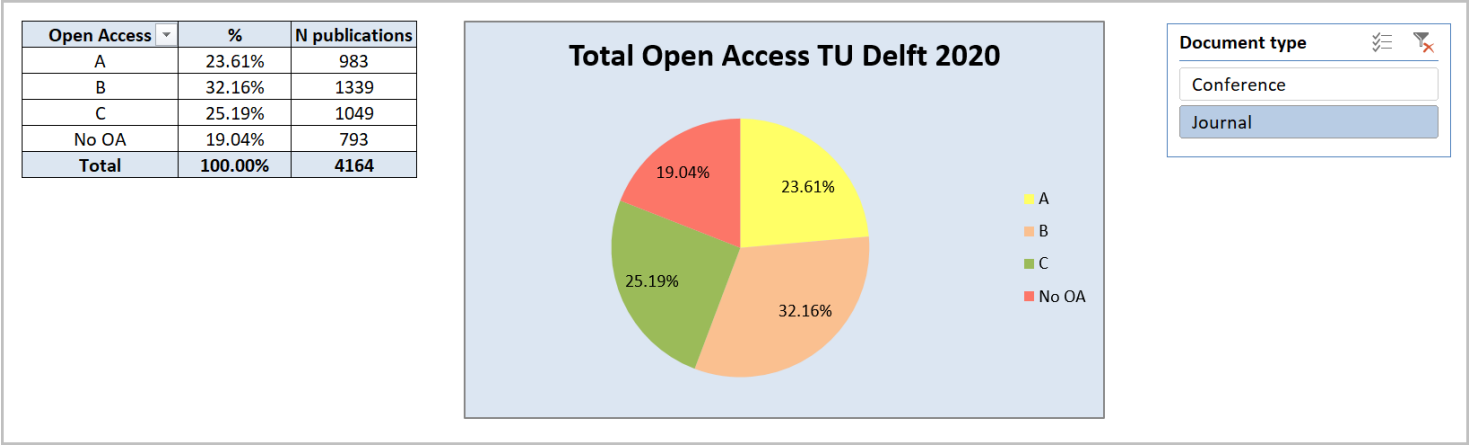
1.2 OA TU Delft Total: Conference proceedings



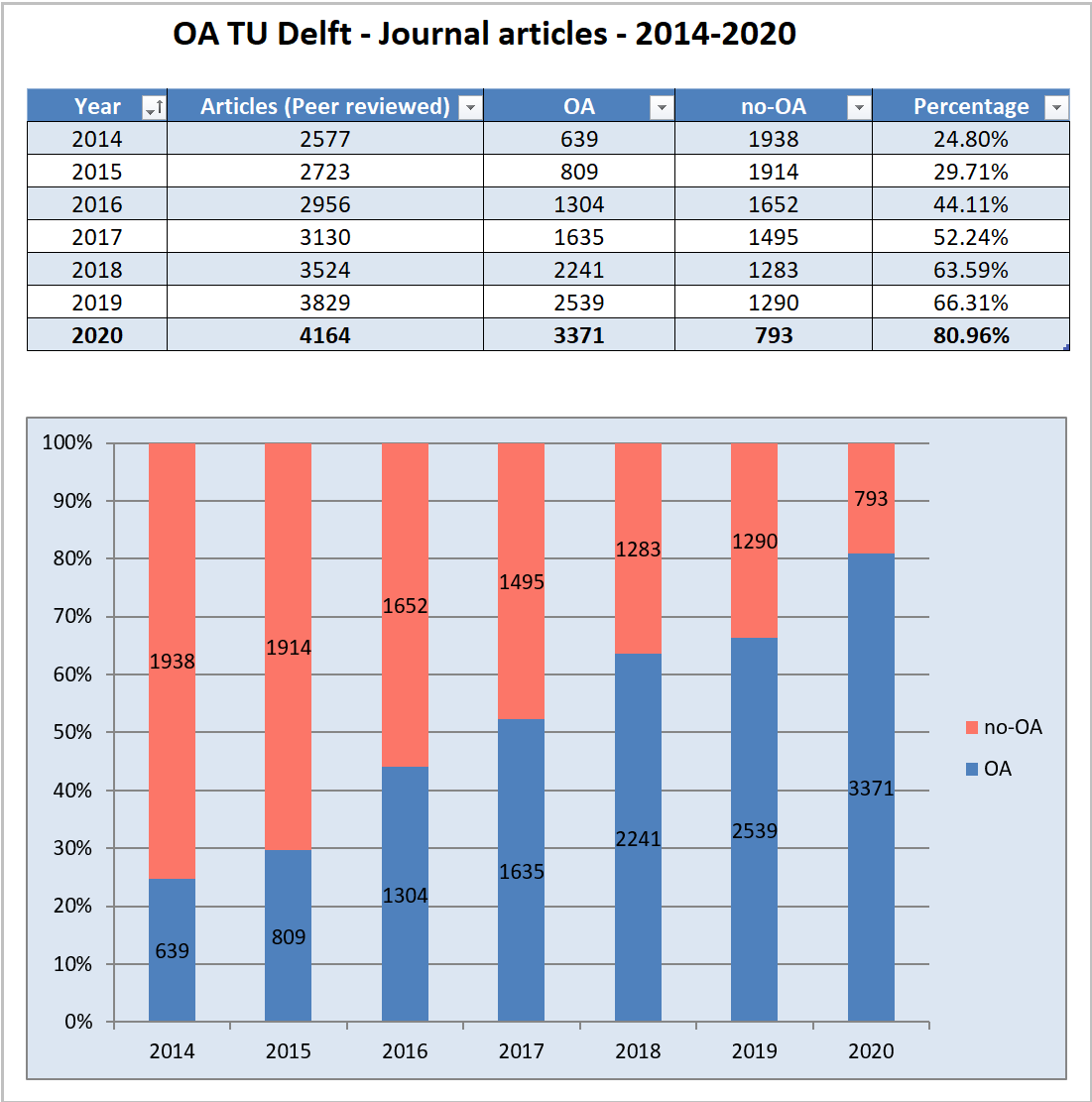
1.3 OA TU Delft Total: Journal articles AND Conference proceedings



1.4 OA TU Delft VSNU Categories Total: **Journal articles**



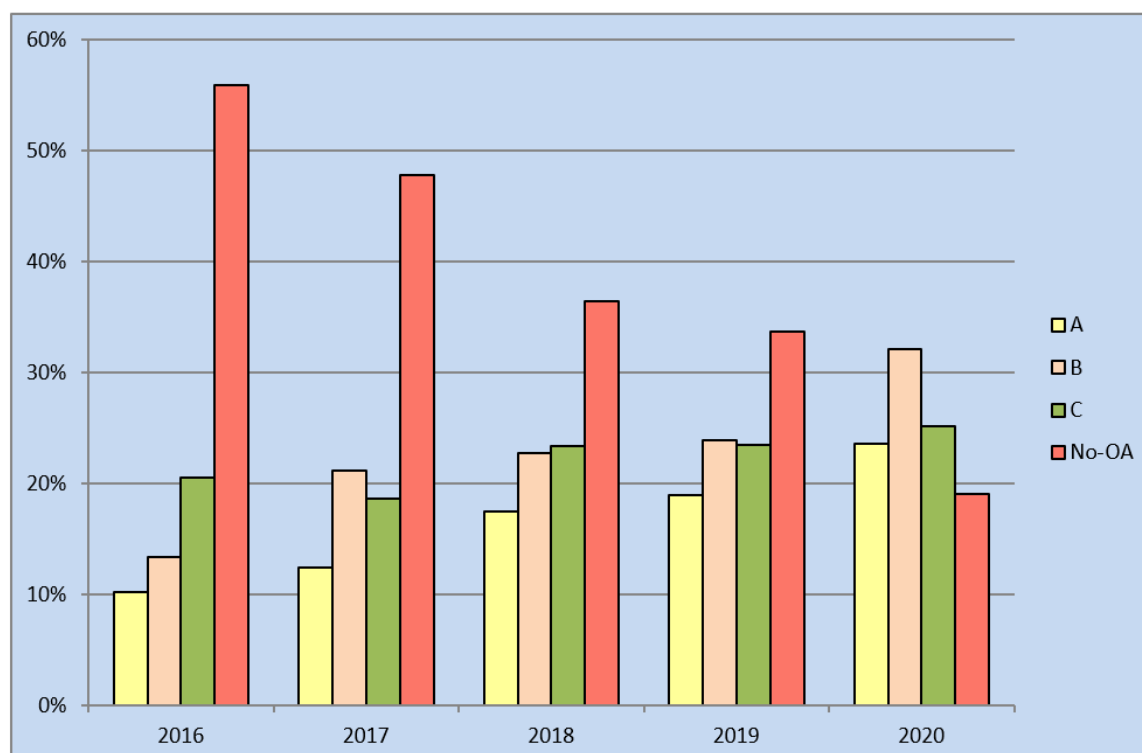
1.5 OA TU Delft **Journal articles 2014-2020**



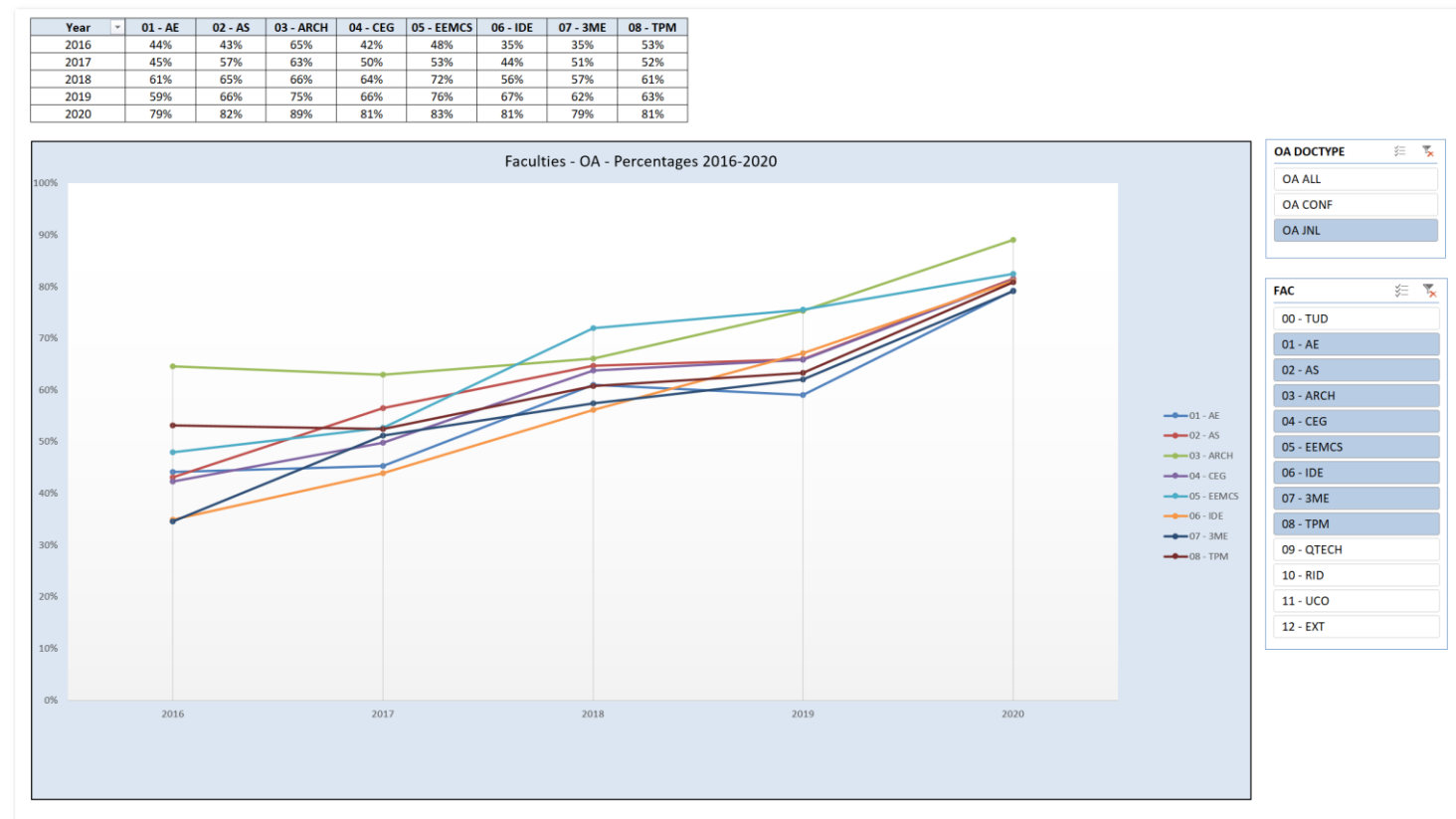
OA TU Delft - Journal articles - 2016-2020 - VSNU Categories

Year	A	B	C	No-OA	Total
2016	302	395	607	1652	2956
2017	389	662	584	1495	3130
2018	616	800	825	1283	3524
2019	726	916	897	1290	3829
2020	983	1339	1049	793	4164

Year	A	B	C	No-OA	Total
2016	10%	13%	21%	56%	2956
2017	12%	21%	19%	48%	3130
2018	17%	23%	23%	36%	3524
2019	19%	24%	23%	34%	3829
2020	24%	32%	25%	19%	4164



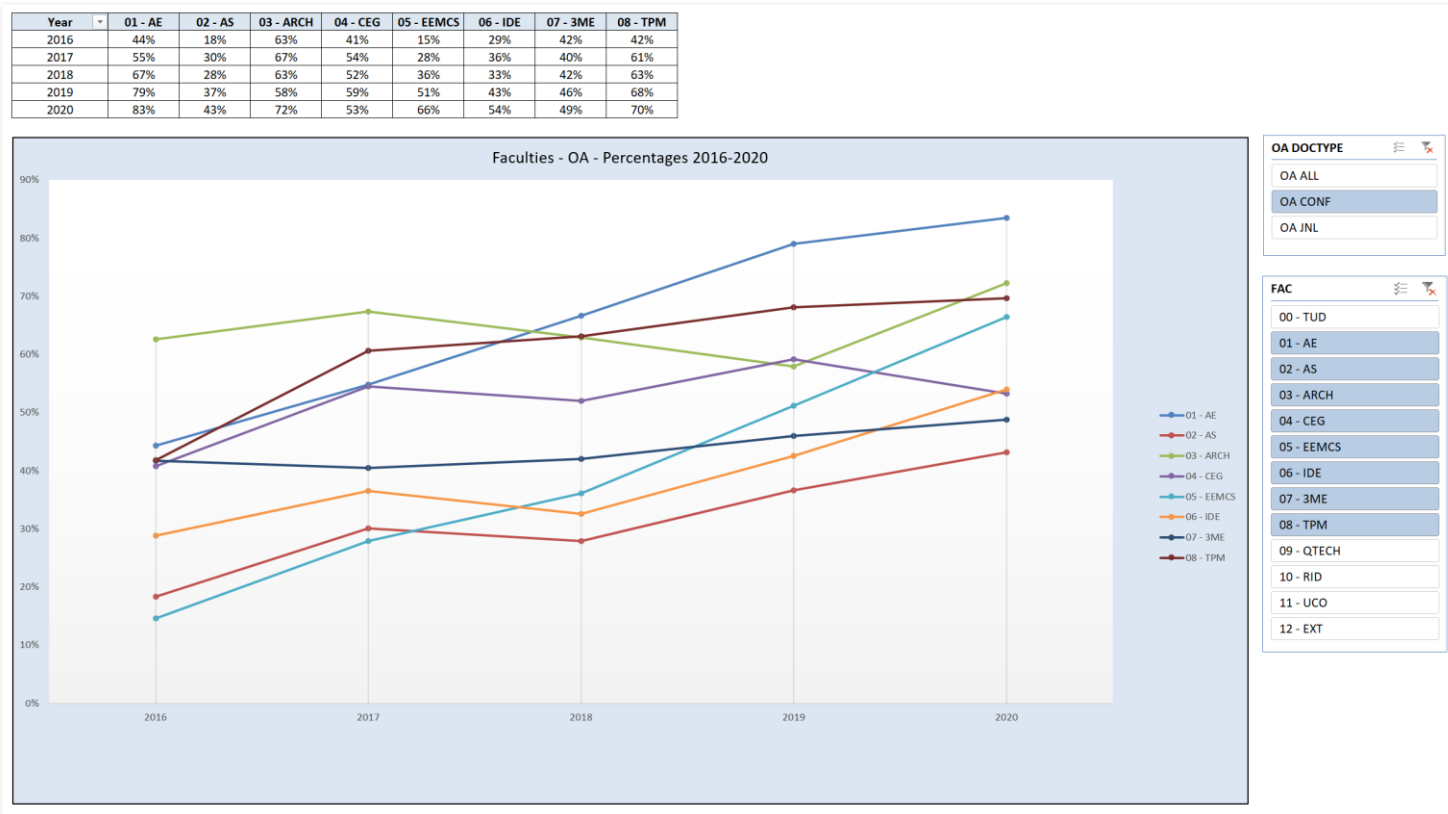
1.7.1 OA Faculties: Journal articles - 2016-2020 - Percentages OA



1.7.2 OA Faculties: Journal articles - 2020 - Percentages and number of publications OA

YEAR	OA DOCTYPE	FAC	A %	B %	C %	No OA%	OA Total %	Total %	A	B	C	No OA	OA Total	Total
2020	OA JNL	00 - TUD	23.61%	32.16%	25.19%	19.04%	80.96%	100.00%	983	1339	1049	793	3371	4164
2020	OA JNL	01 - AE	17.87%	30.93%	30.40%	20.80%	79.20%	100.00%	67	116	114	78	297	375
2020	OA JNL	02 - AS	20.78%	39.42%	21.40%	18.40%	81.60%	100.00%	166	315	171	147	652	799
2020	OA JNL	03 - ARCH	35.37%	26.37%	27.33%	10.93%	89.07%	100.00%	110	82	85	34	277	311
2020	OA JNL	04 - CEG	27.10%	35.40%	18.88%	18.62%	81.38%	100.00%	310	405	216	213	931	1144
2020	OA JNL	05 - EEMCS	21.76%	20.88%	39.85%	17.50%	82.50%	100.00%	148	142	271	119	561	680
2020	OA JNL	06 - IDE	31.47%	23.08%	26.57%	18.88%	81.12%	100.00%	45	33	38	27	116	143
2020	OA JNL	07 - 3ME	19.82%	37.65%	21.65%	20.88%	79.12%	100.00%	130	247	142	137	519	656
2020	OA JNL	08 - TPM	18.38%	42.16%	20.27%	19.19%	80.81%	100.00%	68	156	75	71	299	370
2020	OA JNL	09 - QTECH	25.53%	13.83%	52.13%	8.51%	91.49%	100.00%	24	13	49	8	86	94
2020	OA JNL	10 - RID	12.12%	42.42%	27.27%	18.18%	81.82%	100.00%	4	14	9	6	27	33
2020	OA JNL	11 - UCO	36.00%	36.00%	20.00%	8.00%	92.00%	100.00%	9	9	5	2	23	25
2020	OA JNL	12 - EXT	16.67%	50.00%	33.33%	0.00%	100.00%	100.00%	1	3	2	0	6	6

1.8.1 OA Faculties: Conference proceedings - 2016-2020 - Percentages OA

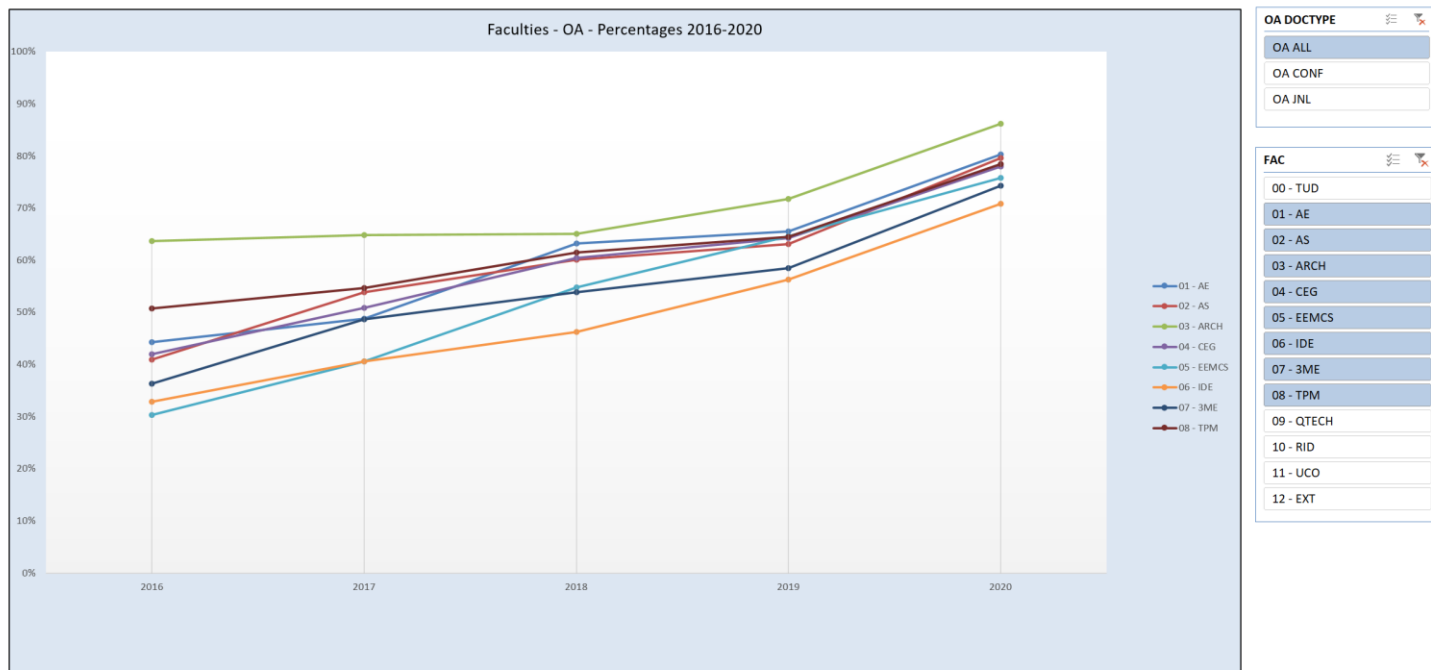


1.8.2 OA Faculties: Conference proceedings - 2020 - Percentages and number of publications OA

YEAR	OA DOCTYPE	FAC	A %	B %	C %	No OA%	OA Total %	Total %	A	B	C	No OA	OA Total	Total
2020	OA CONF	00 - TUD	0.55%	1.19%	61.53%	36.74%	63.26%	100.00%	6	13	675	403	694	1097
2020	OA CONF	01 - AE	0.00%	1.65%	81.82%	16.53%	83.47%	100.00%	0	2	99	20	101	121
2020	OA CONF	02 - AS	0.00%	0.00%	43.18%	56.82%	43.18%	100.00%	0	0	19	25	19	44
2020	OA CONF	03 - ARCH	0.00%	0.00%	72.31%	27.69%	72.31%	100.00%	0	0	47	18	47	65
2020	OA CONF	04 - CEG	2.56%	0.00%	50.64%	46.79%	53.21%	100.00%	4	0	79	73	83	156
2020	OA CONF	05 - EEMCS	0.21%	1.03%	65.23%	33.54%	66.46%	100.00%	1	5	317	163	323	486
2020	OA CONF	06 - IDE	0.00%	4.60%	49.43%	45.98%	54.02%	100.00%	0	4	43	40	47	87
2020	OA CONF	07 - 3ME	0.80%	0.00%	48.00%	51.20%	48.80%	100.00%	1	0	60	64	61	125
2020	OA CONF	08 - TPM	0.00%	2.02%	67.68%	30.30%	69.70%	100.00%	0	2	67	30	69	99
2020	OA CONF	09 - QTECH	0.00%	5.88%	70.59%	23.53%	76.47%	100.00%	0	1	12	4	13	17
2020	OA CONF	10 - RID	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0	0	0	0	0	0
2020	OA CONF	11 - UCO	0.00%	0.00%	75.00%	25.00%	75.00%	100.00%	0	0	6	2	6	8
2020	OA CONF	12 - EXT	0.00%	0.00%	100.00%	0.00%	100.00%	100.00%	0	0	1	0	1	1

1.9.1 OA Faculties: Journal articles AND Conference proceedings - 2016-2020 - Percentages OA

Year	01 - AE	02 - AS	03 - ARCH	04 - CEG	05 - EEMCS	06 - IDE	07 - 3ME	08 - TPM
2016	44%	41%	64%	42%	30%	33%	36%	51%
2017	49%	54%	65%	51%	41%	41%	49%	55%
2018	63%	60%	65%	60%	55%	46%	54%	61%
2019	65%	63%	72%	64%	65%	56%	58%	65%
2020	80%	80%	86%	78%	76%	71%	74%	78%



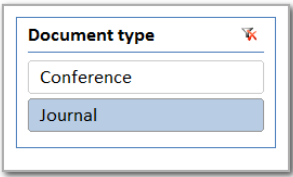
1.9.2 OA Faculties: Journal articles AND Conference proceedings - 2020 - Percentages and number of publications OA

YEAR	OA DOCTYPE	FAC	A %	B %	C %	No OA%	OA Total %	Total %	A	B	C	No OA	OA Total	Total
2020	OA ALL	01 - AE	13.51%	23.79%	42.94%	19.76%	80.24%	100.00%	67	118	213	98	398	496
2020	OA ALL	02 - AS	19.69%	37.37%	22.54%	20.40%	79.60%	100.00%	166	315	190	172	671	843
2020	OA ALL	03 - ARCH	29.26%	21.81%	35.11%	13.83%	86.17%	100.00%	110	82	132	52	324	376
2020	OA ALL	04 - CEG	24.15%	31.15%	22.69%	22.00%	78.00%	100.00%	314	405	295	286	1014	1300
2020	OA ALL	05 - EEMCS	12.78%	12.61%	50.43%	24.19%	75.81%	100.00%	149	147	588	282	884	1166
2020	OA ALL	06 - IDE	19.57%	16.09%	35.22%	29.13%	70.87%	100.00%	45	37	81	67	163	230
2020	OA ALL	07 - 3ME	16.77%	31.63%	25.86%	25.74%	74.26%	100.00%	131	247	202	201	580	781
2020	OA ALL	08 - TPM	14.50%	33.69%	30.28%	21.54%	78.46%	100.00%	68	158	142	101	368	469
2020	OA ALL	09 - QTECH	21.62%	12.61%	54.95%	10.81%	89.19%	100.00%	24	14	61	12	99	111
2020	OA ALL	10 - RID	12.12%	42.42%	27.27%	18.18%	81.82%	100.00%	4	14	9	6	27	33
2020	OA ALL	11 - UCO	27.27%	27.27%	33.33%	12.12%	87.88%	100.00%	9	9	11	4	29	33
2020	OA ALL	12 - EXT	14.29%	42.86%	42.86%	0.00%	100.00%	100.00%	1	3	3	0	7	7
2020	OA ALL	00 - TUD	18.80%	25.70%	32.77%	22.73%	77.27%	100.00%	989	1352	1724	1196	4065	5261

2 Explanation on use and content of the Excel report

2.1 General information

A number of sheets contain reports that have been filtered using so called slicers. Example:

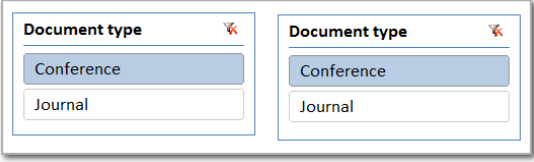
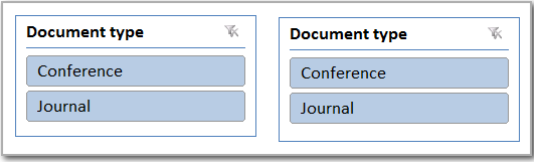
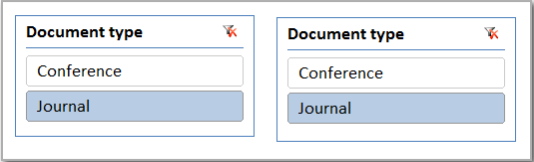


Default filtering is on Journals. In all results sheets you can use these slicers to make another selection. For example, in sheet **1 - OA TU Delft Total** you can either select Conference proceedings, Journals, or all publications. Click on Conference or Journal to make a choice or hold CTRL and click on both items to select Journal as well as Conference.

Important!

Slicers are always shown twice. This in order to make it possible to simultaneously show numbers and percentages. When you toggle slicers make sure you **ALWAYS USE BOTH** equally named slicers and that your filter selections for these slicers are exactly the same!

Examples:



In a number of results sheets you will also find (filtered) tabulated OA results for all faculties, including VSNU OA Categories:

OA JOURNAL						
FAC	A	B	C	No OA	OA Tot	Total
01 - AE	67	116	114	78	297	375
02 - AS	166	315	171	147	652	799
03 - ARCH				34	277	311
04 - CEG				213	931	1144
05 - EEMCS				119	561	680
06 - IDE	45	33	38	27	116	143
07 - 3ME	130	247	142	137	519	656
08 - TPM	68	156	75	71	299	370
09 - QTECH	24	13	49	8	86	94
10 - RID	4	14	9	6	27	33
11 - UCO	9	9	5	2	23	25
12 - EXT	1	3	2	0	6	6

2.1 Description of sheets

Sheet 0 - Output Pure TU Delft 2020

Pure export data: peer reviewed journal articles and peer reviewed conference proceedings.

This sheet includes all collected (matching) information and results and is the basis for OA reporting in the subsequent sheets.

Sheet 0 - Field descriptions

Column(s)	Name	Explanation
A	empty	Intentionally blank
B	Match_with_custom_entity	Hidden - contains formulas for custom entity reports
C	Custom_entity_OA_Y/N	Hidden - contains formulas for custom entity reports
D	Source	Source identifier: source name, publication year and serial number, e.g. Pure_2020_0001
E	UUID	Pure UUID (unique record identifier)
F	TUD-ALL	Is a TU Delft publication (always YES)
G-R	01 - AE, 02 - AS etc.	Publication has at least one author from this faculty (YES/NO)
S	CAT ALL	Identified VSNU Category (A, B, C or No OA)
T	OA	Identified as Open Access (YES/NO)
U	Document type	Document type classification (Journal or Conference)
V	Document type (Pure)	Original Pure document type classification
W	1 - DOAJ - A	Identified as OA, VSNU Category A, using the Directory of Open Access (DOAJ) (YES/NO)
X	2 - Adm Hybrid - B	Identified as TU Delft OA, VSNU Category B using the Dutch national administration of OA publications in subscription journals (YES/NO)
Y	3 - UPW - B	Identified as OA, VSNU Category B, using the Unpaywall (UPW) service (YES/NO)
Z	4 - OA Fund TU Delft	Identified as OA, VSNU Category B: publications for which the Article Processing Charges (APCs) have been paid using the TU Delft Open Access Fund
AA	5 - UPW - C	Identified as OA, VSNU Category C, using the Unpaywall (UPW) service (YES/NO)
AB	6 - Repository - C	Identified as OA, VSNU Category C, by matching repository publications with the set of Pure publications (YES/NO)
AC	7 - Taverne - no embargo	Identified as OA, VSNU Category C: in accordance with the Taverne Amendment, and with the explicit consent of an author, a publishers' version has been made available through the TU Delft Repository: on 1-5-2021 the embargo period of 6 months has expired (YES/NO)
AD	8 - OA Pure - C	Identified as OA, VSNU Category C, after manual check on remaining publications having Pure OA status Open but previously NOT verified as OA
AE	Romeo colour	Hidden - unvalidatable content - Sherpa Romeo colour for identified journals: gave information on the archiving policy of a publisher, e.g. if a peer-reviewed, post-print version can be made available in a repository. Note: Romeo colours have been retired in 2020
AF	Surf Admin Publisher	Publisher names of publications from the Dutch national administration of OA publications in subscription journals
AG	ISSN ALL	Cleaned list of ISSNs, including additional ISSNs from ISSN.org (ISSN-L)
AH	ISSN-L	ISSN-L: the preferred ISSN for a publication according to ISSN.org
AI	Journal title	Original journal title from Pure
AJ	OA status Pure	Open Access status as found in Pure on 1-4-2021
AK	DOI - clean	Cleaned and/or corrected DOIs
AL	DOI	Original DOIs from Pure
AM	Title	Main title from Pure
AN	Subtitle	Subtitle from Pure
AO	Reference (APA)	Reference in APA format: contains basic bibliographic data of a Pure publication
AP	Managing organisational unit	Name of managing organisational unit in Pure

AQ	Org units - Ids (Au)	Author organisation IDs. This Information has been used to identify the different faculties
AR	Potential OA	Hidden - unvalidatable content - Romeo colours have been retired in 2020. Identification based on the SHERPA/RoMEO colour. If Green or Blue then a publication could have actually been deposited in a trusted repository and thus could have been at least OA VSNU Category C. This column contains the value YES if a publication is identified as actually OA or when a publication might have been OA (identified colour Green or Blue)
AS	IS OA UPW	Is Open Access according to Unpaywall (UPW) (YES/NO)
AT	UPW OA type	Open Access colour derived from data received from Unpaywall (UPW)
AU	TU Delft OA Fund	Publications for which the Article Processing Charges (APCs) have been paid using the TU Delft Open Access Fund
AV	Taverne no embargo on 1-5-2021	In accordance with the Taverne Amendment, and with the explicit consent of an author, a publishers' version has been made available through the TU Delft Repository: on 1-5-2021 the embargo period of 6 months has expired (YES/NO)
AW	Taverne	In accordance with the Taverne Amendment, and with the explicit consent of an author, a publishers' version has been made available through the TU Delft Repository
AX	Taverne Embargo Date	Taverne Embargo Date as found in Pure
AY	Surf OA Admin	Open Access publications in subscription journals that have been made Open Access as a results of agreements of Dutch university libraries with publishers. Information was collected using the Surf administration
AZ	UPW Journal Name	Journal name as identified using Unpaywall (UPW)
BA	Manual check is OA	Final manual check on OA status of publications with Pure status OA = Open that were still not assigned to an Open Access category A, B, or C at the end of the previous "batch" matching steps
BB	DOAJ Title match only	A publication was identified as Gold (Category A) after matching and verifying journal titles from Unpaywall and Pure with the 'frozen' DOAJ list of 31-12-2020, but was not previously identified using ISSNs for matching. Noet: no additional publications found for the 2020 analysis.
BC	Multiple DOIs	A record has multiple DOIs. Note: this is only the case for a limited number of records. In most cases the first DOI is kept for further matching and all other DOIs discarded
BD	Duplicate DOIs	Multiple records have the same DOI. Note: this is only the case for a limited number of records and has been disregarded in this analysis

0 - FAC data 2016-2020

Data table with Open Access percentages and number of publications for all faculties for the period 2016-2020.

Sheet 1 - OA TU Delft Total

Total Open Access for TU Delft 2020.

Sheet 2 - OA TU Delft Total VSNU Cat

Total Open Access for TU Delft 2020 specified according to VSNU Categories (A, B, C, or No OA).

Sheet 3 - OA Journal art. 2014-2020

Open access statistics and trend for the period 2014-2020 for TU Delft.

Sheet 4 - OA VSNU CAT TUD 2016-2020

Open access statistics and trend for the period 2016-2020* for TU Delft specified according to VSNU Categories (A, B, C, or No OA).

* No prior data is available: the VSNU Framework formalizing guidelines on category classification was made public in April 2017, and used for the first time for the analysis of publications from 2016.

Sheet 5 - FAC OA % 2016-2020

Open Access percentages for the period 2016-2020 for all faculties.

Sheet 6 - FAC OA N pub 2016-2020

Number of Open Access publications for the period 2016-2020 for all faculties.

Sheet 7 - FAC No OA % 2016-2020

Non-Open Access percentages for the period 2016-2020 for all faculties.

Sheet 8 - FAC No OA N pub 2016-2020

Number of Non-Open Access publications for the period 2016-2020 for all faculties.

Sheet 9 - FAC Gold % 2016-2020

Gold Open Access percentages for the period 2016-2020 for all faculties.

Sheet 10 - FAC Gold N pub 2016-2020

Number of Gold Open Access publications for the period 2016-2020 for all faculties.

Sheet 11 - FAC Hybrid % 2016-2020

Hybrid Open Access percentages for the period 2016-2020 for all faculties.

Sheet 12 - FAC Hybrid N pub 2016-2020

Number of Hybrid Open Access publications for the period 2016-2020 for all faculties.

Sheet 13 - FAC Green % 2016-2020

Green Open Access percentages for the period 2016-2020 for all faculties.

Sheet 14 - FAC Green N pub 2016-2020

Number of Green Open Access publications for the period 2016-2020 for all faculties.

Sheets 01-12 - Faculty name - OA YES-NO

Open Access 2020 figures for a specific faculty.

Sheets 01-12 - Faculty name - OA CAT VSNU

Open Access 2020 figures for a specific faculty specified according to VSNU Categories (A, B, C, or No OA).

Sheet 13 - Paste custom entities

Sheet to enable reporting on OA 2020 figures for custom entities, e.g. a specific TU department. Please refer to the instructions provided in this sheet.

Sheet 13.1 - OA YES-NO Custom entity

Total Open Access for a custom entity, e.g. a specific TU department. Based on the custom input from sheet 13.

Sheet 13.2 - OA VSNU Cat Custom entity

Total Open Access for a custom entity, e.g. a specific TU department, specified according to VSNU Categories (A, B, C, or No OA). Based on the custom input from sheet 13.

3 METHODOLOGY

3.1 INPUT: collection, cleaning and preparation of data and sources

All necessary data and sources were collected and prepared for the analysis. In order to optimize and maximize the identification of OA status of publications all data, especially key fields needed for matching and identification (ISSN, DOI, UUIDs from Pure) were properly checked and cleaned if necessary.

The following sources were used for collecting the necessary information to make it possible to identify TU Delft Open Access publications and classify these according to the April 2017 VSNU Framework Monitoring Open Access.

3.1.1 Publication data from CRIS (Pure)

- Export date 1-4-2021
- Peer reviewed journal articles, publication year 2020 (article, comment/letter to the editor, letter and review article)
- Peer reviewed conference proceedings, publication year 2020 (conference contribution) *
- This dataset also includes publications that have been labeled "Taverne" **

* Only used for internal reporting. VSNU reporting is limited to peer reviewed journal articles.

** The Dutch universities have decided to give open access an extra boost from 2019 by starting a pilot. On the basis of the Taverne Amendment, the publishers' versions of short scientific works can be shared after six months via the university repository if a researcher explicitly has given consent. TU Delft Library shares these publications via the TU Delft Repository. The period of publication after six months applies under the following conditions:

- The publication is funded wholly or partly with Dutch public funds
- The author(s) has/had an employment contract with the TU Delft, which participates in the pilot. Authors can be corresponding- as well as co-authors
- It concerns a short scientific work; this has the length of a scientific article or book chapter in an edited collection.

More information on this initiative can be found at: TU Delft: You Share, we take care! continues:

<https://www.tudelft.nl/en/library/current-topics/libraryfor-researchers/library-for-researchers/publishing-outreach/you-share-we-take-care-continues/>

3.1.2 DOAJ Journal list

The Directory of Access Journals (DOAJ) can be used to determine if a publication is Gold OA. According to the VSNU Framework all universities must use the same 'frozen' version from 31-12-2020.

- Export date: 31-12-2020
- ISSNs were extracted and cleaned
- Additional ISSNs were identified and added using ISSN tables from ISSN.org and the linking ISSNs (ISSN-L) were determined

3.1.3 Surf OA administration: data from publishers on OA (hybrid) publications

As a result of agreements of Dutch university libraries and publishers regarding Open Access an increasing number of publications in subscription journals are being made Open Access. Reports from publishers on these so called hybrid OA (VSNU Category Gold, B) publications are collected nationally. The available cumulative list of DOIs has been used to identify TU Delft (co)authored publications.

- Retrieval date 1-4-2021 and version date: 3-3-2021

3.1.4 TUD OA Fund

This list is exported from the TU Delft Repository. It identifies publications for which the APCs (Article Processing Charges) have been paid through the TU Delft Open Access Fund. These publications are at least classified as Category B (Gold, not DOAJ classified OA/Hybrid):

- Export date: 7-4-2021
- Label OA Fund TU Delft

3.1.5 Institutional Repository list

This list can be used to determine whether a TU Delft publication is at least Green OA:

- Export date: 1-4-2021
- Publication year: 2020
- Visibility: Public - no restriction
- Workflow status: Approved or Validated
- Research output has an association to file
- Open access permission NOT closed, embargoed or restricted

3.1.6 Unpaywall (UPW)

Unpaywall's API (api v2 at <https://api.unpaywall.org/>) was queried using the cleaned DOIs from the Pure publication data (3.1.1). The resulting csv-report was used to identify and classify TU publications. Using a formula created by Bianca Kramer (Utrecht University) we were able to find the following OA evidence for a publication:

- Pure Gold: OA publication in an OA journal (VSNU Category A)
 - Hybrid: OA in a subscription based journal (VSNU Category B)
 - Bronze: accessible on a publisher's journal website, but no identified OA-license
 - Green: available through a trusted repository (VSNU Category C)
 - Closed: not OA (VSNU Category D, in our report: no-OA)
-
- Retrieval date: 8-4-2021

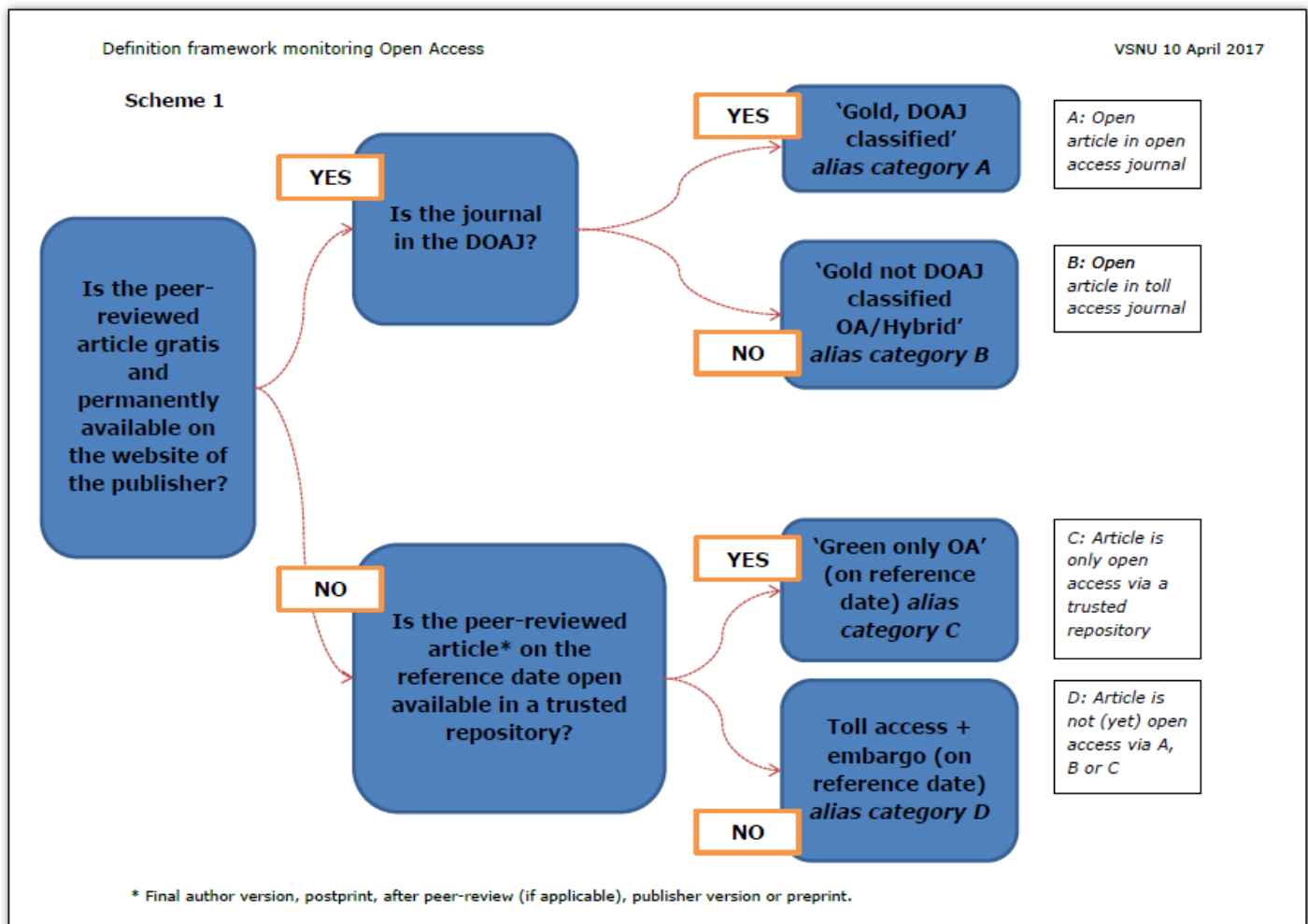
Notes:

In order to comply with the guidelines drawn up in the VSNU Framework we initially only use the UPW Green and Hybrid classifications for our matching: Since Pure Gold is only allowed to be identified using the DOAJ list from 31-12-2020, we performed an additional title match on that list for publications with UPW status Pure Gold. The output from UPW also uncovered additional ISSNs. These were added to the list of already identified ISSNs and subsequently used to match TU Delft publications with the DOAJ journal list.

Bronze publications are not recognized as being sustainable OA and thus have been disregarded for our analysis. The status Closed will already be determined automatically at the end of our analysis and will consist of all publications for which we could find no conclusive OA evidence.

3.2 MATCHING: matching and determining OA status of publications

The final classification of a TU Delft publication is determined using the April 2017 VSNU Framework monitoring OA. The matching and classification follows the scheme below:



In practice matching and classification is done by matching all TU Delft publications from Pure with all other collected sources using the steps and order described in the following table.

Note:

A publication will only be assigned to one VSNU Category: the highest possible category for which we have found evidence!

Step	Source	Match fields	If match is YES: Assigned OA status
1	Directory of Open Access (DOAJ)	ISSN OR Title match DOAJ-Pure	Category A (Gold, DOAJ classified OA)
2	Surf OA administration	DOI	Category B (Gold, not DOAJ classified OA/Hybrid)
3	Unpaywall : Gold/Hybrid status	DOI	Category B (Gold, not DOAJ classified OA/Hybrid)
4	Repository: OA Fund TU Delft	Pure UUID	Category B (Gold, not DOAJ classified OA/Hybrid)
5	Unpaywall: Green status	DOI	Category C (Green only OA)
6	Repository Pure UUID	Pure UUID	Category C (Green only OA)
7	Pure: label Taverne (and no embargo on 1-5-2021)	Pure UUID	Category C (Green only OA)
8	OA status Pure = open*	Open Access status Pure: Open (not A, B, C) manual check	Category C (Green only OA)

* After performing steps 1 through 7 - a limited set of publications with Pure status OA = Open remained unassigned to category A, B, C or non-OA. These were checked manually to determine their specific OA status.