

Corpus des Deutschen Bundesrechts (C-DBR-Source)

ROBUSTNESS CHECKS

Version 2024-10-02



DOI: [10.5281/zenodo.13871897](https://doi.org/10.5281/zenodo.13871897)

| | |
|------------------|---|
| Titel | Source Code des »Corpus des Deutschen Bundesrechts« |
| Abkürzung | C-DBR-Source |
| Autor | Seán Fobbe |
| Version | 2024-10-02 |
| Download | https://doi.org/10.5281/zenodo.13871897 |
| Lizenz | GNU General Public License Version 3 (GPLv3) |

Zitiervorschlag

Seán Fobbe (2024). Source Code des »Corpus des Deutschen Bundesrechts« (C-DBR-Source). Version 2024-10-02. Zenodo. DOI: 10.5281/zenodo.13871897.

Digital Object Identifier (DOI): Concept DOI und Version DOI

Soweit nicht anders angegeben ist die DOI immer eine »Version DOI« und bezieht sich nur auf eine bestimmte Version der Software. Sie verlinkt daher nur Version 2024-10-02. Für das Gesamtkonzept der Software steht eine »Concept DOI« zur Verfügung, die auf der Zenodo-Seite jeder Version unter »Cite all versions?« zu finden ist. Sie lautet 10.5281/zenodo.4072934. Die »Concept DOI« verlinkt immer die aktuellste Version.

GNU General Public License Version 3 (GPLv3)

Copyright — 2024 — Seán Fobbe

This program is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or (at your option) any later version.

This program is distributed in the hope that it will be useful, but WITHOUT ANY WARRANTY; without even the implied warranty of MERCHANTABILITY or FITNESS FOR A PARTICULAR PURPOSE. See the GNU General Public License for more details.

You should have received a copy of the GNU General Public License along with this program. If not, see <https://www.gnu.org/licenses/>.

Disclaimer

Dieser Datensatz ist eine private wissenschaftliche Initiative und steht in keiner Verbindung zu Behörden, Gerichten oder anderen öffentlichen Stellen der Bundesrepublik Deutschland.

Inhaltsverzeichnis

| | | |
|-----------|---|------------|
| 1 | Ergebnisse laden | 5 |
| 2 | Pipeline visualisieren | 6 |
| 3 | Vollständigkeit des Downloads | 10 |
| 3.1 | Überblick | 10 |
| 3.2 | Fehlende XML-Archive | 10 |
| 3.3 | Fehlende PDF-Dateien | 11 |
| 3.4 | Fehlende EPUB-Dateien | 11 |
| 4 | Vollständigkeit der Konvertierung | 12 |
| 4.1 | Überblick | 12 |
| 4.2 | Fehler bei TXT-Konvertierung | 12 |
| 5 | Variablen | 13 |
| 5.1 | Anzahl Variablen | 13 |
| 5.2 | Alle Namen der Variablen | 13 |
| 5.3 | Beispiel-Werte | 16 |
| 6 | Quantitative Variablen | 20 |
| 6.1 | Ausfertigungsdatum | 20 |
| 6.1.1 | Einzelnormen | 20 |
| 6.1.2 | Rechtsakte | 20 |
| 6.1.3 | XML-Metadaten | 20 |
| 6.2 | Ausfertigungsjahr | 20 |
| 6.2.1 | Einzelnormen | 20 |
| 6.2.2 | Rechtsakte | 21 |
| 6.2.3 | XML-Metadaten | 21 |
| 7 | Frequenztabellen erstellen | 22 |
| 7.1 | Liste zu prüfender Variablen | 22 |
| 8 | Frequenztabellen erstellen: Einzelnormen | 23 |
| 9 | Frequenztabellen erstellen: Rechtsakte | 85 |
| 9.1 | Reduzierte Liste zu prüfender Variablen | 85 |
| 9.2 | Frequenztabellen erstellen | 85 |
| 10 | Frequenztabellen erstellen: XML-Metadaten | 94 |
| 10.1 | Liste zu prüfender Variablen | 94 |
| 10.2 | Frequenztabellen erstellen | 94 |
| 11 | Changelog | 104 |
| 11.1 | Version 2024-10-02 | 104 |
| 11.2 | Version 2024-07-04 | 104 |
| 11.3 | Version 2024-04-03 | 104 |
| 11.4 | Version 2024-01-07 | 104 |
| 11.5 | Version 2023-10-03 | 104 |
| 11.6 | Version 2023-07-09 | 104 |

| | |
|---|------------|
| 11.7 Version 2023-04-07 | 104 |
| 11.8 Version 2023-01-05 | 105 |
| 11.9 Version 2022-08-05 | 105 |
| 11.10Version 2022-05-22 | 105 |
| 11.11Version 2022-01-12 | 105 |
| 11.12Version 2021-09-16 | 106 |
| 11.13Version 2021-07-30 | 106 |
| 11.14Version 2021-01-05 | 106 |
| 11.15Version 2020-10-09 | 106 |
| 11.16Version 2020-07-08 | 107 |
| 11.17Version 2020-05-18 | 107 |
| 12 Parameter für strenge Replikationen | 108 |
| Literaturverzeichnis | 110 |

1 Ergebnisse laden

```
tar_load(latexdefs)
tar_load(dt.download)
tar_load(dt.normen.final)
tar_load(dt.normen.meta)
tar_load(dt.rechtsakte.final)
tar_load(dt.rechtsakte.meta)
tar_load(dt.meta)
tar_load(files.pdf)
tar_load(files.txt)
tar_load(files.xmlzip)
tar_load(files.epub)
```

2 Pipeline visualisieren

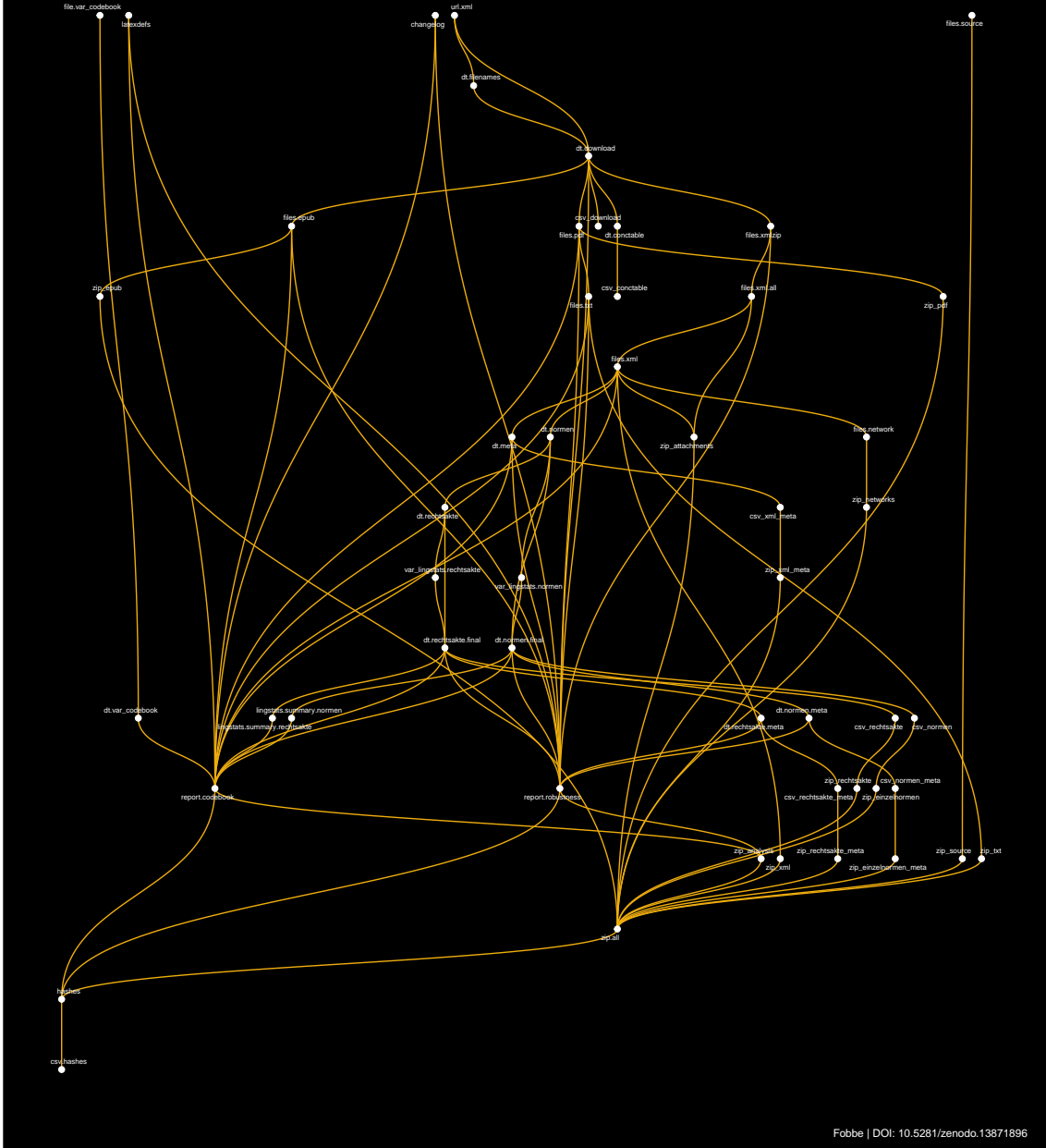
```
edgelist <- tar_network(targets_only = TRUE)$edges
setDT(edgelist)

g <- igraph::graph.data.frame(edgelist,
                              directed = TRUE)

ggraph(g,
       'sugiyama') +
  geom_edge_diagonal(colour = "darkgoldenrod2")+
  geom_node_point(size = 2,
                 color = "white")+
  geom_node_text(aes(label = name),
                color = "white",
                size = 2,
                repel = TRUE)+
  theme_void()+
  labs(
    title = paste(prefix.figuretitle,
                  "| Vollständiger Prozess der Datensatz-Kompilierung"),
    caption = caption
  )+
  theme(
    plot.title = element_text(size = 14,
                              face = "bold",
                              color = "white"),
    plot.background = element_rect(fill = "black"),
    plot.caption = element_text(color = "white"),
    plot.margin = margin(10, 20, 10, 10)
  )
)
```

```
ggraph(g,
       'sugiyama') +
  geom_edge_diagonal(colour = "darkgreen")+
  geom_node_point(size = 2,
                 color = "white")+
  geom_node_text(aes(label = name),
                color = "white",
                size = 2,
                repel = TRUE)+
  theme_void()+
  labs(
    title = paste(prefix.figuretitle,
                  "| Vollständiger Prozess der Datensatz-Kompilierung"),
    caption = caption
  )+
  theme(
    plot.title = element_text(size = 14,
                              face = "bold",
                              color = "white"),
    plot.background = element_rect(fill = "black"),
    plot.caption = element_text(color = "white"),
  )
)
```

C-DBR | Version 2024-10-02 | Vollständiger Prozess der Datensatz-Kompilierung



Fobbe | DOI: 10.5281/zenodo.13871896

Abbildung 1: Der vollständige Prozess der Datensatz-Kompilierung.

```
) plot.margin = margin(10, 20, 10, 10)
```


3 Vollständigkeit des Downloads

3.1 Überblick

```
length(files.xmlzip) == length(files.epub)
```

```
## [1] TRUE
```

```
length(files.xmlzip) == length(files.pdf)
```

```
## [1] TRUE
```

```
length(files.xmlzip)
```

```
## [1] 6784
```

```
length(files.pdf)
```

```
## [1] 6784
```

```
length(files.epub)
```

```
## [1] 6784
```

3.2 Fehlende XML-Archive

```
setdiff(dt.download$title.xml,  
        basename(files.xmlzip))
```

```
## character(0)
```

3.3 Fehlende PDF-Dateien

```
setdiff(dt.download$title.pdf,  
        basename(files.pdf))
```

```
## character(0)
```

3.4 Fehlende EPUB-Dateien

```
setdiff(dt.download$title.epub,  
        basename(files.epub))
```

```
## character(0)
```

4 Vollständigkeit der Konvertierung

4.1 Überblick

```
length(files.pdf) == length(files.txt)
```

```
## [1] TRUE
```

```
length(files.pdf)
```

```
## [1] 6784
```

```
length(files.txt)
```

```
## [1] 6784
```

4.2 Fehler bei TXT-Konvertierung

```
setdiff(tools::file_path_sans_ext(basename(files.pdf)),  
        tools::file_path_sans_ext(basename(files.txt)))
```

```
## character(0)
```

5 Variablen

5.1 Anzahl Variablen

```
length(dt.normen.final)
```

```
## [1] 42
```

```
length(dt.normen.meta)
```

```
## [1] 41
```

```
length(dt.rechtsakte.final)
```

```
## [1] 33
```

```
length(dt.rechtsakte.meta)
```

```
## [1] 32
```

```
length(dt.meta)
```

```
## [1] 30
```

5.2 Alle Namen der Variablen

```
names(dt.normen.final)
```

```
## [1] "doc_id"           "dateiname"  
## [3] "text"            "jurabk"  
## [5] "amtabk"         "langue"  
## [7] "kurzue"         "gliederungskennzahl"
```

```

## [9] "gliederungsbez"          "gliederungstitel"
## [11] "enbez"                   "bezkette"
## [13] "titelkette"              "ausfertigung_datum"
## [15] "ausfertigung_jahr"       "aenderung_datum"
## [17] "aufhebung_verkuendung_datum" "aufhebung_wirkung_datum"
## [19] "neufassung_datum"        "fundstellentyp"
## [21] "periodikum"              "zitstelle"
## [23] "stand"                   "aufh"
## [25] "neuf"                    "hinweis"
## [27] "sonst"                   "check_stand"
## [29] "check_aufh"              "check_neuf"
## [31] "check_hinweis"           "check_sonst"
## [33] "builddate_original"      "builddate_iso"
## [35] "zeichen"                 "tokens"
## [37] "typen"                   "saetze"
## [39] "doi_concept"             "doi_version"
## [41] "version"                 "lizenz"

```

```
names(dt.normen.meta)
```

```

## [1] "doc_id"                  "dateiname"
## [3] "jurabk"                  "amtabk"
## [5] "langue"                  "kurzue"
## [7] "gliederungskennzahl"    "gliederungsbez"
## [9] "gliederungstitel"       "enbez"
## [11] "bezkette"                "titelkette"
## [13] "ausfertigung_datum"     "ausfertigung_jahr"
## [15] "aenderung_datum"        "aufhebung_verkuendung_datum"
## [17] "aufhebung_wirkung_datum" "neufassung_datum"
## [19] "fundstellentyp"        "periodikum"
## [21] "zitstelle"              "stand"
## [23] "aufh"                   "neuf"
## [25] "hinweis"                "sonst"
## [27] "check_stand"            "check_aufh"
## [29] "check_neuf"             "check_hinweis"
## [31] "check_sonst"            "builddate_original"
## [33] "builddate_iso"          "zeichen"
## [35] "tokens"                 "typen"
## [37] "saetze"                 "doi_concept"
## [39] "doi_version"            "version"
## [41] "lizenz"

```

```
names(dt.rechtsakte.final)
```

```

## [1] "doc_id"                  "text"
## [3] "jurabk"                  "amtabk"
## [5] "langue"                  "kurzue"
## [7] "ausfertigung_datum"     "ausfertigung_jahr"

```

```

## [9] "aenderung_datum"           "aufhebung_verkuendung_datum"
## [11] "aufhebung_wirkung_datum"   "neufassung_datum"
## [13] "fundstellentyp"           "periodikum"
## [15] "zitstelle"                 "stand"
## [17] "aufh"                      "neuf"
## [19] "hinweis"                   "sonst"
## [21] "check_stand"               "check_aufh"
## [23] "check_neuf"                "check_hinweis"
## [25] "check_sonst"               "zeichen"
## [27] "tokens"                    "typen"
## [29] "saetze"                    "doi_concept"
## [31] "doi_version"               "version"
## [33] "lizenz"

```

```
names(dt.rechtsakte.meta)
```

```

## [1] "doc_id"                    "jurabk"
## [3] "amtabk"                    "langue"
## [5] "kurzue"                    "ausfertigung_datum"
## [7] "ausfertigung_jahr"         "aenderung_datum"
## [9] "aufhebung_verkuendung_datum" "aufhebung_wirkung_datum"
## [11] "neufassung_datum"          "fundstellentyp"
## [13] "periodikum"                "zitstelle"
## [15] "stand"                     "aufh"
## [17] "neuf"                      "hinweis"
## [19] "sonst"                     "check_stand"
## [21] "check_aufh"                "check_neuf"
## [23] "check_hinweis"            "check_sonst"
## [25] "zeichen"                   "tokens"
## [27] "typen"                     "saetze"
## [29] "doi_concept"               "doi_version"
## [31] "version"                   "lizenz"

```

```
names(dt.meta)
```

```

## [1] "doc_id"                    "jurabk"
## [3] "amtabk"                    "langue"
## [5] "kurzue"                    "ausfertigung_datum"
## [7] "ausfertigung_jahr"         "aenderung_datum"
## [9] "aufhebung_verkuendung_datum" "aufhebung_wirkung_datum"
## [11] "neufassung_datum"          "fundstellentyp"
## [13] "periodikum"                "zitstelle"
## [15] "stand"                     "aufh"
## [17] "neuf"                      "hinweis"
## [19] "sonst"                     "check_stand"
## [21] "check_aufh"                "check_neuf"
## [23] "check_hinweis"            "check_sonst"
## [25] "builddate_original"       "builddate_iso"

```

```
## [27] "doi_concept"          "doi_version"
## [29] "version"              "lizenz"
```

5.3 Beispiel-Werte

```
str(dt.normen.final)
```

```
## Classes 'data.table' and 'data.frame':  104709 obs. of  42 variables:
## $ doc_id          : chr  "BJNR200200022.xml" "BJNR200200022.xml.1"
##   "BJNR200200022.xml.2" "BJNR635810015.xml" ...
## $ dateiname      : chr  "BJNR200200022.xml" "BJNR200200022.xml" "
##   BJNR200200022.xml" "BJNR635810015.xml" ...
## $ text           : chr  "Auf Grund des § 118a Satz 1 und 2 des
##   Energiewirtschaftsgesetzes vom 7. Juli 2005 (BGBl. I S. 1970, 3621), der "|
##   __truncated__ "Die Bundesnetzagentur für Elektrizität, Gas, Telekommunikation
##   , Post und Eisenbahnen wird ermächtigt, Verordnun"| __truncated__ "Diese
##   Verordnung tritt am Tag nach der Verkündung in Kraft. Sie tritt mit Ablauf
##   des 31. Dezember 2027 außer Kraft." "1. Gemäß § 77 Absatz 3 SGB IX erhöhen
##   sich die zuletzt mit Bekanntmachung vom 16. Dezember 2011 (BAnz. S. 4624"| __
##   truncated__ ...
## $ jurabk         : chr  "EnWGS118aSubV" "EnWGS118aSubV" "EnWGS118
##   aSubV" "$77Abs3/§145Abs1/§54Abs3SGB9Bek" ...
## $ amtabk         : chr  "$ 118a EnWG-SubVO" "$ 118a EnWG-SubVO" "
##   § 118a EnWG-SubVO" NA ...
## $ langue        : chr  "Verordnung zur Subdelegation der
##   Verordnungsermächtigung über regulatorische Rahmenbedingungen für LNG-Anlagen
##   "| __truncated__ "Verordnung zur Subdelegation der Verordnungsermächtigung ü
##   ber regulatorische Rahmenbedingungen für LNG-Anlagen "| __truncated__ "
##   Verordnung zur Subdelegation der Verordnungsermächtigung über regulatorische
##   Rahmenbedingungen für LNG-Anlagen "| __truncated__ "Bekanntmachung über die
##   Anpassung der Ausgleichsabgabe (§ 77 Absatz 3 des Neunten Buches
##   Sozialgesetzbuch [SGB "| __truncated__ ...
## $ kurzue         : chr  "$ 118a EnWG-Subdelegationsverordnung" "$
##   118a EnWG-Subdelegationsverordnung" "$ 118a EnWG-Subdelegationsverordnung"
##   NA ...
## $ gliederungskennzahl : chr  "NA" "NA" "NA" "NA" ...
## $ gliederungsbez   : chr  "NA" "NA" "NA" "NA" ...
## $ gliederungstitel  : chr  "NA" "NA" "NA" "NA" ...
## $ enbez           : chr  "Eingangsformel" "$ 1" "$ 2" "(XXXX)" ...
## $ bezkette        : chr  NA NA NA NA ...
## $ titelkette       : chr  NA NA NA NA ...
## $ ausfertigung_datum : chr  "2022-11-07" "2022-11-07" "2022-11-07"
##   "2015-12-14" ...
## $ ausfertigung_jahr : int  2022 2022 2022 2015 2015 2011 2011 2000
##   2000 2000 ...
## $ aenderung_datum   : Date, format: NA NA ...
## $ aufhebung_verkuendung_datum: Date, format: NA NA ...
## $ aufhebung_wirkung_datum : Date, format: NA NA ...
## $ neufassung_datum  : Date, format: NA NA ...
## $ fundstellentyp    : chr  "amtlich" "amtlich" "amtlich" "amtlich"
##   ...
```



```

## $ periodikum      : chr "BGB1 I" "BGB1 I" "BGB1 I" "BAnz" ...
## $ zitstelle       : chr "2022, 2002" "2022, 2002" "2022, 2002" "
AT 24.12.2015 B2" ...
## $ stand           : chr NA NA NA NA ...
## $ aufh            : chr "Die V tritt gem. § 2 Satz 2 mit Ablauf
des 31.12.2027 außer Kraft" "Die V tritt gem. § 2 Satz 2 mit Ablauf des
31.12.2027 außer Kraft" "Die V tritt gem. § 2 Satz 2 mit Ablauf des
31.12.2027 außer Kraft" NA ...
## $ neuf            : chr NA NA NA NA ...
## $ hinweis         : chr NA NA NA NA ...
## $ sonst           : chr NA NA NA NA ...
## $ check_stand     : chr NA NA NA NA ...
## $ check_aufh      : chr "ja" "ja" "ja" NA ...
## $ check_neuf      : chr NA NA NA NA ...
## $ check_hinweis   : chr NA NA NA NA ...
## $ check_sonst     : chr NA NA NA NA ...
## $ builddate_original : chr "20230705213505" "20230705213505"
"20230705213505" "20160713215555" ...
## $ builddate_iso   : POSIXct, format: "2023-07-05 21:35:05"
"2023-07-05 21:35:05" ...
## $ zeichen         : int 273 189 115 959 41 667 41 226 448 111 ...
## $ tokens          : int 60 28 23 198 5 132 5 40 75 19 ...
## $ typen           : int 44 24 19 97 5 79 5 35 41 17 ...
## $ saetze          : int 5 1 3 14 1 9 1 1 4 2 ...
## $ doi_concept     : chr "10.5281/zenodo.3832111" "10.5281/zenodo
.3832111" "10.5281/zenodo.3832111" "10.5281/zenodo.3832111" ...
## $ doi_version     : chr "10.5281/zenodo.13871896" "10.5281/zenodo
.13871896" "10.5281/zenodo.13871896" "10.5281/zenodo.13871896" ...
## $ version         : chr "2024-10-02" "2024-10-02" "2024-10-02"
"2024-10-02" ...
## $ lizenz          : chr "Creative Commons Zero 1.0 Universal (CC
Zero 1.0)" "Creative Commons Zero 1.0 Universal (CC Zero 1.0)" "Creative
Commons Zero 1.0 Universal (CC Zero 1.0)" "Creative Commons Zero 1.0
Universal (CC Zero 1.0)" ...
## - attr(*, ".internal.selfref")=<externalptr>

```

```
str(dt.rechtsakte.final)
```

```

## Classes 'data.table' and 'data.frame': 5836 obs. of 33 variables:
## $ doc_id          : chr "BDNR000120949.xml" "BENR012420976.xml" "
BJNR000010886.xml" "BJNR000010935.xml" ...
## $ text            : chr "(1) Auf Grund des § 1 Abs. 1 des Zweiten
Gesetzes zur Neuordnung des Geldwesens (Emissionsgesetz) werden demnäch"| __
truncated__ "Auf Grund des § 4 Abs. 1 des Fluglärmsgesetzes Berlin vom 7.
Februar 1975 (GVBl. S. 671) wird verordnet: Zum Sch"| __truncated__ "Auf
Grund des § 3 des Gesetzes über den Feingehalt der Gold- und Silberwaren vom
16. Juli 1884 (Reichsgesetzbl."| __truncated__ "Die Reichsregierung hat das
folgende Gesetz beschlossen, das hiermit verkündet wird: (1) Wird ein mit
einer Hyp"| __truncated__ ...
## $ jurabk         : chr "Münz1PfBek BW" "FluLärmBerl-TegelV BE" "
FeinGehStempG" "RSiedlGErgG 1935" ...
## $ amtabk         : chr NA NA NA NA ...

```

```

## $ langue          : chr "Bekanntmachung über die Ausprägung von M
ünzen im Nennwert von 1 Pfennig" "Verordnung über die Festsetzung des Lä
rmschutzbereichs für den Flughafen\nBerlin-Tegel" "Bekanntmachung betreffend
die Bestimmung der Form des Stempelzeichens zur\nAngabe des Feingehalts auf
goldenen "| __truncated__ "Gesetz zur Ergänzung des Reichssiedlungsgesetzes"
...
## $ kurzue          : chr NA NA NA NA ...
## $ ausfertigung_datum : chr "1948-11-04" "1976-06-04" "1886-01-07"
"1935-01-04" ...
## $ ausfertigung_jahr : int 1948 1976 1886 1935 1949 1952 1963 1938
1972 1982 ...
## $ aenderung_datum : Date, format: NA NA ...
## $ aufhebung_verkuendung_datum: Date, format: NA NA ...
## $ aufhebung_wirkung_datum : Date, format: NA NA ...
## $ neufassung_datum : Date, format: NA NA ...
## $ fundstellentyp  : chr "amtlich" "amtlich" "amtlich" "amtlich"
...
## $ periodikum      : chr "BAGVB1" "GVBl BE" "RGB1" "RGB1 I" ...
## $ zitstelle       : chr "1949, 12" "1976, 1242" "1886, 1" "1935,
1" ...
## $ stand           : chr NA NA NA NA ...
## $ aufh            : chr NA NA NA NA ...
## $ neuf            : chr NA NA NA NA ...
## $ hinweis         : chr NA NA NA NA ...
## $ sonst           : chr NA NA NA NA ...
## $ check_stand     : chr NA NA NA NA ...
## $ check_aufh      : chr NA NA NA NA ...
## $ check_neuf      : chr NA NA NA NA ...
## $ check_hinweis   : chr NA NA NA NA ...
## $ check_sonst     : chr NA NA NA NA ...
## $ zeichen         : int 1012 22972 787 8861 172333 14392 10549
1843 574 529 ...
## $ tokens          : int 177 3795 152 1353 26625 2667 1697 339 123
88 ...
## $ typen           : int 105 1967 81 477 3668 548 526 138 72 61
...
## $ saetze          : int 9 65 9 50 1077 340 85 22 12 5 ...
## $ doi_concept     : chr "10.5281/zenodo.3832111" "10.5281/zenodo
.3832111" "10.5281/zenodo.3832111" "10.5281/zenodo.3832111" ...
## $ doi_version     : chr "10.5281/zenodo.13871896" "10.5281/zenodo
.13871896" "10.5281/zenodo.13871896" "10.5281/zenodo.13871896" ...
## $ version         : chr "2024-10-02" "2024-10-02" "2024-10-02"
"2024-10-02" ...
## $ lizenz          : chr "Creative Commons Zero 1.0 Universal (CC
Zero 1.0)" "Creative Commons Zero 1.0 Universal (CC Zero 1.0)" "Creative
Commons Zero 1.0 Universal (CC Zero 1.0)" "Creative Commons Zero 1.0
Universal (CC Zero 1.0)" ...
## - attr(*, ".internal.selfref")=<externalptr>
## - attr(*, "sorted")= chr "doc_id"

```

```
str(dt.meta)
```

```

## Classes 'data.table' and 'data.frame': 6784 obs. of 30 variables:
## $ doc_id : chr "BJNR200200022.xml" "BJNR635810015.xml" "
BJNR519640011.xml" "BJNR204500000.xml" ...
## $ jurabk : chr "EnWGS118aSubV" "$77Abs3/$145Abs1/$54
Abs3SGB9Bek" "$77Abs3/$54Abs3SGB9Bek" "1-DM-GoldmünzG" ...
## $ amtabk : chr "$ 118a EnWG-SubVO" NA NA NA ...
## $ langue : chr "Verordnung zur Subdelegation der
Verordnungsermächtigung über regulatorische Rahmenbedingungen für LNG-Anlagen
"| __truncated__ "Bekanntmachung über die Anpassung der Ausgleichsabgabe (§
77 Absatz 3 des Neunten Buches Sozialgesetzbuch [SGB "| __truncated__ "
Bekanntmachung über die Erhöhung der Ausgleichsabgabe (§ 77 Absatz 3 SGB IX)
und der übernahmefähigen Kinderbet"| __truncated__ "Gesetz über die Ausprä
gung einer 1-DM-Goldmünze\nund die Errichtung der Stiftung \"Geld und Währung
\" ...
## $ kurzue : chr "$ 118a EnWG-Subdelegationsverordnung" NA
NA NA ...
## $ ausfertigung_datum : chr "2022-11-07" "2015-12-14" "2011-12-16"
"2000-12-27" ...
## $ ausfertigung_jahr : int 2022 2015 2011 2000 1971 2010 2014 1966
1965 2008 ...
## $ aenderung_datum : Date, format: NA NA ...
## $ aufhebung_verkuendung_datum: Date, format: NA NA ...
## $ aufhebung_wirkung_datum : Date, format: NA NA ...
## $ neufassung_datum : Date, format: NA NA ...
## $ fundstellentyp : chr "amtlich" "amtlich" "amtlich" "amtlich"
...
## $ periodikum : chr "BGB1 I" "BAnz" "BAnz" "BGB1 I" ...
## $ zitstelle : chr "2022, 2002" "AT 24.12.2015 B2" "2011,
196, 4624" "2000, 2045" ...
## $ stand : chr NA NA NA NA ...
## $ aufh : chr "Die V tritt gem. § 2 Satz 2 mit Ablauf
des 31.12.2027 außer Kraft" NA NA NA ...
## $ neuf : chr NA NA NA NA ...
## $ hinweis : chr NA NA NA NA ...
## $ sonst : chr NA NA NA NA ...
## $ check_stand : chr NA NA NA NA ...
## $ check_aufh : chr "ja" NA NA NA ...
## $ check_neuf : chr NA NA NA NA ...
## $ check_hinweis : chr NA NA NA NA ...
## $ check_sonst : chr NA NA NA NA ...
## $ builddate_original : chr "20230705213505" "20160713215555"
"20150703231214" "20130405132018" ...
## $ builddate_iso : POSIXct, format: "2023-07-05 21:35:05"
"2016-07-13 21:55:55" ...
## $ doi_concept : chr "10.5281/zenodo.3832111" "10.5281/zenodo
.3832111" "10.5281/zenodo.3832111" "10.5281/zenodo.3832111" ...
## $ doi_version : chr "10.5281/zenodo.13871896" "10.5281/zenodo
.13871896" "10.5281/zenodo.13871896" "10.5281/zenodo.13871896" ...
## $ version : chr "2024-10-02" "2024-10-02" "2024-10-02"
"2024-10-02" ...
## $ lizenz : chr "Creative Commons Zero 1.0 Universal (CC
Zero 1.0)" "Creative Commons Zero 1.0 Universal (CC Zero 1.0)" "Creative
Commons Zero 1.0 Universal (CC Zero 1.0)" "Creative Commons Zero 1.0
Universal (CC Zero 1.0)" ...
## - attr(*, ".internal.selfref")=<externalptr>

```

6 Quantitative Variablen

6.1 Ausfertigungsdatum

6.1.1 Einzelnormen

```
summary(as.IDate(dt.normen.final$ausfertigung_datum))
```

```
##           Min.          1st Qu.          Median          Mean          3rd Qu.          Max.
## "1869-06-21" "1975-05-02" "2000-07-27" "1990-02-24" "2013-12-06" "2024-09-24"
```

6.1.2 Rechtsakte

```
summary(as.IDate(dt.rechtsakte.final$ausfertigung_datum))
```

```
##           Min.          1st Qu.          Median          Mean          3rd Qu.          Max.
## "1869-06-21" "1984-02-11" "2002-06-27" "1996-10-13" "2014-08-17" "2024-09-24"
```

6.1.3 XML-Metadaten

```
summary(as.IDate(dt.meta$ausfertigung_datum))
```

```
##           Min.          1st Qu.          Median          Mean          3rd Qu.          Max.
## "1869-06-21" "1979-04-15" "1999-07-09" "1994-09-21" "2013-02-13" "2024-09-24"
##           NA's
##           "1"
```

6.2 Ausfertigungsjahr

6.2.1 Einzelnormen

```
summary(dt.normen.final$ausfertigung_jahr)
```

```
##           Min. 1st Qu.  Median  Mean 3rd Qu.  Max.
##          1869   1975   2000   1990   2013   2024
```

6.2.2 Rechtsakte

```
summary(dt.rechtsakte.final$ausfertigung_jahr)
```

| ## | Min. | 1st Qu. | Median | Mean | 3rd Qu. | Max. |
|----|------|---------|--------|------|---------|------|
| ## | 1869 | 1984 | 2002 | 1996 | 2014 | 2024 |

6.2.3 XML-Metadaten

```
summary(dt.meta$ausfertigung_jahr)
```

| ## | Min. | 1st Qu. | Median | Mean | 3rd Qu. | Max. | NA's |
|----|------|---------|--------|------|---------|------|------|
| ## | 1869 | 1979 | 1999 | 1994 | 2013 | 2024 | 1 |

7 Frequenztabellen erstellen

7.1 Liste zu prüfender Variablen

Hinweis: Nur diese Variablen werden bei der Erstellung der Frequenztabellen berücksichtigt.

```
varlist <- c("periodikum",  
            "fundstellentyp",  
            "check_neuf",  
            "check_aufh",  
            "check_sonst",  
            "check_hinweis",  
            "check_stand",  
            "gliederungskennzahl",  
            "ausfertigung_jahr",  
            "doi_concept",  
            "doi_version",  
            "version",  
            "lizenz" )
```

8 Frequenztabellen erstellen: Einzelnormen

```
prefix.freqtable.einzelnormen <- paste0(config$project$shortname,  
                                         "_01_Einzelnormen_Frequenztabelle_var-")  
  
f.fast.freqtable(dt.normen.final,  
                varlist = varlist,  
                sumrow = TRUE,  
                output.list = FALSE,  
                output.kable = TRUE,  
                output.csv = TRUE,  
                outputdir = dir.analysis,  
                prefix = prefix.freqtable.einzelnormen)
```

Frequency Table for Variable: periodikum

23 unique value(s) detected.

| periodikum | N | roundedpercent | cumulpercent |
|------------|-------|----------------|--------------|
| BAGVBl | 1 | 0.00 | 0.00 |
| BAnz | 1141 | 1.09 | 1.09 |
| BGBI | 2278 | 2.18 | 3.27 |
| BGBI I | 88016 | 84.06 | 87.32 |
| BGBI II | 3383 | 3.23 | 90.55 |
| BGBI. I | 569 | 0.54 | 91.10 |
| BGBI. II | 5 | 0.00 | 91.10 |
| GBI DDR | 233 | 0.22 | 91.33 |
| GBI DDR I | 616 | 0.59 | 91.91 |
| GBI DDR II | 43 | 0.04 | 91.95 |
| GVBl BE | 9 | 0.01 | 91.96 |
| NV | 15 | 0.01 | 91.98 |
| RAnz | 38 | 0.04 | 92.01 |
| RGBI | 5735 | 5.48 | 97.49 |
| RGBI I | 1651 | 1.58 | 99.07 |
| RGBI II | 339 | 0.32 | 99.39 |

(continued)

| periodikum | N | roundedpercent | cumulpercent |
|------------|--------|----------------|--------------|
| RMBI | 230 | 0.22 | 99.61 |
| VOBl BrZ | 19 | 0.02 | 99.63 |
| VkBl | 110 | 0.11 | 99.73 |
| WiGBI | 122 | 0.12 | 99.85 |
| ZBl | 63 | 0.06 | 99.91 |
| eBAnz | 52 | 0.05 | 99.96 |
| Öff Anz | 41 | 0.04 | 100.00 |
| Total | 104709 | 100.00 | 100.00 |

Frequency Table for Variable: fundstellentyp

1 unique value(s) detected.

| fundstellentyp | N | roundedpercent | cumulpercent |
|----------------|--------|----------------|--------------|
| amtlich | 104709 | 100 | 100 |
| Total | 104709 | 100 | 100 |

Frequency Table for Variable: check_neuf

2 unique value(s) detected.

| check_neuf | N | roundedpercent | cumulpercent |
|------------|--------|----------------|--------------|
| NA | 80830 | 77.19 | 77.19 |
| ja | 23879 | 22.81 | 100.00 |
| Total | 104709 | 100.00 | 100.00 |

Frequency Table for Variable: check_aufh

2 unique value(s) detected.

| check_aufh | N | roundedpercent | cumulpercent |
|------------|--------|----------------|--------------|
| NA | 103336 | 98.69 | 98.69 |
| ja | 1373 | 1.31 | 100.00 |
| Total | 104709 | 100.00 | 100.00 |

Frequency Table for Variable: check_sonst

2 unique value(s) detected.

| check_sonst | N | roundedpercent | cumulpercent |
|-------------|--------|----------------|--------------|
| NA | 84745 | 80.93 | 80.93 |
| ja | 19964 | 19.07 | 100.00 |
| Total | 104709 | 100.00 | 100.00 |

Frequency Table for Variable: check_hinweis

2 unique value(s) detected.

| check_hinweis | N | roundedpercent | cumulpercent |
|---------------|--------|----------------|--------------|
| NA | 101032 | 96.49 | 96.49 |
| ja | 3677 | 3.51 | 100.00 |
| Total | 104709 | 100.00 | 100.00 |

Frequency Table for Variable: check_stand

2 unique value(s) detected.

| check_stand | N | roundedpercent | cumulpercent |
|-------------|--------|----------------|--------------|
| NA | 23156 | 22.11 | 22.11 |
| ja | 81553 | 77.89 | 100.00 |
| Total | 104709 | 100.00 | 100.00 |

Frequency Table for Variable: gliederungskennzahl

1526 unique value(s) detected.

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|----|----------------|--------------|
| 000 | 76 | 0.07 | 0.07 |
| 000010 | 12 | 0.01 | 0.08 |
| 000020 | 18 | 0.02 | 0.10 |
| 000030 | 17 | 0.02 | 0.12 |
| 000040 | 17 | 0.02 | 0.13 |
| 000050 | 17 | 0.02 | 0.15 |
| 000060 | 10 | 0.01 | 0.16 |
| 000070 | 3 | 0.00 | 0.16 |
| 000080 | 2 | 0.00 | 0.16 |
| 000090 | 1 | 0.00 | 0.17 |
| 000100 | 2 | 0.00 | 0.17 |
| 000110 | 3 | 0.00 | 0.17 |
| 000120 | 5 | 0.00 | 0.17 |
| 001000 | 2 | 0.00 | 0.18 |
| 001010 | 1 | 0.00 | 0.18 |
| 001020 | 3 | 0.00 | 0.18 |
| 001030 | 1 | 0.00 | 0.18 |
| 001040 | 1 | 0.00 | 0.18 |
| 001052 | 1 | 0.00 | 0.18 |
| 001053 | 1 | 0.00 | 0.18 |
| 001060 | 2 | 0.00 | 0.19 |
| 001080 | 1 | 0.00 | 0.19 |
| 001090 | 1 | 0.00 | 0.19 |
| 001100 | 1 | 0.00 | 0.19 |
| 001101 | 1 | 0.00 | 0.19 |
| 001110 | 1 | 0.00 | 0.19 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|------|----------------|--------------|
| 001120 | 6 | 0.01 | 0.20 |
| 010 | 6341 | 6.06 | 6.25 |
| 010010 | 917 | 0.88 | 7.13 |
| 010010000010 | 1 | 0.00 | 7.13 |
| 010010000020 | 1 | 0.00 | 7.13 |
| 010010010 | 118 | 0.11 | 7.24 |
| 010010020 | 118 | 0.11 | 7.36 |
| 010010020010 | 3 | 0.00 | 7.36 |
| 010010020010010 | 37 | 0.04 | 7.39 |
| 010010020010020 | 24 | 0.02 | 7.42 |
| 010010020020 | 32 | 0.03 | 7.45 |
| 010010020030 | 1 | 0.00 | 7.45 |
| 010010030 | 28 | 0.03 | 7.48 |
| 010010030010 | 7 | 0.01 | 7.48 |
| 010010030020 | 16 | 0.02 | 7.50 |
| 010010030030 | 12 | 0.01 | 7.51 |
| 010010030040 | 12 | 0.01 | 7.52 |
| 010010040 | 34 | 0.03 | 7.55 |
| 010010050 | 11 | 0.01 | 7.56 |
| 010010060 | 6 | 0.01 | 7.57 |
| 010010070010 | 10 | 0.01 | 7.58 |
| 010010070020 | 5 | 0.00 | 7.58 |
| 010020 | 815 | 0.78 | 8.36 |
| 010020010 | 150 | 0.14 | 8.50 |
| 010020010000030 | 1 | 0.00 | 8.51 |
| 010020010000040 | 1 | 0.00 | 8.51 |
| 010020010000050 | 1 | 0.00 | 8.51 |
| 010020010000060 | 1 | 0.00 | 8.51 |
| 010020020 | 138 | 0.13 | 8.64 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|-----|----------------|--------------|
| 010020020000070 | 1 | 0.00 | 8.64 |
| 010020020000080 | 1 | 0.00 | 8.64 |
| 010020020000090 | 1 | 0.00 | 8.64 |
| 010020020000100 | 1 | 0.00 | 8.64 |
| 010020020000110 | 1 | 0.00 | 8.64 |
| 010020020000120 | 1 | 0.00 | 8.65 |
| 010020020010 | 16 | 0.02 | 8.66 |
| 010020020020 | 19 | 0.02 | 8.68 |
| 010020020030 | 9 | 0.01 | 8.69 |
| 010020020040 | 14 | 0.01 | 8.70 |
| 010020020050 | 18 | 0.02 | 8.72 |
| 010020030 | 108 | 0.10 | 8.82 |
| 010020030000130 | 1 | 0.00 | 8.82 |
| 010020030000140 | 1 | 0.00 | 8.82 |
| 010020030000150 | 1 | 0.00 | 8.82 |
| 010020030000170 | 1 | 0.00 | 8.83 |
| 010020030000171 | 1 | 0.00 | 8.83 |
| 010020030000172 | 1 | 0.00 | 8.83 |
| 010020030000190 | 1 | 0.00 | 8.83 |
| 010020030000200 | 1 | 0.00 | 8.83 |
| 010020030000210 | 1 | 0.00 | 8.83 |
| 010020030000220 | 1 | 0.00 | 8.83 |
| 010020030000230 | 1 | 0.00 | 8.83 |
| 010020030000240 | 1 | 0.00 | 8.83 |
| 010020030010 | 3 | 0.00 | 8.84 |
| 010020030020 | 2 | 0.00 | 8.84 |
| 010020030030 | 2 | 0.00 | 8.84 |
| 010020040 | 75 | 0.07 | 8.91 |
| 010020040000250 | 1 | 0.00 | 8.91 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|-----|----------------|--------------|
| 010020040000260 | 1 | 0.00 | 8.91 |
| 010020050 | 56 | 0.05 | 8.97 |
| 010020050020000380 | 1 | 0.00 | 8.97 |
| 010020050020000390 | 1 | 0.00 | 8.97 |
| 010020050020000400 | 1 | 0.00 | 8.97 |
| 010020050020000410 | 1 | 0.00 | 8.97 |
| 010020050020000420 | 1 | 0.00 | 8.97 |
| 010020060 | 44 | 0.04 | 9.01 |
| 010020060000430 | 1 | 0.00 | 9.01 |
| 010020060000440 | 1 | 0.00 | 9.02 |
| 010020060000450 | 1 | 0.00 | 9.02 |
| 010020060000460 | 1 | 0.00 | 9.02 |
| 010020070 | 30 | 0.03 | 9.05 |
| 010020070010000461 | 1 | 0.00 | 9.05 |
| 010020070020000462 | 1 | 0.00 | 9.05 |
| 010020070020000463 | 1 | 0.00 | 9.05 |
| 010020070030000464 | 1 | 0.00 | 9.05 |
| 010020070040000465 | 1 | 0.00 | 9.05 |
| 010020080 | 41 | 0.04 | 9.09 |
| 010020090 | 1 | 0.00 | 9.09 |
| 010030 | 533 | 0.51 | 9.60 |
| 010030000470 | 1 | 0.00 | 9.60 |
| 010030000480 | 1 | 0.00 | 9.60 |
| 010030010 | 127 | 0.12 | 9.72 |
| 010030010010 | 8 | 0.01 | 9.73 |
| 010030010020 | 14 | 0.01 | 9.74 |
| 010030010030 | 20 | 0.02 | 9.76 |
| 010030010040 | 12 | 0.01 | 9.77 |
| 010030010050 | 4 | 0.00 | 9.78 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|----|----------------|--------------|
| 010030010060 | 8 | 0.01 | 9.79 |
| 010030010070 | 8 | 0.01 | 9.79 |
| 010030010080 | 4 | 0.00 | 9.80 |
| 010030010380 | 2 | 0.00 | 9.80 |
| 010030010400 | 4 | 0.00 | 9.80 |
| 010030010440 | 1 | 0.00 | 9.80 |
| 010030010450 | 3 | 0.00 | 9.81 |
| 010030020 | 84 | 0.08 | 9.89 |
| 010030020010 | 75 | 0.07 | 9.96 |
| 010030020020 | 32 | 0.03 | 9.99 |
| 010030020030 | 12 | 0.01 | 10.00 |
| 010030020040 | 12 | 0.01 | 10.01 |
| 010030020050 | 9 | 0.01 | 10.02 |
| 010030020060 | 18 | 0.02 | 10.04 |
| 010030030 | 70 | 0.07 | 10.11 |
| 010030030010 | 1 | 0.00 | 10.11 |
| 010030030020 | 2 | 0.00 | 10.11 |
| 010030030030 | 6 | 0.01 | 10.11 |
| 010030030040 | 1 | 0.00 | 10.11 |
| 010030040 | 32 | 0.03 | 10.15 |
| 010030050 | 39 | 0.04 | 10.18 |
| 010030060 | 6 | 0.01 | 10.19 |
| 010030060010 | 16 | 0.02 | 10.20 |
| 010030060020 | 8 | 0.01 | 10.21 |
| 010030060030 | 3 | 0.00 | 10.21 |
| 010030060040 | 3 | 0.00 | 10.22 |
| 010030060050 | 2 | 0.00 | 10.22 |
| 010030070 | 17 | 0.02 | 10.24 |
| 010031 | 2 | 0.00 | 10.24 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|-----|----------------|--------------|
| 010040 | 338 | 0.32 | 10.56 |
| 010040010 | 83 | 0.08 | 10.64 |
| 010040020 | 69 | 0.07 | 10.70 |
| 010040020010 | 3 | 0.00 | 10.71 |
| 010040020020 | 5 | 0.00 | 10.71 |
| 010040020030 | 2 | 0.00 | 10.71 |
| 010040030 | 42 | 0.04 | 10.75 |
| 010040030010 | 8 | 0.01 | 10.76 |
| 010040030020 | 3 | 0.00 | 10.77 |
| 010040040 | 21 | 0.02 | 10.79 |
| 010040040010 | 8 | 0.01 | 10.79 |
| 010040040020 | 11 | 0.01 | 10.80 |
| 010040040030 | 5 | 0.00 | 10.81 |
| 010040040040 | 10 | 0.01 | 10.82 |
| 010040040050 | 1 | 0.00 | 10.82 |
| 010040040060 | 3 | 0.00 | 10.82 |
| 010040040070 | 8 | 0.01 | 10.83 |
| 010040050 | 2 | 0.00 | 10.83 |
| 010040120010 | 1 | 0.00 | 10.83 |
| 010040120020 | 1 | 0.00 | 10.83 |
| 010040120030 | 1 | 0.00 | 10.83 |
| 010040120040 | 1 | 0.00 | 10.83 |
| 010040120050 | 1 | 0.00 | 10.84 |
| 010040120060 | 1 | 0.00 | 10.84 |
| 010041 | 2 | 0.00 | 10.84 |
| 010050 | 161 | 0.15 | 10.99 |
| 010050010 | 61 | 0.06 | 11.05 |
| 010050020 | 87 | 0.08 | 11.13 |
| 010050020020 | 2 | 0.00 | 11.14 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|-----|----------------|--------------|
| 010050030 | 43 | 0.04 | 11.18 |
| 010050030010 | 2 | 0.00 | 11.18 |
| 010050030020 | 1 | 0.00 | 11.18 |
| 010050030030 | 2 | 0.00 | 11.18 |
| 010050040 | 2 | 0.00 | 11.18 |
| 010060 | 183 | 0.17 | 11.36 |
| 010060010 | 47 | 0.04 | 11.40 |
| 010060020 | 63 | 0.06 | 11.46 |
| 010060020010 | 11 | 0.01 | 11.47 |
| 010060020020 | 10 | 0.01 | 11.48 |
| 010060020030 | 5 | 0.00 | 11.49 |
| 010060020040 | 14 | 0.01 | 11.50 |
| 010060020050 | 1 | 0.00 | 11.50 |
| 010060030 | 45 | 0.04 | 11.55 |
| 010060030810 | 7 | 0.01 | 11.55 |
| 010060030820 | 8 | 0.01 | 11.56 |
| 010060030830 | 3 | 0.00 | 11.56 |
| 010060030840 | 1 | 0.00 | 11.56 |
| 010060040 | 13 | 0.01 | 11.58 |
| 010060050 | 26 | 0.02 | 11.60 |
| 010060051 | 4 | 0.00 | 11.60 |
| 010060060 | 19 | 0.02 | 11.62 |
| 010060070 | 1 | 0.00 | 11.62 |
| 010070 | 217 | 0.21 | 11.83 |
| 010070010 | 8 | 0.01 | 11.84 |
| 010070010010 | 11 | 0.01 | 11.85 |
| 010070010020 | 8 | 0.01 | 11.86 |
| 010070020 | 14 | 0.01 | 11.87 |
| 010070030 | 14 | 0.01 | 11.88 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|------|----------------|--------------|
| 010080 | 134 | 0.13 | 12.01 |
| 010080010 | 9 | 0.01 | 12.02 |
| 010080010010 | 2 | 0.00 | 12.02 |
| 010080010020 | 11 | 0.01 | 12.03 |
| 010080020 | 17 | 0.02 | 12.05 |
| 010080030 | 8 | 0.01 | 12.06 |
| 010090 | 62 | 0.06 | 12.12 |
| 010090010 | 23 | 0.02 | 12.14 |
| 010090020 | 19 | 0.02 | 12.16 |
| 010090030 | 6 | 0.01 | 12.16 |
| 010091 | 5 | 0.00 | 12.17 |
| 010092 | 1 | 0.00 | 12.17 |
| 010100 | 29 | 0.03 | 12.19 |
| 010100010 | 2 | 0.00 | 12.20 |
| 010100020 | 1 | 0.00 | 12.20 |
| 010110 | 37 | 0.04 | 12.23 |
| 010110010 | 1 | 0.00 | 12.23 |
| 010110020 | 1 | 0.00 | 12.23 |
| 010110030 | 1 | 0.00 | 12.24 |
| 010120 | 4 | 0.00 | 12.24 |
| 010130 | 9 | 0.01 | 12.25 |
| 010140 | 5 | 0.00 | 12.25 |
| 011 | 12 | 0.01 | 12.26 |
| 012 | 2 | 0.00 | 12.27 |
| 014 | 2 | 0.00 | 12.27 |
| 020 | 6721 | 6.42 | 18.69 |
| 020000 | 1 | 0.00 | 18.69 |
| 020000010 | 2 | 0.00 | 18.69 |
| 020000020 | 8 | 0.01 | 18.70 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|------|----------------|--------------|
| 020000030 | 8 | 0.01 | 18.71 |
| 020000040 | 8 | 0.01 | 18.71 |
| 020000050 | 8 | 0.01 | 18.72 |
| 020000060 | 8 | 0.01 | 18.73 |
| 020000500 | 1 | 0.00 | 18.73 |
| 020000510 | 1 | 0.00 | 18.73 |
| 020000520 | 1 | 0.00 | 18.73 |
| 020000530 | 1 | 0.00 | 18.73 |
| 020000531 | 1 | 0.00 | 18.73 |
| 020010 | 1802 | 1.72 | 20.45 |
| 020010010 | 294 | 0.28 | 20.73 |
| 020010020 | 233 | 0.22 | 20.96 |
| 020010020010 | 25 | 0.02 | 20.98 |
| 020010020020 | 8 | 0.01 | 20.99 |
| 020010020020010 | 4 | 0.00 | 20.99 |
| 020010020020020 | 3 | 0.00 | 21.00 |
| 020010020020030 | 3 | 0.00 | 21.00 |
| 020010020020040 | 3 | 0.00 | 21.00 |
| 020010020020050 | 1 | 0.00 | 21.00 |
| 020010020030 | 10 | 0.01 | 21.01 |
| 020010020040 | 6 | 0.01 | 21.02 |
| 020010020050 | 5 | 0.00 | 21.02 |
| 020010020060 | 4 | 0.00 | 21.03 |
| 020010030 | 145 | 0.14 | 21.16 |
| 020010030010 | 11 | 0.01 | 21.17 |
| 020010030020 | 7 | 0.01 | 21.18 |
| 020010030030010 | 4 | 0.00 | 21.19 |
| 020010030030020010 | 5 | 0.00 | 21.19 |
| 020010030030020020 | 8 | 0.01 | 21.20 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|------|----------------|--------------|
| 020010030040 | 4 | 0.00 | 21.20 |
| 020010040 | 93 | 0.09 | 21.29 |
| 020010040010 | 6 | 0.01 | 21.30 |
| 020010040020 | 3 | 0.00 | 21.30 |
| 020010040030 | 6 | 0.01 | 21.30 |
| 020010041 | 5 | 0.00 | 21.31 |
| 020010050 | 87 | 0.08 | 21.39 |
| 020010060 | 43 | 0.04 | 21.43 |
| 020010070 | 43 | 0.04 | 21.47 |
| 020010070010 | 4 | 0.00 | 21.48 |
| 020010070020 | 7 | 0.01 | 21.49 |
| 020010070030 | 7 | 0.01 | 21.49 |
| 020010080 | 22 | 0.02 | 21.51 |
| 020010090 | 31 | 0.03 | 21.54 |
| 020010100 | 11 | 0.01 | 21.55 |
| 020010110 | 7 | 0.01 | 21.56 |
| 020010120 | 9 | 0.01 | 21.57 |
| 020011 | 3 | 0.00 | 21.57 |
| 020011042 | 1 | 0.00 | 21.57 |
| 020020 | 1645 | 1.57 | 23.14 |
| 020020010 | 173 | 0.17 | 23.31 |
| 020020010010 | 60 | 0.06 | 23.37 |
| 020020010010010 | 2 | 0.00 | 23.37 |
| 020020010010020 | 1 | 0.00 | 23.37 |
| 020020010010030 | 3 | 0.00 | 23.37 |
| 020020010010040 | 1 | 0.00 | 23.37 |
| 020020010010050 | 3 | 0.00 | 23.38 |
| 020020010020 | 13 | 0.01 | 23.39 |
| 020020010030 | 17 | 0.02 | 23.40 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|-----|----------------|--------------|
| 020020010040 | 17 | 0.02 | 23.42 |
| 020020010050 | 8 | 0.01 | 23.43 |
| 020020010060 | 13 | 0.01 | 23.44 |
| 020020010070 | 8 | 0.01 | 23.45 |
| 020020010080 | 4 | 0.00 | 23.45 |
| 020020020 | 240 | 0.23 | 23.68 |
| 020020020010 | 38 | 0.04 | 23.72 |
| 020020020020 | 31 | 0.03 | 23.75 |
| 020020020030 | 25 | 0.02 | 23.77 |
| 020020020040 | 9 | 0.01 | 23.78 |
| 020020020050 | 19 | 0.02 | 23.80 |
| 020020020060 | 1 | 0.00 | 23.80 |
| 020020020070010 | 3 | 0.00 | 23.80 |
| 020020020070020 | 7 | 0.01 | 23.81 |
| 020020020070030 | 2 | 0.00 | 23.81 |
| 020020030 | 111 | 0.11 | 23.92 |
| 020020030010 | 23 | 0.02 | 23.94 |
| 020020030020 | 26 | 0.02 | 23.96 |
| 020020030030 | 21 | 0.02 | 23.98 |
| 020020030040 | 21 | 0.02 | 24.00 |
| 020020030050 | 5 | 0.00 | 24.01 |
| 020020030060 | 2 | 0.00 | 24.01 |
| 020020030070 | 16 | 0.02 | 24.02 |
| 020020030080 | 4 | 0.00 | 24.03 |
| 020020030090 | 3 | 0.00 | 24.03 |
| 020020030100 | 1 | 0.00 | 24.03 |
| 020020040 | 73 | 0.07 | 24.10 |
| 020020043 | 1 | 0.00 | 24.10 |
| 020020050 | 26 | 0.02 | 24.13 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|------|----------------|--------------|
| 020020050010 | 24 | 0.02 | 24.15 |
| 020020050020 | 9 | 0.01 | 24.16 |
| 020020060 | 50 | 0.05 | 24.21 |
| 020020060010 | 1 | 0.00 | 24.21 |
| 020020060020 | 6 | 0.01 | 24.21 |
| 020020060030 | 5 | 0.00 | 24.22 |
| 020020070 | 12 | 0.01 | 24.23 |
| 020020080 | 2 | 0.00 | 24.23 |
| 020020080010 | 6 | 0.01 | 24.24 |
| 020020080020 | 11 | 0.01 | 24.25 |
| 020020080030 | 4 | 0.00 | 24.25 |
| 020020080040 | 2 | 0.00 | 24.25 |
| 020020090 | 5 | 0.00 | 24.26 |
| 020020100 | 3 | 0.00 | 24.26 |
| 020021 | 21 | 0.02 | 24.28 |
| 020030 | 1215 | 1.16 | 25.44 |
| 020030010 | 168 | 0.16 | 25.60 |
| 020030010010 | 11 | 0.01 | 25.61 |
| 020030010020 | 5 | 0.00 | 25.62 |
| 020030010020010 | 2 | 0.00 | 25.62 |
| 020030010020020 | 7 | 0.01 | 25.63 |
| 020030010020030 | 4 | 0.00 | 25.63 |
| 020030010020040 | 1 | 0.00 | 25.63 |
| 020030010030 | 8 | 0.01 | 25.64 |
| 020030010040 | 6 | 0.01 | 25.64 |
| 020030020 | 216 | 0.21 | 25.85 |
| 020030020010 | 40 | 0.04 | 25.89 |
| 020030020020 | 11 | 0.01 | 25.90 |
| 020030021010 | 20 | 0.02 | 25.92 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|-----|----------------|--------------|
| 020030021020 | 2 | 0.00 | 25.92 |
| 020030030 | 109 | 0.10 | 26.02 |
| 020030030010 | 2 | 0.00 | 26.03 |
| 020030030020 | 5 | 0.00 | 26.03 |
| 020030030030 | 10 | 0.01 | 26.04 |
| 020030040 | 50 | 0.05 | 26.09 |
| 020030040010 | 6 | 0.01 | 26.09 |
| 020030040020 | 2 | 0.00 | 26.10 |
| 020030040030 | 5 | 0.00 | 26.10 |
| 020030040040 | 1 | 0.00 | 26.10 |
| 020030050 | 39 | 0.04 | 26.14 |
| 020030050010 | 9 | 0.01 | 26.15 |
| 020030050020 | 17 | 0.02 | 26.16 |
| 020030060 | 10 | 0.01 | 26.17 |
| 020030070 | 7 | 0.01 | 26.18 |
| 020030080 | 9 | 0.01 | 26.19 |
| 020030090 | 3 | 0.00 | 26.19 |
| 020030100 | 1 | 0.00 | 26.19 |
| 020030100010 | 1 | 0.00 | 26.19 |
| 020030100020 | 11 | 0.01 | 26.20 |
| 020030100030 | 1 | 0.00 | 26.21 |
| 020030110 | 5 | 0.00 | 26.21 |
| 020030120 | 10 | 0.01 | 26.22 |
| 020030130 | 13 | 0.01 | 26.23 |
| 020030140 | 2 | 0.00 | 26.23 |
| 020030150 | 8 | 0.01 | 26.24 |
| 020031 | 18 | 0.02 | 26.26 |
| 020040 | 808 | 0.77 | 27.03 |
| 020040010 | 65 | 0.06 | 27.09 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|-----|----------------|--------------|
| 020040020 | 64 | 0.06 | 27.15 |
| 020040030 | 38 | 0.04 | 27.19 |
| 020040030010 | 1 | 0.00 | 27.19 |
| 020040030020 | 6 | 0.01 | 27.20 |
| 020040040 | 22 | 0.02 | 27.22 |
| 020040050 | 5 | 0.00 | 27.22 |
| 020040060 | 8 | 0.01 | 27.23 |
| 020040070 | 1 | 0.00 | 27.23 |
| 020040140 | 1 | 0.00 | 27.23 |
| 020040150 | 6 | 0.01 | 27.24 |
| 020040160 | 14 | 0.01 | 27.25 |
| 020041 | 6 | 0.01 | 27.26 |
| 020050 | 454 | 0.43 | 27.69 |
| 020050010 | 43 | 0.04 | 27.73 |
| 020050010010 | 5 | 0.00 | 27.74 |
| 020050010020 | 4 | 0.00 | 27.74 |
| 020050010030 | 3 | 0.00 | 27.74 |
| 020050020 | 41 | 0.04 | 27.78 |
| 020050030 | 5 | 0.00 | 27.79 |
| 020050030010 | 13 | 0.01 | 27.80 |
| 020050030020 | 13 | 0.01 | 27.81 |
| 020050030030 | 6 | 0.01 | 27.82 |
| 020050030040 | 2 | 0.00 | 27.82 |
| 020050030050 | 12 | 0.01 | 27.83 |
| 020050040 | 7 | 0.01 | 27.84 |
| 020050050 | 1 | 0.00 | 27.84 |
| 020050180 | 1 | 0.00 | 27.84 |
| 020050190 | 1 | 0.00 | 27.84 |
| 020050200 | 1 | 0.00 | 27.84 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|-----|----------------|--------------|
| 020050210 | 1 | 0.00 | 27.84 |
| 020051 | 7 | 0.01 | 27.85 |
| 020051211 | 1 | 0.00 | 27.85 |
| 020051212 | 1 | 0.00 | 27.85 |
| 020051213 | 1 | 0.00 | 27.85 |
| 020052 | 1 | 0.00 | 27.85 |
| 020053 | 1 | 0.00 | 27.85 |
| 020054 | 1 | 0.00 | 27.85 |
| 020060 | 300 | 0.29 | 28.14 |
| 020060010 | 31 | 0.03 | 28.17 |
| 020060020 | 18 | 0.02 | 28.19 |
| 020060020010 | 11 | 0.01 | 28.20 |
| 020060020020010 | 2 | 0.00 | 28.20 |
| 020060020020020 | 2 | 0.00 | 28.20 |
| 020060020020030 | 1 | 0.00 | 28.20 |
| 020060020020040 | 1 | 0.00 | 28.20 |
| 020060020020050 | 1 | 0.00 | 28.20 |
| 020060030 | 10 | 0.01 | 28.21 |
| 020060030010 | 2 | 0.00 | 28.22 |
| 020060030020 | 2 | 0.00 | 28.22 |
| 020060030030 | 12 | 0.01 | 28.23 |
| 020060030040 | 6 | 0.01 | 28.24 |
| 020060030050 | 1 | 0.00 | 28.24 |
| 020060040 | 9 | 0.01 | 28.24 |
| 020060050 | 4 | 0.00 | 28.25 |
| 020060050010 | 2 | 0.00 | 28.25 |
| 020060050020 | 14 | 0.01 | 28.26 |
| 020060060 | 6 | 0.01 | 28.27 |
| 020060070 | 9 | 0.01 | 28.28 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|-----|----------------|--------------|
| 020060080010 | 5 | 0.00 | 28.28 |
| 020060080020 | 14 | 0.01 | 28.30 |
| 020060090 | 11 | 0.01 | 28.31 |
| 020060100 | 1 | 0.00 | 28.31 |
| 020060110 | 3 | 0.00 | 28.31 |
| 020060220 | 1 | 0.00 | 28.31 |
| 020060230 | 2 | 0.00 | 28.31 |
| 020061 | 3 | 0.00 | 28.32 |
| 020070 | 207 | 0.20 | 28.51 |
| 020070010 | 17 | 0.02 | 28.53 |
| 020070020 | 5 | 0.00 | 28.54 |
| 020070020010 | 10 | 0.01 | 28.54 |
| 020070020020 | 23 | 0.02 | 28.57 |
| 020070020020010 | 1 | 0.00 | 28.57 |
| 020070020020020 | 1 | 0.00 | 28.57 |
| 020070020030010 | 15 | 0.01 | 28.58 |
| 020070020030020010 | 3 | 0.00 | 28.59 |
| 020070020030020020 | 6 | 0.01 | 28.59 |
| 020070020030020030 | 1 | 0.00 | 28.59 |
| 020070020030020040 | 2 | 0.00 | 28.59 |
| 020070020030020050 | 1 | 0.00 | 28.60 |
| 020070020030030 | 1 | 0.00 | 28.60 |
| 020070020040 | 1 | 0.00 | 28.60 |
| 020070020050 | 2 | 0.00 | 28.60 |
| 020070020060 | 5 | 0.00 | 28.60 |
| 020070020069 | 1 | 0.00 | 28.60 |
| 020070020070 | 3 | 0.00 | 28.61 |
| 020070020080 | 1 | 0.00 | 28.61 |
| 020070020090 | 1 | 0.00 | 28.61 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|-----|----------------|--------------|
| 020070030 | 4 | 0.00 | 28.61 |
| 020070030010 | 10 | 0.01 | 28.62 |
| 020070030020 | 6 | 0.01 | 28.63 |
| 020070030030 | 14 | 0.01 | 28.64 |
| 020070030040 | 3 | 0.00 | 28.65 |
| 020070030050 | 1 | 0.00 | 28.65 |
| 020070040 | 5 | 0.00 | 28.65 |
| 020070240 | 1 | 0.00 | 28.65 |
| 020080 | 139 | 0.13 | 28.78 |
| 020080010 | 5 | 0.00 | 28.79 |
| 020080010010 | 24 | 0.02 | 28.81 |
| 020080010020010 | 2 | 0.00 | 28.81 |
| 020080010020020 | 7 | 0.01 | 28.82 |
| 020080010020030 | 11 | 0.01 | 28.83 |
| 020080010030 | 11 | 0.01 | 28.84 |
| 020080010040 | 1 | 0.00 | 28.84 |
| 020080020 | 18 | 0.02 | 28.86 |
| 020080030 | 3 | 0.00 | 28.86 |
| 020080030010010 | 3 | 0.00 | 28.87 |
| 020080030010020 | 24 | 0.02 | 28.89 |
| 020080030020 | 3 | 0.00 | 28.89 |
| 020080030030 | 1 | 0.00 | 28.89 |
| 020080030040 | 1 | 0.00 | 28.89 |
| 020080030050 | 2 | 0.00 | 28.90 |
| 020080030060 | 2 | 0.00 | 28.90 |
| 020080040 | 22 | 0.02 | 28.92 |
| 020080050 | 1 | 0.00 | 28.92 |
| 020080050010 | 20 | 0.02 | 28.94 |
| 020080050020010 | 7 | 0.01 | 28.94 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|----|----------------|--------------|
| 020080050020011 | 6 | 0.01 | 28.95 |
| 020080050020020010 | 4 | 0.00 | 28.95 |
| 020080050020020011 | 4 | 0.00 | 28.96 |
| 020080050020020020 | 17 | 0.02 | 28.97 |
| 020080050020030 | 5 | 0.00 | 28.98 |
| 020080050020040 | 14 | 0.01 | 28.99 |
| 020080050020050010 | 5 | 0.00 | 29.00 |
| 020080050020050020 | 9 | 0.01 | 29.01 |
| 020080050020050030 | 2 | 0.00 | 29.01 |
| 020080050020050040 | 3 | 0.00 | 29.01 |
| 020080050020060 | 2 | 0.00 | 29.01 |
| 020080050030 | 6 | 0.01 | 29.02 |
| 020080050040 | 8 | 0.01 | 29.03 |
| 020080050050 | 31 | 0.03 | 29.06 |
| 020080060 | 10 | 0.01 | 29.07 |
| 020080070 | 7 | 0.01 | 29.07 |
| 020080080 | 3 | 0.00 | 29.07 |
| 020080080010 | 24 | 0.02 | 29.10 |
| 020080080020 | 8 | 0.01 | 29.11 |
| 020080090010010 | 25 | 0.02 | 29.13 |
| 020080090010020 | 8 | 0.01 | 29.14 |
| 020080090010030 | 6 | 0.01 | 29.14 |
| 020080090010040 | 1 | 0.00 | 29.14 |
| 020080090020 | 5 | 0.00 | 29.15 |
| 020080090030 | 2 | 0.00 | 29.15 |
| 020080090040 | 25 | 0.02 | 29.17 |
| 020080100010 | 4 | 0.00 | 29.18 |
| 020080100020 | 5 | 0.00 | 29.18 |
| 020080100030 | 1 | 0.00 | 29.18 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|----|----------------|--------------|
| 020080100040 | 4 | 0.00 | 29.19 |
| 020080110 | 6 | 0.01 | 29.19 |
| 020080120010 | 13 | 0.01 | 29.21 |
| 020080120020 | 3 | 0.00 | 29.21 |
| 020080120030010 | 3 | 0.00 | 29.21 |
| 020080120030020 | 4 | 0.00 | 29.22 |
| 020080120030030010 | 4 | 0.00 | 29.22 |
| 020080120030030020 | 7 | 0.01 | 29.23 |
| 020080120030030030 | 10 | 0.01 | 29.24 |
| 020080130 | 11 | 0.01 | 29.25 |
| 020080140 | 13 | 0.01 | 29.26 |
| 020080150 | 5 | 0.00 | 29.26 |
| 020080160010 | 1 | 0.00 | 29.26 |
| 020080160020010 | 6 | 0.01 | 29.27 |
| 020080160020020 | 15 | 0.01 | 29.28 |
| 020080160020030 | 6 | 0.01 | 29.29 |
| 020080160020040 | 8 | 0.01 | 29.30 |
| 020080160020050 | 6 | 0.01 | 29.30 |
| 020080160020060 | 9 | 0.01 | 29.31 |
| 020080160030 | 4 | 0.00 | 29.32 |
| 020080170 | 18 | 0.02 | 29.33 |
| 020080180 | 3 | 0.00 | 29.34 |
| 020080190 | 3 | 0.00 | 29.34 |
| 020080200 | 14 | 0.01 | 29.35 |
| 020080210 | 1 | 0.00 | 29.35 |
| 020080220 | 3 | 0.00 | 29.36 |
| 020080230 | 10 | 0.01 | 29.37 |
| 020080240 | 16 | 0.02 | 29.38 |
| 020080250 | 4 | 0.00 | 29.38 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|-----|----------------|--------------|
| 020080260 | 11 | 0.01 | 29.39 |
| 020080270 | 32 | 0.03 | 29.43 |
| 020090 | 107 | 0.10 | 29.53 |
| 020090010 | 15 | 0.01 | 29.54 |
| 020090020 | 3 | 0.00 | 29.54 |
| 020090030 | 12 | 0.01 | 29.56 |
| 020100 | 71 | 0.07 | 29.62 |
| 020100010 | 8 | 0.01 | 29.63 |
| 020100020 | 7 | 0.01 | 29.64 |
| 020100030 | 3 | 0.00 | 29.64 |
| 020100040 | 2 | 0.00 | 29.64 |
| 020110 | 94 | 0.09 | 29.73 |
| 020110010 | 1 | 0.00 | 29.73 |
| 020110020 | 2 | 0.00 | 29.74 |
| 020110030 | 2 | 0.00 | 29.74 |
| 020110040 | 2 | 0.00 | 29.74 |
| 020110050 | 3 | 0.00 | 29.74 |
| 020120 | 50 | 0.05 | 29.79 |
| 020120010 | 1 | 0.00 | 29.79 |
| 020120020 | 3 | 0.00 | 29.79 |
| 020120030 | 3 | 0.00 | 29.80 |
| 020130 | 73 | 0.07 | 29.87 |
| 020140 | 76 | 0.07 | 29.94 |
| 020150 | 42 | 0.04 | 29.98 |
| 020160 | 52 | 0.05 | 30.03 |
| 020170 | 39 | 0.04 | 30.07 |
| 020180 | 49 | 0.05 | 30.11 |
| 020190 | 40 | 0.04 | 30.15 |
| 020200 | 37 | 0.04 | 30.19 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|------|----------------|--------------|
| 020210 | 37 | 0.04 | 30.22 |
| 020220 | 42 | 0.04 | 30.26 |
| 020230 | 46 | 0.04 | 30.31 |
| 020240 | 34 | 0.03 | 30.34 |
| 020250 | 43 | 0.04 | 30.38 |
| 020260 | 35 | 0.03 | 30.41 |
| 020270 | 36 | 0.03 | 30.45 |
| 020280 | 37 | 0.04 | 30.48 |
| 020290 | 13 | 0.01 | 30.49 |
| 020300 | 25 | 0.02 | 30.52 |
| 021 | 32 | 0.03 | 30.55 |
| 022 | 3 | 0.00 | 30.55 |
| 030 | 5594 | 5.34 | 35.89 |
| 030000550 | 1 | 0.00 | 35.90 |
| 030000560 | 1 | 0.00 | 35.90 |
| 030000590 | 1 | 0.00 | 35.90 |
| 030000600 | 1 | 0.00 | 35.90 |
| 030000610 | 1 | 0.00 | 35.90 |
| 030000620 | 1 | 0.00 | 35.90 |
| 030000630 | 1 | 0.00 | 35.90 |
| 030000640 | 1 | 0.00 | 35.90 |
| 030000660 | 1 | 0.00 | 35.90 |
| 030000670 | 1 | 0.00 | 35.90 |
| 030000680 | 1 | 0.00 | 35.91 |
| 030000690 | 1 | 0.00 | 35.91 |
| 030000730 | 1 | 0.00 | 35.91 |
| 030000740 | 1 | 0.00 | 35.91 |
| 030000760 | 1 | 0.00 | 35.91 |
| 030000770 | 1 | 0.00 | 35.91 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|---|----------------|--------------|
| 030000780 | 1 | 0.00 | 35.91 |
| 030000790 | 1 | 0.00 | 35.91 |
| 030000800 | 1 | 0.00 | 35.91 |
| 030000810 | 1 | 0.00 | 35.91 |
| 030000820 | 1 | 0.00 | 35.91 |
| 030000830 | 1 | 0.00 | 35.92 |
| 030000840 | 1 | 0.00 | 35.92 |
| 030000850 | 1 | 0.00 | 35.92 |
| 030000860 | 1 | 0.00 | 35.92 |
| 030000890 | 1 | 0.00 | 35.92 |
| 030000900 | 1 | 0.00 | 35.92 |
| 030000910 | 1 | 0.00 | 35.92 |
| 030000930 | 1 | 0.00 | 35.92 |
| 030000940 | 1 | 0.00 | 35.92 |
| 030000960 | 1 | 0.00 | 35.92 |
| 030000970 | 1 | 0.00 | 35.93 |
| 030000980 | 1 | 0.00 | 35.93 |
| 030000990 | 1 | 0.00 | 35.93 |
| 030001000 | 1 | 0.00 | 35.93 |
| 030001010 | 1 | 0.00 | 35.93 |
| 030001020 | 1 | 0.00 | 35.93 |
| 030001040 | 1 | 0.00 | 35.93 |
| 030001050 | 1 | 0.00 | 35.93 |
| 030001060 | 1 | 0.00 | 35.93 |
| 030001070 | 1 | 0.00 | 35.93 |
| 030001080 | 1 | 0.00 | 35.93 |
| 030001090 | 1 | 0.00 | 35.94 |
| 030001100 | 1 | 0.00 | 35.94 |
| 030001110 | 1 | 0.00 | 35.94 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|---|----------------|--------------|
| 030001120 | 1 | 0.00 | 35.94 |
| 030001130 | 1 | 0.00 | 35.94 |
| 030001140 | 1 | 0.00 | 35.94 |
| 030001150 | 1 | 0.00 | 35.94 |
| 030001160 | 1 | 0.00 | 35.94 |
| 030001170 | 1 | 0.00 | 35.94 |
| 030001180 | 1 | 0.00 | 35.94 |
| 030001190 | 1 | 0.00 | 35.95 |
| 030001200 | 1 | 0.00 | 35.95 |
| 030001210 | 1 | 0.00 | 35.95 |
| 030001220 | 1 | 0.00 | 35.95 |
| 030001230 | 1 | 0.00 | 35.95 |
| 030001240 | 1 | 0.00 | 35.95 |
| 030001250 | 1 | 0.00 | 35.95 |
| 030001260 | 1 | 0.00 | 35.95 |
| 030001270 | 1 | 0.00 | 35.95 |
| 030001280 | 1 | 0.00 | 35.95 |
| 030001290 | 1 | 0.00 | 35.95 |
| 030001300 | 1 | 0.00 | 35.96 |
| 030001310 | 1 | 0.00 | 35.96 |
| 030001320 | 1 | 0.00 | 35.96 |
| 030001330 | 1 | 0.00 | 35.96 |
| 030001370 | 1 | 0.00 | 35.96 |
| 030001380 | 1 | 0.00 | 35.96 |
| 030001390 | 1 | 0.00 | 35.96 |
| 030001400 | 1 | 0.00 | 35.96 |
| 030001430 | 1 | 0.00 | 35.96 |
| 030001440 | 1 | 0.00 | 35.96 |
| 030001470 | 1 | 0.00 | 35.97 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|------|----------------|--------------|
| 030001520 | 1 | 0.00 | 35.97 |
| 030010 | 1242 | 1.19 | 37.15 |
| 030010010 | 126 | 0.12 | 37.27 |
| 030010020 | 116 | 0.11 | 37.38 |
| 030010020010 | 4 | 0.00 | 37.39 |
| 030010020020 | 6 | 0.01 | 37.39 |
| 030010020030 | 6 | 0.01 | 37.40 |
| 030010030 | 73 | 0.07 | 37.47 |
| 030010030010 | 18 | 0.02 | 37.49 |
| 030010030020 | 8 | 0.01 | 37.49 |
| 030010030030 | 4 | 0.00 | 37.50 |
| 030010030040 | 6 | 0.01 | 37.50 |
| 030010030050 | 1 | 0.00 | 37.50 |
| 030010031 | 5 | 0.00 | 37.51 |
| 030010040 | 35 | 0.03 | 37.54 |
| 030010040010 | 16 | 0.02 | 37.56 |
| 030010040020 | 5 | 0.00 | 37.56 |
| 030010040030 | 2 | 0.00 | 37.56 |
| 030010050 | 20 | 0.02 | 37.58 |
| 030010060 | 10 | 0.01 | 37.59 |
| 030010070 | 3 | 0.00 | 37.60 |
| 030010080 | 3 | 0.00 | 37.60 |
| 030010150 | 3 | 0.00 | 37.60 |
| 030020 | 1102 | 1.05 | 38.65 |
| 030020010 | 129 | 0.12 | 38.78 |
| 030020010010 | 11 | 0.01 | 38.79 |
| 030020010020 | 13 | 0.01 | 38.80 |
| 030020010030 | 6 | 0.01 | 38.81 |
| 030020010050 | 4 | 0.00 | 38.81 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|-----|----------------|--------------|
| 030020010060 | 7 | 0.01 | 38.82 |
| 030020020 | 142 | 0.14 | 38.95 |
| 030020020010 | 4 | 0.00 | 38.96 |
| 030020020020 | 2 | 0.00 | 38.96 |
| 030020020030 | 3 | 0.00 | 38.96 |
| 030020020040 | 7 | 0.01 | 38.97 |
| 030020020050 | 3 | 0.00 | 38.97 |
| 030020020060 | 1 | 0.00 | 38.97 |
| 030020020070 | 2 | 0.00 | 38.97 |
| 030020020080 | 2 | 0.00 | 38.97 |
| 030020020090 | 5 | 0.00 | 38.98 |
| 030020020100 | 1 | 0.00 | 38.98 |
| 030020030 | 92 | 0.09 | 39.07 |
| 030020040 | 31 | 0.03 | 39.10 |
| 030020050 | 21 | 0.02 | 39.12 |
| 030020060 | 10 | 0.01 | 39.13 |
| 030020060010 | 6 | 0.01 | 39.13 |
| 030020060020 | 4 | 0.00 | 39.14 |
| 030020070 | 4 | 0.00 | 39.14 |
| 030020070010 | 1 | 0.00 | 39.14 |
| 030020070020 | 5 | 0.00 | 39.15 |
| 030020070030 | 3 | 0.00 | 39.15 |
| 030020080 | 9 | 0.01 | 39.16 |
| 030020090 | 6 | 0.01 | 39.16 |
| 030020170 | 2 | 0.00 | 39.17 |
| 030020180 | 2 | 0.00 | 39.17 |
| 030020190 | 12 | 0.01 | 39.18 |
| 030021 | 2 | 0.00 | 39.18 |
| 030030 | 691 | 0.66 | 39.84 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|-----|----------------|--------------|
| 030030010 | 111 | 0.11 | 39.95 |
| 030030020 | 91 | 0.09 | 40.03 |
| 030030030 | 40 | 0.04 | 40.07 |
| 030030030010 | 10 | 0.01 | 40.08 |
| 030030030020 | 9 | 0.01 | 40.09 |
| 030030030030 | 7 | 0.01 | 40.10 |
| 030030030040 | 5 | 0.00 | 40.10 |
| 030030030050 | 7 | 0.01 | 40.11 |
| 030030030060 | 20 | 0.02 | 40.13 |
| 030030040 | 40 | 0.04 | 40.17 |
| 030030050 | 17 | 0.02 | 40.18 |
| 030030060 | 4 | 0.00 | 40.19 |
| 030030070 | 4 | 0.00 | 40.19 |
| 030030270 | 2 | 0.00 | 40.19 |
| 030030280 | 2 | 0.00 | 40.19 |
| 030030290 | 5 | 0.00 | 40.20 |
| 030030330 | 4 | 0.00 | 40.20 |
| 030031 | 10 | 0.01 | 40.21 |
| 030032 | 7 | 0.01 | 40.22 |
| 030033 | 3 | 0.00 | 40.22 |
| 030040 | 384 | 0.37 | 40.59 |
| 030040010 | 41 | 0.04 | 40.63 |
| 030040010010 | 1 | 0.00 | 40.63 |
| 030040010020 | 4 | 0.00 | 40.63 |
| 030040010030 | 3 | 0.00 | 40.63 |
| 030040010040 | 1 | 0.00 | 40.64 |
| 030040010050 | 2 | 0.00 | 40.64 |
| 030040010060 | 1 | 0.00 | 40.64 |
| 030040010070 | 1 | 0.00 | 40.64 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|-----|----------------|--------------|
| 030040010080 | 3 | 0.00 | 40.64 |
| 030040020 | 40 | 0.04 | 40.68 |
| 030040020010 | 44 | 0.04 | 40.72 |
| 030040020020 | 18 | 0.02 | 40.74 |
| 030040020030 | 8 | 0.01 | 40.75 |
| 030040020040 | 4 | 0.00 | 40.75 |
| 030040020050 | 2 | 0.00 | 40.75 |
| 030040020060 | 1 | 0.00 | 40.75 |
| 030040020070 | 1 | 0.00 | 40.75 |
| 030040020080 | 4 | 0.00 | 40.76 |
| 030040030 | 8 | 0.01 | 40.77 |
| 030040030010 | 2 | 0.00 | 40.77 |
| 030040030020 | 5 | 0.00 | 40.77 |
| 030040030030 | 2 | 0.00 | 40.77 |
| 030040040 | 16 | 0.02 | 40.79 |
| 030040040010 | 2 | 0.00 | 40.79 |
| 030040040020 | 5 | 0.00 | 40.80 |
| 030040040030 | 6 | 0.01 | 40.80 |
| 030040040040 | 2 | 0.00 | 40.80 |
| 030040040050 | 2 | 0.00 | 40.81 |
| 030040050 | 2 | 0.00 | 40.81 |
| 030040100 | 2 | 0.00 | 40.81 |
| 030041 | 2 | 0.00 | 40.81 |
| 030050 | 205 | 0.20 | 41.01 |
| 030050010 | 56 | 0.05 | 41.06 |
| 030050020 | 34 | 0.03 | 41.09 |
| 030050030 | 11 | 0.01 | 41.10 |
| 030050040 | 7 | 0.01 | 41.11 |
| 030050050 | 3 | 0.00 | 41.11 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|-----|----------------|--------------|
| 030060 | 135 | 0.13 | 41.24 |
| 030060010010 | 6 | 0.01 | 41.25 |
| 030060010020 | 3 | 0.00 | 41.25 |
| 030060010030 | 4 | 0.00 | 41.26 |
| 030060010040 | 1 | 0.00 | 41.26 |
| 030060010050 | 1 | 0.00 | 41.26 |
| 030060010060 | 1 | 0.00 | 41.26 |
| 030060020 | 3 | 0.00 | 41.26 |
| 030070 | 75 | 0.07 | 41.33 |
| 030070010 | 83 | 0.08 | 41.41 |
| 030070010010 | 4 | 0.00 | 41.42 |
| 030070010020 | 3 | 0.00 | 41.42 |
| 030070020 | 11 | 0.01 | 41.43 |
| 030070020010 | 8 | 0.01 | 41.44 |
| 030070020020 | 5 | 0.00 | 41.44 |
| 030070030 | 3 | 0.00 | 41.44 |
| 030070030010 | 2 | 0.00 | 41.45 |
| 030070030020 | 8 | 0.01 | 41.45 |
| 030070030030 | 2 | 0.00 | 41.46 |
| 030070030040 | 1 | 0.00 | 41.46 |
| 030070040 | 6 | 0.01 | 41.46 |
| 030080 | 38 | 0.04 | 41.50 |
| 030080010 | 56 | 0.05 | 41.55 |
| 030080020 | 24 | 0.02 | 41.58 |
| 030081 | 2 | 0.00 | 41.58 |
| 030090 | 57 | 0.05 | 41.63 |
| 030100 | 47 | 0.04 | 41.68 |
| 030100010 | 6 | 0.01 | 41.68 |
| 030100020 | 4 | 0.00 | 41.69 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|------|----------------|--------------|
| 030100030 | 4 | 0.00 | 41.69 |
| 030110 | 29 | 0.03 | 41.72 |
| 030120 | 36 | 0.03 | 41.75 |
| 030130 | 31 | 0.03 | 41.78 |
| 030130010 | 13 | 0.01 | 41.79 |
| 030130020 | 12 | 0.01 | 41.81 |
| 030130030 | 2 | 0.00 | 41.81 |
| 030130040 | 2 | 0.00 | 41.81 |
| 030140 | 26 | 0.02 | 41.83 |
| 030150 | 47 | 0.04 | 41.88 |
| 030160 | 1 | 0.00 | 41.88 |
| 030170 | 6 | 0.01 | 41.89 |
| 030180 | 4 | 0.00 | 41.89 |
| 030190 | 10 | 0.01 | 41.90 |
| 030220 | 1 | 0.00 | 41.90 |
| 030260 | 1 | 0.00 | 41.90 |
| 030280 | 15 | 0.01 | 41.92 |
| 030970 | 62 | 0.06 | 41.97 |
| 030971 | 5 | 0.00 | 41.98 |
| 030980 | 1 | 0.00 | 41.98 |
| 030990 | 1 | 0.00 | 41.98 |
| 030991 | 1 | 0.00 | 41.98 |
| 030992 | 1 | 0.00 | 41.98 |
| 030993 | 1 | 0.00 | 41.98 |
| 031 | 20 | 0.02 | 42.00 |
| 040 | 4404 | 4.21 | 46.21 |
| 040001570 | 1 | 0.00 | 46.21 |
| 040001630 | 1 | 0.00 | 46.21 |
| 040001640 | 1 | 0.00 | 46.21 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|---|----------------|--------------|
| 040001650 | 1 | 0.00 | 46.21 |
| 040001660 | 1 | 0.00 | 46.21 |
| 040001670 | 1 | 0.00 | 46.21 |
| 040001680 | 1 | 0.00 | 46.22 |
| 040001690 | 1 | 0.00 | 46.22 |
| 040001700 | 1 | 0.00 | 46.22 |
| 040001710 | 1 | 0.00 | 46.22 |
| 040001720 | 1 | 0.00 | 46.22 |
| 040001730 | 1 | 0.00 | 46.22 |
| 040001740 | 1 | 0.00 | 46.22 |
| 040001750 | 1 | 0.00 | 46.22 |
| 040001760 | 1 | 0.00 | 46.22 |
| 040001770 | 1 | 0.00 | 46.22 |
| 040001780 | 1 | 0.00 | 46.23 |
| 040001790 | 1 | 0.00 | 46.23 |
| 040001800 | 1 | 0.00 | 46.23 |
| 040001810 | 1 | 0.00 | 46.23 |
| 040001820 | 1 | 0.00 | 46.23 |
| 040001830 | 1 | 0.00 | 46.23 |
| 040001840 | 1 | 0.00 | 46.23 |
| 040001850 | 1 | 0.00 | 46.23 |
| 040001860 | 1 | 0.00 | 46.23 |
| 040001870 | 1 | 0.00 | 46.23 |
| 040001880 | 1 | 0.00 | 46.23 |
| 040001890 | 1 | 0.00 | 46.24 |
| 040001900 | 1 | 0.00 | 46.24 |
| 040001910 | 1 | 0.00 | 46.24 |
| 040001920 | 1 | 0.00 | 46.24 |
| 040001930 | 1 | 0.00 | 46.24 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|-----|----------------|--------------|
| 040001940 | 1 | 0.00 | 46.24 |
| 040001950 | 1 | 0.00 | 46.24 |
| 040001960 | 1 | 0.00 | 46.24 |
| 040001970 | 1 | 0.00 | 46.24 |
| 040001980 | 1 | 0.00 | 46.24 |
| 040001990 | 1 | 0.00 | 46.25 |
| 040002000 | 1 | 0.00 | 46.25 |
| 040002010 | 1 | 0.00 | 46.25 |
| 040002020 | 1 | 0.00 | 46.25 |
| 040002030 | 1 | 0.00 | 46.25 |
| 040002070 | 1 | 0.00 | 46.25 |
| 040002080 | 1 | 0.00 | 46.25 |
| 040002090 | 1 | 0.00 | 46.25 |
| 040002100 | 1 | 0.00 | 46.25 |
| 040002120 | 1 | 0.00 | 46.25 |
| 040002130 | 1 | 0.00 | 46.25 |
| 040002140 | 1 | 0.00 | 46.26 |
| 040002150 | 1 | 0.00 | 46.26 |
| 040002170 | 1 | 0.00 | 46.26 |
| 040002180 | 1 | 0.00 | 46.26 |
| 040010 | 578 | 0.55 | 46.81 |
| 040010010 | 57 | 0.05 | 46.87 |
| 040010020 | 78 | 0.07 | 46.94 |
| 040010020010 | 7 | 0.01 | 46.95 |
| 040010020020 | 20 | 0.02 | 46.97 |
| 040010020030 | 1 | 0.00 | 46.97 |
| 040010020040 | 3 | 0.00 | 46.97 |
| 040010030 | 30 | 0.03 | 47.00 |
| 040010030010 | 8 | 0.01 | 47.01 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|-----|----------------|--------------|
| 040010030020 | 4 | 0.00 | 47.01 |
| 040010030030 | 7 | 0.01 | 47.02 |
| 040010040 | 19 | 0.02 | 47.03 |
| 040010050 | 27 | 0.03 | 47.06 |
| 040010060 | 1 | 0.00 | 47.06 |
| 040010060010 | 28 | 0.03 | 47.09 |
| 040010060020010 | 6 | 0.01 | 47.09 |
| 040010060020020 | 1 | 0.00 | 47.09 |
| 040010060020030010 | 7 | 0.01 | 47.10 |
| 040010060020030020 | 28 | 0.03 | 47.13 |
| 040010060020030030 | 20 | 0.02 | 47.15 |
| 040010060020030040 | 12 | 0.01 | 47.16 |
| 040010060020030050 | 36 | 0.03 | 47.19 |
| 040010060020040 | 1 | 0.00 | 47.19 |
| 040010070 | 1 | 0.00 | 47.19 |
| 040010070010 | 5 | 0.00 | 47.20 |
| 040010070011 | 2 | 0.00 | 47.20 |
| 040010070020010 | 1 | 0.00 | 47.20 |
| 040010070020020 | 13 | 0.01 | 47.21 |
| 040010070020030 | 4 | 0.00 | 47.22 |
| 040010070020040 | 4 | 0.00 | 47.22 |
| 040010070020050 | 3 | 0.00 | 47.23 |
| 040010070030 | 1 | 0.00 | 47.23 |
| 040010080 | 3 | 0.00 | 47.23 |
| 040020 | 480 | 0.46 | 47.69 |
| 040020010 | 154 | 0.15 | 47.83 |
| 040020010010 | 7 | 0.01 | 47.84 |
| 040020010020 | 13 | 0.01 | 47.85 |
| 040020010030 | 8 | 0.01 | 47.86 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|-----|----------------|--------------|
| 040020010040 | 11 | 0.01 | 47.87 |
| 040020010050 | 6 | 0.01 | 47.88 |
| 040020010060 | 7 | 0.01 | 47.88 |
| 040020010070 | 4 | 0.00 | 47.89 |
| 040020010080 | 1 | 0.00 | 47.89 |
| 040020020 | 128 | 0.12 | 48.01 |
| 040020020010 | 29 | 0.03 | 48.04 |
| 040020020020 | 8 | 0.01 | 48.05 |
| 040020020030 | 12 | 0.01 | 48.06 |
| 040020020040 | 15 | 0.01 | 48.07 |
| 040020020050 | 7 | 0.01 | 48.08 |
| 040020030 | 69 | 0.07 | 48.14 |
| 040020030010 | 28 | 0.03 | 48.17 |
| 040020030020 | 5 | 0.00 | 48.18 |
| 040020030030 | 3 | 0.00 | 48.18 |
| 040020030040 | 1 | 0.00 | 48.18 |
| 040020040 | 58 | 0.06 | 48.24 |
| 040020050 | 82 | 0.08 | 48.31 |
| 040020060 | 16 | 0.02 | 48.33 |
| 040020070 | 12 | 0.01 | 48.34 |
| 040020070010 | 27 | 0.03 | 48.37 |
| 040020070020 | 6 | 0.01 | 48.37 |
| 040020080 | 7 | 0.01 | 48.38 |
| 040020090 | 5 | 0.00 | 48.38 |
| 040021 | 6 | 0.01 | 48.39 |
| 040022 | 1 | 0.00 | 48.39 |
| 040030 | 431 | 0.41 | 48.80 |
| 040030010 | 43 | 0.04 | 48.84 |
| 040030010010 | 15 | 0.01 | 48.86 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|----|----------------|--------------|
| 040030010010010010 | 5 | 0.00 | 48.86 |
| 040030010010010020 | 8 | 0.01 | 48.87 |
| 040030010010020 | 2 | 0.00 | 48.87 |
| 040030010020 | 4 | 0.00 | 48.88 |
| 040030010020010 | 7 | 0.01 | 48.88 |
| 040030010020020 | 3 | 0.00 | 48.89 |
| 040030010020030 | 4 | 0.00 | 48.89 |
| 040030010030 | 11 | 0.01 | 48.90 |
| 040030010040 | 5 | 0.00 | 48.90 |
| 040030010050 | 1 | 0.00 | 48.91 |
| 040030020 | 46 | 0.04 | 48.95 |
| 040030020010 | 10 | 0.01 | 48.96 |
| 040030020020 | 2 | 0.00 | 48.96 |
| 040030030 | 36 | 0.03 | 48.99 |
| 040030030010 | 7 | 0.01 | 49.00 |
| 040030030020010 | 6 | 0.01 | 49.01 |
| 040030030020020 | 8 | 0.01 | 49.01 |
| 040030030020030010 | 3 | 0.00 | 49.02 |
| 040030030020030020 | 8 | 0.01 | 49.03 |
| 040030030020030030 | 2 | 0.00 | 49.03 |
| 040030030020030040 | 7 | 0.01 | 49.03 |
| 040030030020030050 | 4 | 0.00 | 49.04 |
| 040030030020030060 | 2 | 0.00 | 49.04 |
| 040030030030 | 7 | 0.01 | 49.05 |
| 040030030040 | 7 | 0.01 | 49.05 |
| 040030030050 | 7 | 0.01 | 49.06 |
| 040030040 | 18 | 0.02 | 49.08 |
| 040030040010 | 1 | 0.00 | 49.08 |
| 040030040020 | 1 | 0.00 | 49.08 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|-----|----------------|--------------|
| 040030050 | 2 | 0.00 | 49.08 |
| 040030060 | 1 | 0.00 | 49.08 |
| 040030070 | 1 | 0.00 | 49.08 |
| 040040 | 227 | 0.22 | 49.30 |
| 040040010 | 81 | 0.08 | 49.38 |
| 040040020 | 25 | 0.02 | 49.40 |
| 040040030 | 7 | 0.01 | 49.41 |
| 040040040 | 4 | 0.00 | 49.41 |
| 040040050 | 5 | 0.00 | 49.42 |
| 040050 | 121 | 0.12 | 49.53 |
| 040050010 | 5 | 0.00 | 49.54 |
| 040050020 | 3 | 0.00 | 49.54 |
| 040050030 | 7 | 0.01 | 49.55 |
| 040060 | 59 | 0.06 | 49.60 |
| 040060010 | 6 | 0.01 | 49.61 |
| 040060020 | 4 | 0.00 | 49.61 |
| 040070 | 14 | 0.01 | 49.63 |
| 040080 | 30 | 0.03 | 49.65 |
| 040090 | 37 | 0.04 | 49.69 |
| 040100 | 17 | 0.02 | 49.71 |
| 040110 | 11 | 0.01 | 49.72 |
| 040120 | 6 | 0.01 | 49.72 |
| 040130 | 5 | 0.00 | 49.73 |
| 040140 | 2 | 0.00 | 49.73 |
| 040160 | 14 | 0.01 | 49.74 |
| 040170 | 6 | 0.01 | 49.75 |
| 040190 | 1 | 0.00 | 49.75 |
| 040200 | 20 | 0.02 | 49.77 |
| 040390 | 1 | 0.00 | 49.77 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|------|----------------|--------------|
| 040400 | 8 | 0.01 | 49.78 |
| 040410 | 1 | 0.00 | 49.78 |
| 040420 | 1 | 0.00 | 49.78 |
| 040430 | 1 | 0.00 | 49.78 |
| 040440 | 1 | 0.00 | 49.78 |
| 040450 | 1 | 0.00 | 49.78 |
| 040460 | 1 | 0.00 | 49.78 |
| 040470 | 1 | 0.00 | 49.78 |
| 040480 | 1 | 0.00 | 49.78 |
| 040500 | 1 | 0.00 | 49.78 |
| 040510 | 1 | 0.00 | 49.79 |
| 040520 | 1 | 0.00 | 49.79 |
| 041 | 40 | 0.04 | 49.82 |
| 041010 | 9 | 0.01 | 49.83 |
| 041020 | 5 | 0.00 | 49.84 |
| 041030 | 2 | 0.00 | 49.84 |
| 041040 | 10 | 0.01 | 49.85 |
| 041451 | 3 | 0.00 | 49.85 |
| 041452 | 3 | 0.00 | 49.86 |
| 041454 | 14 | 0.01 | 49.87 |
| 042 | 2 | 0.00 | 49.87 |
| 042010 | 1 | 0.00 | 49.87 |
| 042020 | 9 | 0.01 | 49.88 |
| 042030 | 1 | 0.00 | 49.88 |
| 042040 | 11 | 0.01 | 49.89 |
| 050 | 3236 | 3.09 | 52.98 |
| 050002190 | 1 | 0.00 | 52.98 |
| 050002200 | 1 | 0.00 | 52.98 |
| 050002210 | 1 | 0.00 | 52.98 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|-----|----------------|--------------|
| 050002220 | 1 | 0.00 | 52.99 |
| 050002230 | 1 | 0.00 | 52.99 |
| 050002231 | 1 | 0.00 | 52.99 |
| 050002240 | 3 | 0.00 | 52.99 |
| 050002250 | 1 | 0.00 | 52.99 |
| 050002260 | 1 | 0.00 | 52.99 |
| 050002270 | 1 | 0.00 | 52.99 |
| 050002280 | 1 | 0.00 | 52.99 |
| 050002290 | 67 | 0.06 | 53.06 |
| 050010 | 357 | 0.34 | 53.40 |
| 050010010 | 45 | 0.04 | 53.44 |
| 050010020 | 54 | 0.05 | 53.49 |
| 050010030 | 18 | 0.02 | 53.51 |
| 050010040 | 47 | 0.04 | 53.56 |
| 050010050 | 30 | 0.03 | 53.58 |
| 050010050010 | 1 | 0.00 | 53.59 |
| 050010050020 | 1 | 0.00 | 53.59 |
| 050010050030 | 2 | 0.00 | 53.59 |
| 050010050040 | 2 | 0.00 | 53.59 |
| 050010060 | 5 | 0.00 | 53.60 |
| 050010070 | 3 | 0.00 | 53.60 |
| 050010080 | 4 | 0.00 | 53.60 |
| 050010090 | 5 | 0.00 | 53.61 |
| 050010100010 | 3 | 0.00 | 53.61 |
| 050010100020 | 3 | 0.00 | 53.61 |
| 050010100030 | 1 | 0.00 | 53.61 |
| 050010110010 | 1 | 0.00 | 53.61 |
| 050010110020 | 19 | 0.02 | 53.63 |
| 050010110030 | 14 | 0.01 | 53.65 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|-----|----------------|--------------|
| 050010110040 | 8 | 0.01 | 53.65 |
| 050010110050 | 10 | 0.01 | 53.66 |
| 050010110060 | 1 | 0.00 | 53.66 |
| 050010120 | 8 | 0.01 | 53.67 |
| 050011 | 5 | 0.00 | 53.68 |
| 050020 | 331 | 0.32 | 53.99 |
| 050020010 | 79 | 0.08 | 54.07 |
| 050020010010 | 19 | 0.02 | 54.09 |
| 050020010010010 | 17 | 0.02 | 54.10 |
| 050020010010020 | 15 | 0.01 | 54.12 |
| 050020010010030 | 14 | 0.01 | 54.13 |
| 050020010020 | 14 | 0.01 | 54.14 |
| 050020020 | 44 | 0.04 | 54.19 |
| 050020020010 | 5 | 0.00 | 54.19 |
| 050020020020 | 15 | 0.01 | 54.20 |
| 050020020030 | 32 | 0.03 | 54.24 |
| 050020020040 | 28 | 0.03 | 54.26 |
| 050020020050 | 4 | 0.00 | 54.27 |
| 050020030 | 54 | 0.05 | 54.32 |
| 050020040 | 55 | 0.05 | 54.37 |
| 050020040010 | 28 | 0.03 | 54.40 |
| 050020040020 | 16 | 0.02 | 54.41 |
| 050020040030 | 8 | 0.01 | 54.42 |
| 050020050 | 17 | 0.02 | 54.44 |
| 050020060 | 11 | 0.01 | 54.45 |
| 050020070 | 4 | 0.00 | 54.45 |
| 050020080 | 2 | 0.00 | 54.45 |
| 050020090 | 2 | 0.00 | 54.45 |
| 050020100 | 1 | 0.00 | 54.45 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|------|----------------|--------------|
| 050020110 | 4 | 0.00 | 54.46 |
| 050030 | 233 | 0.22 | 54.68 |
| 050030010 | 37 | 0.04 | 54.72 |
| 050030020 | 31 | 0.03 | 54.75 |
| 050030030 | 54 | 0.05 | 54.80 |
| 050030040 | 48 | 0.05 | 54.84 |
| 050030050 | 5 | 0.00 | 54.85 |
| 050030060 | 32 | 0.03 | 54.88 |
| 050030070 | 23 | 0.02 | 54.90 |
| 050030080 | 9 | 0.01 | 54.91 |
| 050040 | 115 | 0.11 | 55.02 |
| 050040010 | 9 | 0.01 | 55.03 |
| 050040020 | 17 | 0.02 | 55.04 |
| 050040030 | 8 | 0.01 | 55.05 |
| 050050 | 82 | 0.08 | 55.13 |
| 050060 | 20 | 0.02 | 55.15 |
| 050070 | 23 | 0.02 | 55.17 |
| 050080 | 22 | 0.02 | 55.19 |
| 050090 | 16 | 0.02 | 55.21 |
| 050460 | 6 | 0.01 | 55.21 |
| 050660 | 1 | 0.00 | 55.21 |
| 051 | 47 | 0.04 | 55.26 |
| 052 | 12 | 0.01 | 55.27 |
| 053 | 3 | 0.00 | 55.27 |
| 060 | 2472 | 2.36 | 57.63 |
| 060002300 | 1 | 0.00 | 57.63 |
| 060002310 | 10 | 0.01 | 57.64 |
| 060002320 | 12 | 0.01 | 57.66 |
| 060002330010 | 13 | 0.01 | 57.67 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|-----|----------------|--------------|
| 060002330020 | 7 | 0.01 | 57.68 |
| 060002340 | 12 | 0.01 | 57.69 |
| 060002350 | 2 | 0.00 | 57.69 |
| 060002360 | 3 | 0.00 | 57.69 |
| 060002370 | 2 | 0.00 | 57.69 |
| 060010 | 227 | 0.22 | 57.91 |
| 060010010 | 9 | 0.01 | 57.92 |
| 060010020 | 23 | 0.02 | 57.94 |
| 060010030 | 11 | 0.01 | 57.95 |
| 060010040 | 12 | 0.01 | 57.96 |
| 060010050 | 4 | 0.00 | 57.97 |
| 060010060 | 3 | 0.00 | 57.97 |
| 060010070 | 6 | 0.01 | 57.97 |
| 060020 | 224 | 0.21 | 58.19 |
| 060020010 | 26 | 0.02 | 58.21 |
| 060020020 | 23 | 0.02 | 58.24 |
| 060020030 | 2 | 0.00 | 58.24 |
| 060020030010 | 4 | 0.00 | 58.24 |
| 060020030020 | 24 | 0.02 | 58.26 |
| 060020030030 | 13 | 0.01 | 58.28 |
| 060020040 | 2 | 0.00 | 58.28 |
| 060020050 | 3 | 0.00 | 58.28 |
| 060020060 | 1 | 0.00 | 58.28 |
| 060021 | 4 | 0.00 | 58.29 |
| 060030 | 135 | 0.13 | 58.42 |
| 060030010 | 23 | 0.02 | 58.44 |
| 060030020 | 19 | 0.02 | 58.46 |
| 060030030 | 6 | 0.01 | 58.46 |
| 060030040 | 2 | 0.00 | 58.46 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|------|----------------|--------------|
| 060030050 | 12 | 0.01 | 58.47 |
| 060030060 | 1 | 0.00 | 58.48 |
| 060040 | 59 | 0.06 | 58.53 |
| 060040010 | 7 | 0.01 | 58.54 |
| 060040020 | 6 | 0.01 | 58.54 |
| 060050 | 7 | 0.01 | 58.55 |
| 060101 | 6 | 0.01 | 58.56 |
| 060102 | 5 | 0.00 | 58.56 |
| 060110 | 3 | 0.00 | 58.56 |
| 060670 | 1 | 0.00 | 58.57 |
| 061 | 11 | 0.01 | 58.58 |
| 070 | 1728 | 1.65 | 60.23 |
| 070002380 | 4 | 0.00 | 60.23 |
| 070002390 | 1 | 0.00 | 60.23 |
| 070002420 | 2 | 0.00 | 60.23 |
| 070002430 | 1 | 0.00 | 60.23 |
| 070002440 | 1 | 0.00 | 60.23 |
| 070002460 | 1 | 0.00 | 60.24 |
| 070002461 | 4 | 0.00 | 60.24 |
| 070002462 | 2 | 0.00 | 60.24 |
| 070002463 | 1 | 0.00 | 60.24 |
| 070002464 | 2 | 0.00 | 60.24 |
| 070002465 | 2 | 0.00 | 60.25 |
| 070002470 | 19 | 0.02 | 60.26 |
| 070002471 | 2 | 0.00 | 60.27 |
| 070002480010 | 2 | 0.00 | 60.27 |
| 070002480020 | 9 | 0.01 | 60.28 |
| 070002480030 | 6 | 0.01 | 60.28 |
| 070002480040 | 4 | 0.00 | 60.29 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|-----|----------------|--------------|
| 070002490 | 3 | 0.00 | 60.29 |
| 070002500 | 10 | 0.01 | 60.30 |
| 070002510 | 2 | 0.00 | 60.30 |
| 070002520 | 1 | 0.00 | 60.30 |
| 070002530 | 3 | 0.00 | 60.30 |
| 070010 | 202 | 0.19 | 60.50 |
| 070010010 | 21 | 0.02 | 60.52 |
| 070010020 | 17 | 0.02 | 60.53 |
| 070010030 | 6 | 0.01 | 60.54 |
| 070010040 | 6 | 0.01 | 60.54 |
| 070010050 | 4 | 0.00 | 60.55 |
| 070011 | 1 | 0.00 | 60.55 |
| 070020 | 181 | 0.17 | 60.72 |
| 070020010 | 12 | 0.01 | 60.73 |
| 070020020 | 20 | 0.02 | 60.75 |
| 070020020010 | 3 | 0.00 | 60.76 |
| 070020020020 | 6 | 0.01 | 60.76 |
| 070020020030 | 1 | 0.00 | 60.76 |
| 070020030 | 11 | 0.01 | 60.77 |
| 070020040 | 1 | 0.00 | 60.77 |
| 070030 | 74 | 0.07 | 60.84 |
| 070030010 | 7 | 0.01 | 60.85 |
| 070030020 | 3 | 0.00 | 60.85 |
| 070030020010 | 8 | 0.01 | 60.86 |
| 070030020020 | 2 | 0.00 | 60.86 |
| 070030030 | 1 | 0.00 | 60.86 |
| 070030040 | 1 | 0.00 | 60.87 |
| 070040 | 36 | 0.03 | 60.90 |
| 070050 | 29 | 0.03 | 60.93 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|------|----------------|--------------|
| 070060 | 6 | 0.01 | 60.93 |
| 070070 | 2 | 0.00 | 60.94 |
| 070080 | 5 | 0.00 | 60.94 |
| 070090 | 6 | 0.01 | 60.95 |
| 070680 | 1 | 0.00 | 60.95 |
| 070690 | 1 | 0.00 | 60.95 |
| 071 | 6 | 0.01 | 60.95 |
| 080 | 1084 | 1.04 | 61.99 |
| 080010 | 233 | 0.22 | 62.21 |
| 080010010 | 8 | 0.01 | 62.22 |
| 080010020 | 24 | 0.02 | 62.24 |
| 080010030 | 14 | 0.01 | 62.26 |
| 080010040 | 7 | 0.01 | 62.26 |
| 080010050 | 6 | 0.01 | 62.27 |
| 080020 | 162 | 0.15 | 62.42 |
| 080020010 | 12 | 0.01 | 62.43 |
| 080020020010 | 6 | 0.01 | 62.44 |
| 080020020020 | 23 | 0.02 | 62.46 |
| 080020020030 | 55 | 0.05 | 62.51 |
| 080020030 | 9 | 0.01 | 62.52 |
| 080020040 | 11 | 0.01 | 62.53 |
| 080020050 | 1 | 0.00 | 62.53 |
| 080020060 | 8 | 0.01 | 62.54 |
| 080030 | 67 | 0.06 | 62.61 |
| 080030010 | 16 | 0.02 | 62.62 |
| 080030020 | 3 | 0.00 | 62.62 |
| 080030020010 | 3 | 0.00 | 62.63 |
| 080030020020 | 3 | 0.00 | 62.63 |
| 080030020030 | 2 | 0.00 | 62.63 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|------|----------------|--------------|
| 080030020040 | 1 | 0.00 | 62.63 |
| 080030020050 | 1 | 0.00 | 62.63 |
| 080030030 | 3 | 0.00 | 62.64 |
| 080030040 | 1 | 0.00 | 62.64 |
| 080040 | 68 | 0.06 | 62.70 |
| 080050 | 52 | 0.05 | 62.75 |
| 080060 | 26 | 0.02 | 62.78 |
| 080060010 | 4 | 0.00 | 62.78 |
| 080060020 | 3 | 0.00 | 62.78 |
| 080060030 | 5 | 0.00 | 62.79 |
| 080060040 | 2 | 0.00 | 62.79 |
| 080070 | 3 | 0.00 | 62.79 |
| 080080 | 7 | 0.01 | 62.80 |
| 081 | 5 | 0.00 | 62.80 |
| 090 | 1084 | 1.04 | 63.84 |
| 090010 | 38 | 0.04 | 63.88 |
| 090010010 | 25 | 0.02 | 63.90 |
| 090010020 | 13 | 0.01 | 63.91 |
| 090020 | 50 | 0.05 | 63.96 |
| 090020010 | 9 | 0.01 | 63.97 |
| 090020020 | 20 | 0.02 | 63.99 |
| 090020030 | 7 | 0.01 | 63.99 |
| 090030 | 74 | 0.07 | 64.07 |
| 090040 | 32 | 0.03 | 64.10 |
| 090040010 | 11 | 0.01 | 64.11 |
| 090040020 | 3 | 0.00 | 64.11 |
| 090050 | 21 | 0.02 | 64.13 |
| 090060 | 1 | 0.00 | 64.13 |
| 091 | 14 | 0.01 | 64.14 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|-----|----------------|--------------|
| 092 | 5 | 0.00 | 64.15 |
| 093 | 2 | 0.00 | 64.15 |
| 100 | 594 | 0.57 | 64.72 |
| 100010 | 40 | 0.04 | 64.76 |
| 100010010 | 4 | 0.00 | 64.76 |
| 100010020 | 10 | 0.01 | 64.77 |
| 100020 | 35 | 0.03 | 64.80 |
| 100020010 | 22 | 0.02 | 64.82 |
| 100020020 | 21 | 0.02 | 64.84 |
| 100020030 | 8 | 0.01 | 64.85 |
| 100020040 | 1 | 0.00 | 64.85 |
| 100020050 | 9 | 0.01 | 64.86 |
| 100030 | 27 | 0.03 | 64.89 |
| 100030010 | 4 | 0.00 | 64.89 |
| 100030020 | 4 | 0.00 | 64.89 |
| 100040 | 6 | 0.01 | 64.90 |
| 100050 | 14 | 0.01 | 64.91 |
| 100051 | 1 | 0.00 | 64.91 |
| 100060 | 8 | 0.01 | 64.92 |
| 100070 | 1 | 0.00 | 64.92 |
| 100080 | 2 | 0.00 | 64.92 |
| 100090 | 4 | 0.00 | 64.93 |
| 100100 | 1 | 0.00 | 64.93 |
| 101 | 11 | 0.01 | 64.94 |
| 102 | 11 | 0.01 | 64.95 |
| 102010 | 1 | 0.00 | 64.95 |
| 102020 | 2 | 0.00 | 64.95 |
| 102030010 | 10 | 0.01 | 64.96 |
| 102030020010 | 4 | 0.00 | 64.97 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|-----|----------------|--------------|
| 102030020020 | 6 | 0.01 | 64.97 |
| 102030020030 | 1 | 0.00 | 64.97 |
| 102030030 | 5 | 0.00 | 64.98 |
| 103 | 1 | 0.00 | 64.98 |
| 103010 | 1 | 0.00 | 64.98 |
| 103020 | 1 | 0.00 | 64.98 |
| 103030 | 1 | 0.00 | 64.98 |
| 103040 | 1 | 0.00 | 64.98 |
| 103050 | 1 | 0.00 | 64.98 |
| 103060 | 1 | 0.00 | 64.98 |
| 103070 | 1 | 0.00 | 64.99 |
| 103080 | 1 | 0.00 | 64.99 |
| 103090 | 1 | 0.00 | 64.99 |
| 103100 | 1 | 0.00 | 64.99 |
| 103110 | 1 | 0.00 | 64.99 |
| 103120 | 1 | 0.00 | 64.99 |
| 103130 | 1 | 0.00 | 64.99 |
| 103140 | 1 | 0.00 | 64.99 |
| 104 | 1 | 0.00 | 64.99 |
| 105 | 1 | 0.00 | 64.99 |
| 105010 | 1 | 0.00 | 65.00 |
| 106 | 1 | 0.00 | 65.00 |
| 107 | 1 | 0.00 | 65.00 |
| 107010 | 1 | 0.00 | 65.00 |
| 108 | 1 | 0.00 | 65.00 |
| 109 | 1 | 0.00 | 65.00 |
| 110 | 430 | 0.41 | 65.41 |
| 110010 | 91 | 0.09 | 65.50 |
| 110010010 | 6 | 0.01 | 65.50 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|----|----------------|--------------|
| 110010020 | 3 | 0.00 | 65.51 |
| 110010030 | 6 | 0.01 | 65.51 |
| 110020 | 44 | 0.04 | 65.55 |
| 110020010 | 13 | 0.01 | 65.57 |
| 110020020 | 7 | 0.01 | 65.57 |
| 110020030 | 5 | 0.00 | 65.58 |
| 110030 | 29 | 0.03 | 65.61 |
| 110030010 | 3 | 0.00 | 65.61 |
| 110030020 | 11 | 0.01 | 65.62 |
| 110030030 | 6 | 0.01 | 65.62 |
| 110030040 | 2 | 0.00 | 65.63 |
| 110040 | 9 | 0.01 | 65.64 |
| 110040010 | 3 | 0.00 | 65.64 |
| 110040020 | 5 | 0.00 | 65.64 |
| 110050 | 8 | 0.01 | 65.65 |
| 110050010 | 10 | 0.01 | 65.66 |
| 110050020 | 4 | 0.00 | 65.66 |
| 110050020010 | 5 | 0.00 | 65.67 |
| 110050020020 | 7 | 0.01 | 65.68 |
| 110050020030 | 2 | 0.00 | 65.68 |
| 110050020040 | 2 | 0.00 | 65.68 |
| 110050030 | 2 | 0.00 | 65.68 |
| 110050040 | 5 | 0.00 | 65.69 |
| 110050050 | 3 | 0.00 | 65.69 |
| 110050060 | 4 | 0.00 | 65.69 |
| 110050070 | 3 | 0.00 | 65.70 |
| 110050080 | 1 | 0.00 | 65.70 |
| 110060 | 11 | 0.01 | 65.71 |
| 110060010 | 9 | 0.01 | 65.72 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|-----|----------------|--------------|
| 110060020 | 5 | 0.00 | 65.72 |
| 110070 | 5 | 0.00 | 65.73 |
| 110070010 | 2 | 0.00 | 65.73 |
| 110070020 | 6 | 0.01 | 65.73 |
| 110080 | 13 | 0.01 | 65.75 |
| 111 | 1 | 0.00 | 65.75 |
| 112 | 2 | 0.00 | 65.75 |
| 120 | 200 | 0.19 | 65.94 |
| 120010 | 43 | 0.04 | 65.98 |
| 120020 | 23 | 0.02 | 66.00 |
| 120030 | 24 | 0.02 | 66.02 |
| 130 | 162 | 0.15 | 66.18 |
| 130010 | 13 | 0.01 | 66.19 |
| 130020 | 25 | 0.02 | 66.22 |
| 130030 | 10 | 0.01 | 66.23 |
| 130040 | 8 | 0.01 | 66.23 |
| 130050 | 34 | 0.03 | 66.27 |
| 130060 | 2 | 0.00 | 66.27 |
| 130070 | 3 | 0.00 | 66.27 |
| 130080 | 5 | 0.00 | 66.28 |
| 131 | 1 | 0.00 | 66.28 |
| 140 | 103 | 0.10 | 66.37 |
| 150 | 122 | 0.12 | 66.49 |
| 150010 | 8 | 0.01 | 66.50 |
| 150020 | 8 | 0.01 | 66.51 |
| 150030 | 1 | 0.00 | 66.51 |
| 151 | 2 | 0.00 | 66.51 |
| 160 | 120 | 0.11 | 66.62 |
| 160010 | 14 | 0.01 | 66.64 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|----|----------------|--------------|
| 160020 | 8 | 0.01 | 66.64 |
| 160030 | 10 | 0.01 | 66.65 |
| 160040 | 3 | 0.00 | 66.66 |
| 170 | 28 | 0.03 | 66.68 |
| 171 | 5 | 0.00 | 66.69 |
| 172 | 2 | 0.00 | 66.69 |
| 174 | 2 | 0.00 | 66.69 |
| 175 | 1 | 0.00 | 66.69 |
| 176 | 1 | 0.00 | 66.69 |
| 180 | 29 | 0.03 | 66.72 |
| 180010 | 35 | 0.03 | 66.76 |
| 180020 | 5 | 0.00 | 66.76 |
| 180030 | 9 | 0.01 | 66.77 |
| 180040 | 1 | 0.00 | 66.77 |
| 180060 | 1 | 0.00 | 66.77 |
| 180070 | 1 | 0.00 | 66.77 |
| 180080 | 1 | 0.00 | 66.77 |
| 180100 | 1 | 0.00 | 66.77 |
| 180110 | 1 | 0.00 | 66.77 |
| 180130 | 1 | 0.00 | 66.78 |
| 180140 | 3 | 0.00 | 66.78 |
| 180160 | 1 | 0.00 | 66.78 |
| 180170 | 1 | 0.00 | 66.78 |
| 180180 | 1 | 0.00 | 66.78 |
| 180190 | 1 | 0.00 | 66.78 |
| 180200 | 2 | 0.00 | 66.78 |
| 190 | 14 | 0.01 | 66.80 |
| 200 | 14 | 0.01 | 66.81 |
| 210 | 18 | 0.02 | 66.83 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|----|----------------|--------------|
| 220 | 26 | 0.02 | 66.85 |
| 230 | 16 | 0.02 | 66.87 |
| 230010 | 8 | 0.01 | 66.88 |
| 230020 | 2 | 0.00 | 66.88 |
| 230030 | 1 | 0.00 | 66.88 |
| 230040 | 2 | 0.00 | 66.88 |
| 230050 | 1 | 0.00 | 66.88 |
| 230060 | 3 | 0.00 | 66.88 |
| 230070 | 1 | 0.00 | 66.89 |
| 231 | 1 | 0.00 | 66.89 |
| 232 | 1 | 0.00 | 66.89 |
| 240 | 13 | 0.01 | 66.90 |
| 250 | 10 | 0.01 | 66.91 |
| 260 | 5 | 0.00 | 66.91 |
| 270 | 3 | 0.00 | 66.92 |
| 280 | 4 | 0.00 | 66.92 |
| 281 | 16 | 0.02 | 66.94 |
| 290 | 5 | 0.00 | 66.94 |
| 300 | 3 | 0.00 | 66.94 |
| 301 | 1 | 0.00 | 66.94 |
| 310 | 5 | 0.00 | 66.95 |
| 320 | 2 | 0.00 | 66.95 |
| 330 | 16 | 0.02 | 66.97 |
| 340 | 6 | 0.01 | 66.97 |
| 350 | 6 | 0.01 | 66.98 |
| 360 | 2 | 0.00 | 66.98 |
| 370 | 2 | 0.00 | 66.98 |
| 371 | 1 | 0.00 | 66.98 |
| 380 | 9 | 0.01 | 66.99 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|---|----------------|--------------|
| 390 | 2 | 0.00 | 66.99 |
| 400 | 2 | 0.00 | 67.00 |
| 410 | 3 | 0.00 | 67.00 |
| 420 | 4 | 0.00 | 67.00 |
| 421 | 1 | 0.00 | 67.00 |
| 430 | 2 | 0.00 | 67.00 |
| 440 | 3 | 0.00 | 67.01 |
| 450 | 1 | 0.00 | 67.01 |
| 460 | 6 | 0.01 | 67.01 |
| 460460 | 3 | 0.00 | 67.02 |
| 460490 | 2 | 0.00 | 67.02 |
| 460510 | 8 | 0.01 | 67.03 |
| 460590 | 4 | 0.00 | 67.03 |
| 460620 | 1 | 0.00 | 67.03 |
| 470 | 3 | 0.00 | 67.03 |
| 480 | 4 | 0.00 | 67.04 |
| 490 | 1 | 0.00 | 67.04 |
| 491 | 4 | 0.00 | 67.04 |
| 500 | 1 | 0.00 | 67.04 |
| 510 | 3 | 0.00 | 67.05 |
| 520 | 7 | 0.01 | 67.05 |
| 530 | 3 | 0.00 | 67.06 |
| 540 | 1 | 0.00 | 67.06 |
| 550 | 2 | 0.00 | 67.06 |
| 560 | 2 | 0.00 | 67.06 |
| 580 | 1 | 0.00 | 67.06 |
| 590 | 1 | 0.00 | 67.06 |
| 600 | 2 | 0.00 | 67.06 |
| 610 | 2 | 0.00 | 67.07 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|---|----------------|--------------|
| 620 | 8 | 0.01 | 67.07 |
| 630 | 7 | 0.01 | 67.08 |
| 640 | 1 | 0.00 | 67.08 |
| 650 | 1 | 0.00 | 67.08 |
| 680 | 1 | 0.00 | 67.08 |
| 681 | 2 | 0.00 | 67.09 |
| 700 | 2 | 0.00 | 67.09 |
| 700010 | 1 | 0.00 | 67.09 |
| 700020 | 1 | 0.00 | 67.09 |
| 700030 | 1 | 0.00 | 67.09 |
| 700031 | 1 | 0.00 | 67.09 |
| 700032 | 1 | 0.00 | 67.09 |
| 700040 | 1 | 0.00 | 67.09 |
| 700050 | 1 | 0.00 | 67.09 |
| 700060 | 1 | 0.00 | 67.10 |
| 700070 | 1 | 0.00 | 67.10 |
| 700080 | 1 | 0.00 | 67.10 |
| 700090 | 1 | 0.00 | 67.10 |
| 700100 | 1 | 0.00 | 67.10 |
| 700110 | 1 | 0.00 | 67.10 |
| 700120 | 1 | 0.00 | 67.10 |
| 700130 | 1 | 0.00 | 67.10 |
| 700140 | 1 | 0.00 | 67.10 |
| 700150 | 1 | 0.00 | 67.10 |
| 700160 | 1 | 0.00 | 67.11 |
| 700170 | 1 | 0.00 | 67.11 |
| 700180 | 1 | 0.00 | 67.11 |
| 710 | 2 | 0.00 | 67.11 |
| 720 | 7 | 0.01 | 67.12 |

(continued)

| gliederungskennzahl | N | roundedpercent | cumulpercent |
|---------------------|--------|----------------|--------------|
| 730 | 1 | 0.00 | 67.12 |
| 730740 | 4 | 0.00 | 67.12 |
| 731 | 6 | 0.01 | 67.13 |
| 740 | 6 | 0.01 | 67.13 |
| 780 | 2 | 0.00 | 67.13 |
| 800 | 1 | 0.00 | 67.13 |
| 810 | 1 | 0.00 | 67.14 |
| 820 | 1 | 0.00 | 67.14 |
| 830 | 5 | 0.00 | 67.14 |
| 840 | 4 | 0.00 | 67.15 |
| 870 | 1 | 0.00 | 67.15 |
| 880 | 5 | 0.00 | 67.15 |
| 911 | 1 | 0.00 | 67.15 |
| 920 | 1 | 0.00 | 67.15 |
| 930 | 1 | 0.00 | 67.15 |
| 950 | 1 | 0.00 | 67.15 |
| 960 | 2 | 0.00 | 67.16 |
| 980 | 1 | 0.00 | 67.16 |
| 990 | 1 | 0.00 | 67.16 |
| 991 | 3 | 0.00 | 67.16 |
| NA | 34385 | 32.84 | 100.00 |
| Total | 104709 | 99.00 | 100.00 |

Frequency Table for Variable: ausfertigung_jahr

126 unique value(s) detected.

| ausfertigung_jahr | N | roundedpercent | cumulpercent |
|-------------------|------|----------------|--------------|
| 1869 | 145 | 0.14 | 0.14 |
| 1871 | 566 | 0.54 | 0.68 |
| 1877 | 102 | 0.10 | 0.78 |
| 1884 | 10 | 0.01 | 0.79 |
| 1886 | 3 | 0.00 | 0.79 |
| 1887 | 4 | 0.00 | 0.79 |
| 1889 | 219 | 0.21 | 1.00 |
| 1892 | 117 | 0.11 | 1.11 |
| 1894 | 4 | 0.00 | 1.12 |
| 1895 | 74 | 0.07 | 1.19 |
| 1896 | 2921 | 2.79 | 3.98 |
| 1897 | 1151 | 1.10 | 5.08 |
| 1898 | 3 | 0.00 | 5.08 |
| 1899 | 2 | 0.00 | 5.08 |
| 1901 | 51 | 0.05 | 5.13 |
| 1903 | 1 | 0.00 | 5.13 |
| 1906 | 1 | 0.00 | 5.13 |
| 1907 | 26 | 0.02 | 5.16 |
| 1908 | 8 | 0.01 | 5.16 |
| 1909 | 128 | 0.12 | 5.29 |
| 1910 | 11 | 0.01 | 5.30 |
| 1911 | 47 | 0.04 | 5.34 |
| 1913 | 38 | 0.04 | 5.38 |
| 1919 | 99 | 0.09 | 5.47 |
| 1920 | 7 | 0.01 | 5.48 |
| 1921 | 40 | 0.04 | 5.52 |
| 1922 | 209 | 0.20 | 5.72 |
| 1923 | 15 | 0.01 | 5.73 |
| 1924 | 2 | 0.00 | 5.73 |
| 1925 | 2 | 0.00 | 5.74 |

(continued)

| ausfertigung_jahr | N | roundedpercent | cumulpercent |
|-------------------|------|----------------|--------------|
| 1926 | 31 | 0.03 | 5.77 |
| 1927 | 32 | 0.03 | 5.80 |
| 1928 | 8 | 0.01 | 5.80 |
| 1929 | 8 | 0.01 | 5.81 |
| 1930 | 14 | 0.01 | 5.82 |
| 1931 | 46 | 0.04 | 5.87 |
| 1933 | 196 | 0.19 | 6.06 |
| 1934 | 525 | 0.50 | 6.56 |
| 1935 | 156 | 0.15 | 6.71 |
| 1936 | 287 | 0.27 | 6.98 |
| 1937 | 336 | 0.32 | 7.30 |
| 1938 | 30 | 0.03 | 7.33 |
| 1939 | 90 | 0.09 | 7.42 |
| 1940 | 210 | 0.20 | 7.62 |
| 1941 | 25 | 0.02 | 7.64 |
| 1942 | 20 | 0.02 | 7.66 |
| 1943 | 24 | 0.02 | 7.68 |
| 1944 | 12 | 0.01 | 7.69 |
| 1947 | 19 | 0.02 | 7.71 |
| 1948 | 73 | 0.07 | 7.78 |
| 1949 | 314 | 0.30 | 8.08 |
| 1950 | 2079 | 1.99 | 10.07 |
| 1951 | 579 | 0.55 | 10.62 |
| 1952 | 445 | 0.42 | 11.04 |
| 1953 | 1822 | 1.74 | 12.78 |
| 1954 | 209 | 0.20 | 12.98 |
| 1955 | 276 | 0.26 | 13.25 |
| 1956 | 695 | 0.66 | 13.91 |
| 1957 | 979 | 0.93 | 14.85 |

(continued)

| ausfertigung_jahr | N | roundedpercent | cumulpercent |
|-------------------|------|----------------|--------------|
| 1958 | 134 | 0.13 | 14.97 |
| 1959 | 766 | 0.73 | 15.71 |
| 1960 | 954 | 0.91 | 16.62 |
| 1961 | 1286 | 1.23 | 17.85 |
| 1962 | 212 | 0.20 | 18.05 |
| 1963 | 254 | 0.24 | 18.29 |
| 1964 | 332 | 0.32 | 18.61 |
| 1965 | 1506 | 1.44 | 20.05 |
| 1966 | 574 | 0.55 | 20.59 |
| 1967 | 331 | 0.32 | 20.91 |
| 1968 | 460 | 0.44 | 21.35 |
| 1969 | 720 | 0.69 | 22.04 |
| 1970 | 406 | 0.39 | 22.43 |
| 1971 | 775 | 0.74 | 23.17 |
| 1972 | 802 | 0.77 | 23.93 |
| 1973 | 228 | 0.22 | 24.15 |
| 1974 | 793 | 0.76 | 24.91 |
| 1975 | 898 | 0.86 | 25.76 |
| 1976 | 2477 | 2.37 | 28.13 |
| 1977 | 691 | 0.66 | 28.79 |
| 1978 | 399 | 0.38 | 29.17 |
| 1979 | 456 | 0.44 | 29.61 |
| 1980 | 1089 | 1.04 | 30.65 |
| 1981 | 539 | 0.51 | 31.16 |
| 1982 | 536 | 0.51 | 31.67 |
| 1983 | 226 | 0.22 | 31.89 |
| 1984 | 351 | 0.34 | 32.22 |
| 1985 | 568 | 0.54 | 32.77 |
| 1986 | 549 | 0.52 | 33.29 |

(continued)

| ausfertigung_jahr | N | roundedpercent | cumulpercent |
|-------------------|------|----------------|--------------|
| 1987 | 451 | 0.43 | 33.72 |
| 1988 | 1299 | 1.24 | 34.96 |
| 1989 | 1036 | 0.99 | 35.95 |
| 1990 | 2473 | 2.36 | 38.31 |
| 1991 | 733 | 0.70 | 39.01 |
| 1992 | 986 | 0.94 | 39.95 |
| 1993 | 776 | 0.74 | 40.70 |
| 1994 | 3772 | 3.60 | 44.30 |
| 1995 | 736 | 0.70 | 45.00 |
| 1996 | 898 | 0.86 | 45.86 |
| 1997 | 1701 | 1.62 | 47.48 |
| 1998 | 1420 | 1.36 | 48.84 |
| 1999 | 703 | 0.67 | 49.51 |
| 2000 | 700 | 0.67 | 50.18 |
| 2001 | 1473 | 1.41 | 51.59 |
| 2002 | 2008 | 1.92 | 53.50 |
| 2003 | 1164 | 1.11 | 54.62 |
| 2004 | 2440 | 2.33 | 56.95 |
| 2005 | 2038 | 1.95 | 58.89 |
| 2006 | 2239 | 2.14 | 61.03 |
| 2007 | 1588 | 1.52 | 62.55 |
| 2008 | 2117 | 2.02 | 64.57 |
| 2009 | 2685 | 2.56 | 67.13 |
| 2010 | 1406 | 1.34 | 68.48 |
| 2011 | 2259 | 2.16 | 70.63 |
| 2012 | 1380 | 1.32 | 71.95 |
| 2013 | 3372 | 3.22 | 75.17 |
| 2014 | 1515 | 1.45 | 76.62 |
| 2015 | 2004 | 1.91 | 78.53 |

(continued)

| ausfertigung_jahr | N | roundedpercent | cumulpercent |
|-------------------|--------|----------------|--------------|
| 2016 | 3067 | 2.93 | 81.46 |
| 2017 | 3440 | 3.29 | 84.75 |
| 2018 | 1557 | 1.49 | 86.23 |
| 2019 | 1895 | 1.81 | 88.04 |
| 2020 | 2880 | 2.75 | 90.79 |
| 2021 | 3849 | 3.68 | 94.47 |
| 2022 | 1997 | 1.91 | 96.38 |
| 2023 | 2531 | 2.42 | 98.79 |
| 2024 | 1263 | 1.21 | 100.00 |
| Total | 104709 | 100.00 | 100.00 |

Frequency Table for Variable: doi_concept

1 unique value(s) detected.

| doi_concept | N | roundedpercent | cumulpercent |
|------------------------|--------|----------------|--------------|
| 10.5281/zenodo.3832111 | 104709 | 100 | 100 |
| Total | 104709 | 100 | 100 |

Frequency Table for Variable: doi_version

1 unique value(s) detected.

| doi_version | N | roundedpercent | cumulpercent |
|-------------------------|--------|----------------|--------------|
| 10.5281/zenodo.13871896 | 104709 | 100 | 100 |
| Total | 104709 | 100 | 100 |

Frequency Table for Variable: version

1 unique value(s) detected.

| version | N | roundedpercent | cumulpercent |
|------------|--------|----------------|--------------|
| 2024-10-02 | 104709 | 100 | 100 |
| Total | 104709 | 100 | 100 |

Frequency Table for Variable: lizenz

1 unique value(s) detected.

| | lizenz | N | roundedpercent | cumulpercent |
|---|--------|--------|----------------|--------------|
| Creative Commons Zero 1.0 Universal (CC Zero 1.0) | | 104709 | 100 | 100 |
| Total | | 104709 | 100 | 100 |

9 Frequenztabellen erstellen: Rechtsakte

9.1 Reduzierte Liste zu prüfender Variablen

Folgende Variablen sind wegen der geringeren Auflösung der Metadaten (nur Rechtsaktebene, nicht Normebene) nicht mehr nutzbar.

```
varremove <- c("gliederungskennzahl")

vars.freqtable.rechtsakte <- setdiff(varlist, varremove)

print(vars.freqtable.rechtsakte)
```

```
## [1] "periodikum"      "fundstellentyp"  "check_neuf"
## [4] "check_aufh"      "check_sonst"    "check_hinweis"
## [7] "check_stand"     "ausfertigung_jahr" "doi_concept"
## [10] "doi_version"     "version"        "lizenz"
```

9.2 Frequenztabellen erstellen

```
prefix.freqtable.rechtsakte <- paste0(config$project$shortname,
                                       "_01_Rechtsakte_Frequenztafel_var-")

f.fast.freqtable(dt.rechtsakte.final,
                 varlist = vars.freqtable.rechtsakte,
                 sumrow = TRUE,
                 output.list = FALSE,
                 output.kable = TRUE,
                 output.csv = TRUE,
                 outputdir = dir.analysis,
                 prefix = prefix.freqtable.rechtsakte)
```

Frequency Table for Variable: periodikum

23 unique value(s) detected.

| periodikum | N | roundedpercent | cumulpercent |
|------------|-----|----------------|--------------|
| BAGVBl | 1 | 0.02 | 0.02 |
| BAnz | 128 | 2.19 | 2.21 |
| BGBI | 20 | 0.34 | 2.55 |

(continued)

| periodikum | N | roundedpercent | cumulpercent |
|------------|------|----------------|--------------|
| BGBI I | 5030 | 86.19 | 88.74 |
| BGBI II | 378 | 6.48 | 95.22 |
| BGBI. I | 37 | 0.63 | 95.85 |
| BGBI. II | 1 | 0.02 | 95.87 |
| GBI DDR | 15 | 0.26 | 96.13 |
| GBI DDR I | 43 | 0.74 | 96.86 |
| GBI DDR II | 3 | 0.05 | 96.92 |
| GVBI BE | 1 | 0.02 | 96.93 |
| NV | 1 | 0.02 | 96.95 |
| RAnz | 2 | 0.03 | 96.98 |
| RGBI | 51 | 0.87 | 97.86 |
| RGBI I | 46 | 0.79 | 98.65 |
| RGBI II | 44 | 0.75 | 99.40 |
| RMBI | 4 | 0.07 | 99.47 |
| VOBI BrZ | 1 | 0.02 | 99.49 |
| VkBI | 11 | 0.19 | 99.67 |
| WiGBI | 7 | 0.12 | 99.79 |
| ZBI | 2 | 0.03 | 99.83 |
| eBAnz | 6 | 0.10 | 99.93 |
| Öff Anz | 4 | 0.07 | 100.00 |
| Total | 5836 | 100.00 | 100.00 |

Frequency Table for Variable: fundstellentyp

1 unique value(s) detected.

| fundstellentyp | N | roundedpercent | cumulpercent |
|----------------|------|----------------|--------------|
| amtlich | 5836 | 100 | 100 |
| Total | 5836 | 100 | 100 |

Frequency Table for Variable: check_neuf

2 unique value(s) detected.

| check_neuf | N | roundedpercent | cumulpercent |
|------------|------|----------------|--------------|
| NA | 5435 | 93.13 | 93.13 |
| ja | 401 | 6.87 | 100.00 |
| Total | 5836 | 100.00 | 100.00 |

Frequency Table for Variable: check_aufh

2 unique value(s) detected.

| check_aufh | N | roundedpercent | cumulpercent |
|------------|------|----------------|--------------|
| NA | 5722 | 98.05 | 98.05 |
| ja | 114 | 1.95 | 100.00 |
| Total | 5836 | 100.00 | 100.00 |

Frequency Table for Variable: check_sonst

2 unique value(s) detected.

| check_sonst | N | roundedpercent | cumulpercent |
|-------------|------|----------------|--------------|
| NA | 5311 | 91 | 91 |
| ja | 525 | 9 | 100 |
| Total | 5836 | 100 | 100 |

Frequency Table for Variable: check_hinweis

2 unique value(s) detected.

| check_hinweis | N | roundedpercent | cumulpercent |
|---------------|------|----------------|--------------|
| NA | 5764 | 98.77 | 98.77 |
| ja | 72 | 1.23 | 100.00 |
| Total | 5836 | 100.00 | 100.00 |

Frequency Table for Variable: check_stand

2 unique value(s) detected.

| check_stand | N | roundedpercent | cumulpercent |
|-------------|------|----------------|--------------|
| NA | 2959 | 50.7 | 50.7 |
| ja | 2877 | 49.3 | 100.0 |
| Total | 5836 | 100.0 | 100.0 |

Frequency Table for Variable: ausfertigung_jahr

126 unique value(s) detected.

| ausfertigung_jahr | N | roundedpercent | cumulpercent |
|-------------------|---|----------------|--------------|
| 1869 | 1 | 0.02 | 0.02 |
| 1871 | 3 | 0.05 | 0.07 |
| 1877 | 3 | 0.05 | 0.12 |
| 1884 | 1 | 0.02 | 0.14 |
| 1886 | 2 | 0.03 | 0.17 |
| 1887 | 1 | 0.02 | 0.19 |
| 1889 | 2 | 0.03 | 0.22 |
| 1892 | 1 | 0.02 | 0.24 |
| 1894 | 2 | 0.03 | 0.27 |
| 1895 | 2 | 0.03 | 0.31 |
| 1896 | 2 | 0.03 | 0.34 |
| 1897 | 6 | 0.10 | 0.45 |

(continued)

| ausfertigung_jahr | N | roundedpercent | cumulpercent |
|-------------------|---|----------------|--------------|
| 1898 | 1 | 0.02 | 0.46 |
| 1899 | 2 | 0.03 | 0.50 |
| 1901 | 2 | 0.03 | 0.53 |
| 1903 | 1 | 0.02 | 0.55 |
| 1906 | 1 | 0.02 | 0.57 |
| 1907 | 1 | 0.02 | 0.58 |
| 1908 | 1 | 0.02 | 0.60 |
| 1909 | 3 | 0.05 | 0.65 |
| 1910 | 2 | 0.03 | 0.69 |
| 1911 | 2 | 0.03 | 0.72 |
| 1913 | 2 | 0.03 | 0.75 |
| 1919 | 4 | 0.07 | 0.82 |
| 1920 | 1 | 0.02 | 0.84 |
| 1921 | 4 | 0.07 | 0.91 |
| 1922 | 6 | 0.10 | 1.01 |
| 1923 | 2 | 0.03 | 1.05 |
| 1924 | 2 | 0.03 | 1.08 |
| 1925 | 2 | 0.03 | 1.11 |
| 1926 | 4 | 0.07 | 1.18 |
| 1927 | 5 | 0.09 | 1.27 |
| 1928 | 3 | 0.05 | 1.32 |
| 1929 | 3 | 0.05 | 1.37 |
| 1930 | 3 | 0.05 | 1.42 |
| 1931 | 5 | 0.09 | 1.51 |
| 1933 | 8 | 0.14 | 1.64 |
| 1934 | 7 | 0.12 | 1.76 |
| 1935 | 3 | 0.05 | 1.82 |
| 1936 | 7 | 0.12 | 1.94 |
| 1937 | 9 | 0.15 | 2.09 |

(continued)

| ausfertigung_jahr | N | roundedpercent | cumulpercent |
|-------------------|----|----------------|--------------|
| 1938 | 9 | 0.15 | 2.24 |
| 1939 | 6 | 0.10 | 2.35 |
| 1940 | 6 | 0.10 | 2.45 |
| 1941 | 2 | 0.03 | 2.48 |
| 1942 | 2 | 0.03 | 2.52 |
| 1943 | 1 | 0.02 | 2.54 |
| 1944 | 1 | 0.02 | 2.55 |
| 1947 | 1 | 0.02 | 2.57 |
| 1948 | 5 | 0.09 | 2.66 |
| 1949 | 12 | 0.21 | 2.86 |
| 1950 | 20 | 0.34 | 3.20 |
| 1951 | 31 | 0.53 | 3.74 |
| 1952 | 14 | 0.24 | 3.98 |
| 1953 | 40 | 0.69 | 4.66 |
| 1954 | 17 | 0.29 | 4.95 |
| 1955 | 25 | 0.43 | 5.38 |
| 1956 | 32 | 0.55 | 5.93 |
| 1957 | 45 | 0.77 | 6.70 |
| 1958 | 19 | 0.33 | 7.03 |
| 1959 | 27 | 0.46 | 7.49 |
| 1960 | 32 | 0.55 | 8.04 |
| 1961 | 50 | 0.86 | 8.89 |
| 1962 | 30 | 0.51 | 9.41 |
| 1963 | 23 | 0.39 | 9.80 |
| 1964 | 28 | 0.48 | 10.28 |
| 1965 | 45 | 0.77 | 11.05 |
| 1966 | 23 | 0.39 | 11.45 |
| 1967 | 39 | 0.67 | 12.11 |
| 1968 | 39 | 0.67 | 12.78 |

(continued)

| ausfertigung_jahr | N | roundedpercent | cumulpercent |
|-------------------|-----|----------------|--------------|
| 1969 | 52 | 0.89 | 13.67 |
| 1970 | 42 | 0.72 | 14.39 |
| 1971 | 53 | 0.91 | 15.30 |
| 1972 | 51 | 0.87 | 16.18 |
| 1973 | 32 | 0.55 | 16.72 |
| 1974 | 51 | 0.87 | 17.60 |
| 1975 | 63 | 1.08 | 18.68 |
| 1976 | 70 | 1.20 | 19.88 |
| 1977 | 57 | 0.98 | 20.85 |
| 1978 | 43 | 0.74 | 21.59 |
| 1979 | 39 | 0.67 | 22.26 |
| 1980 | 51 | 0.87 | 23.13 |
| 1981 | 39 | 0.67 | 23.80 |
| 1982 | 41 | 0.70 | 24.50 |
| 1983 | 28 | 0.48 | 24.98 |
| 1984 | 32 | 0.55 | 25.53 |
| 1985 | 38 | 0.65 | 26.18 |
| 1986 | 50 | 0.86 | 27.04 |
| 1987 | 38 | 0.65 | 27.69 |
| 1988 | 48 | 0.82 | 28.51 |
| 1989 | 48 | 0.82 | 29.34 |
| 1990 | 156 | 2.67 | 32.01 |
| 1991 | 73 | 1.25 | 33.26 |
| 1992 | 74 | 1.27 | 34.53 |
| 1993 | 79 | 1.35 | 35.88 |
| 1994 | 158 | 2.71 | 38.59 |
| 1995 | 69 | 1.18 | 39.77 |
| 1996 | 81 | 1.39 | 41.16 |
| 1997 | 100 | 1.71 | 42.87 |

(continued)

| ausfertigung_jahr | N | roundedpercent | cumulpercent |
|-------------------|------|----------------|--------------|
| 1998 | 117 | 2.00 | 44.88 |
| 1999 | 71 | 1.22 | 46.09 |
| 2000 | 59 | 1.01 | 47.10 |
| 2001 | 101 | 1.73 | 48.83 |
| 2002 | 136 | 2.33 | 51.17 |
| 2003 | 93 | 1.59 | 52.76 |
| 2004 | 135 | 2.31 | 55.07 |
| 2005 | 126 | 2.16 | 57.23 |
| 2006 | 125 | 2.14 | 59.37 |
| 2007 | 98 | 1.68 | 61.05 |
| 2008 | 118 | 2.02 | 63.07 |
| 2009 | 145 | 2.48 | 65.56 |
| 2010 | 112 | 1.92 | 67.48 |
| 2011 | 116 | 1.99 | 69.47 |
| 2012 | 101 | 1.73 | 71.20 |
| 2013 | 172 | 2.95 | 74.14 |
| 2014 | 94 | 1.61 | 75.75 |
| 2015 | 127 | 2.18 | 77.93 |
| 2016 | 143 | 2.45 | 80.38 |
| 2017 | 168 | 2.88 | 83.26 |
| 2018 | 88 | 1.51 | 84.77 |
| 2019 | 107 | 1.83 | 86.60 |
| 2020 | 155 | 2.66 | 89.26 |
| 2021 | 221 | 3.79 | 93.04 |
| 2022 | 139 | 2.38 | 95.42 |
| 2023 | 169 | 2.90 | 98.32 |
| 2024 | 98 | 1.68 | 100.00 |
| Total | 5836 | 100.00 | 100.00 |

Frequency Table for Variable: doi_concept

1 unique value(s) detected.

| doi_concept | N | roundedpercent | cumulpercent |
|------------------------|------|----------------|--------------|
| 10.5281/zenodo.3832111 | 5836 | 100 | 100 |
| Total | 5836 | 100 | 100 |

Frequency Table for Variable: doi_version

1 unique value(s) detected.

| doi_version | N | roundedpercent | cumulpercent |
|-------------------------|------|----------------|--------------|
| 10.5281/zenodo.13871896 | 5836 | 100 | 100 |
| Total | 5836 | 100 | 100 |

Frequency Table for Variable: version

1 unique value(s) detected.

| version | N | roundedpercent | cumulpercent |
|------------|------|----------------|--------------|
| 2024-10-02 | 5836 | 100 | 100 |
| Total | 5836 | 100 | 100 |

Frequency Table for Variable: lizenz

1 unique value(s) detected.

| | lizenz | N | roundedpercent | cumulpercent |
|---|--------|------|----------------|--------------|
| Creative Commons Zero 1.0 Universal (CC Zero 1.0) | | 5836 | 100 | 100 |
| | Total | 5836 | 100 | 100 |

10 Frequenztabellen erstellen: XML-Metadaten

10.1 Liste zu prüfender Variablen

```
print(vars.freqtable.rechtsakte)
```

```
## [1] "periodikum"      "fundstellentyp"  "check_neuf"  
## [4] "check_aufh"     "check_sonst"    "check_hinweis"  
## [7] "check_stand"    "ausfertigung_jahr" "doi_concept"  
## [10] "doi_version"    "version"        "lizenz"
```

10.2 Frequenztabellen erstellen

```
prefix.freqtable.meta <- paste0(config$project$shortname,  
                                "_01_Meta_Frequenztabelle_var-")  
  
f.fast.freqtable(dt.meta,  
                 varlist = vars.freqtable.rechtsakte,  
                 sumrow = TRUE,  
                 output.list = FALSE,  
                 output.kable = TRUE,  
                 output.csv = TRUE,  
                 outputdir = dir.analysis,  
                 prefix = prefix.freqtable.meta)
```

Frequency Table for Variable: periodikum

34 unique value(s) detected.

| periodikum | N | roundedpercent | cumulpercent |
|------------|------|----------------|--------------|
| NA | 1 | 0.01 | 0.01 |
| ABl EU | 1 | 0.01 | 0.03 |
| BAGVBl | 2 | 0.03 | 0.06 |
| BAnz | 235 | 3.46 | 3.52 |
| BGBI | 22 | 0.32 | 3.85 |
| BGBI I | 5043 | 74.34 | 78.18 |
| BGBI II | 1158 | 17.07 | 95.25 |
| BGBI III | 1 | 0.01 | 95.27 |

(continued)

| periodikum | N | roundedpercent | cumulpercent |
|------------|------|----------------|--------------|
| BGBI. I | 38 | 0.56 | 95.83 |
| BGBI. II | 1 | 0.01 | 95.84 |
| BremGBI | 4 | 0.06 | 95.90 |
| GBI DDR | 15 | 0.22 | 96.12 |
| GBI DDR I | 44 | 0.65 | 96.77 |
| GBI DDR II | 3 | 0.04 | 96.82 |
| GVBI BE | 1 | 0.01 | 96.83 |
| GVBI BY | 4 | 0.06 | 96.89 |
| GVBI HE | 4 | 0.06 | 96.95 |
| GVBI RP I | 2 | 0.03 | 96.98 |
| Mtbl BAA | 1 | 0.01 | 96.99 |
| NV | 1 | 0.01 | 97.01 |
| RAnz | 2 | 0.03 | 97.04 |
| RBesBl | 1 | 0.01 | 97.05 |
| RGBI | 55 | 0.81 | 97.86 |
| RGBI I | 53 | 0.78 | 98.64 |
| RGBI II | 47 | 0.69 | 99.34 |
| RMBI | 4 | 0.06 | 99.40 |
| RegBl WB | 4 | 0.06 | 99.45 |
| RegBl WH | 1 | 0.01 | 99.47 |
| VOBl BrZ | 3 | 0.04 | 99.51 |
| VkBl | 14 | 0.21 | 99.72 |
| WiGBI | 7 | 0.10 | 99.82 |
| ZBl | 2 | 0.03 | 99.85 |
| eBAnz | 6 | 0.09 | 99.94 |
| Öff Anz | 4 | 0.06 | 100.00 |
| Total | 6784 | 100.00 | 100.00 |

Frequency Table for Variable: fundstellentyp

2 unique value(s) detected.

| fundstellentyp | N | roundedpercent | cumulpercent |
|----------------|------|----------------|--------------|
| amtlich | 6783 | 99.99 | 99.99 |
| nichtamtlich | 1 | 0.01 | 100.00 |
| Total | 6784 | 100.00 | 100.00 |

Frequency Table for Variable: check_neuf

2 unique value(s) detected.

| check_neuf | N | roundedpercent | cumulpercent |
|------------|------|----------------|--------------|
| NA | 6383 | 94.09 | 94.09 |
| ja | 401 | 5.91 | 100.00 |
| Total | 6784 | 100.00 | 100.00 |

Frequency Table for Variable: check_aufh

2 unique value(s) detected.

| check_aufh | N | roundedpercent | cumulpercent |
|------------|------|----------------|--------------|
| NA | 6665 | 98.25 | 98.25 |
| ja | 119 | 1.75 | 100.00 |
| Total | 6784 | 100.00 | 100.00 |

Frequency Table for Variable: check_sonst

2 unique value(s) detected.

| check_sonst | N | roundedpercent | cumulpercent |
|-------------|------|----------------|--------------|
| NA | 6245 | 92.05 | 92.05 |
| ja | 539 | 7.95 | 100.00 |
| Total | 6784 | 100.00 | 100.00 |

Frequency Table for Variable: check_hinweis

2 unique value(s) detected.

| check_hinweis | N | roundedpercent | cumulpercent |
|---------------|------|----------------|--------------|
| NA | 6712 | 98.94 | 98.94 |
| ja | 72 | 1.06 | 100.00 |
| Total | 6784 | 100.00 | 100.00 |

Frequency Table for Variable: check_stand

2 unique value(s) detected.

| check_stand | N | roundedpercent | cumulpercent |
|-------------|------|----------------|--------------|
| NA | 3906 | 57.58 | 57.58 |
| ja | 2878 | 42.42 | 100.00 |
| Total | 6784 | 100.00 | 100.00 |

Frequency Table for Variable: ausfertigung_jahr

129 unique value(s) detected.

| ausfertigung_jahr | N | roundedpercent | cumulpercent |
|-------------------|---|----------------|--------------|
| NA | 1 | 0.01 | 0.01 |
| 1869 | 1 | 0.01 | 0.03 |
| 1871 | 3 | 0.04 | 0.07 |

(continued)

| ausfertigung_jahr | N | roundedpercent | cumulpercent |
|-------------------|---|----------------|--------------|
| 1877 | 3 | 0.04 | 0.12 |
| 1884 | 1 | 0.01 | 0.13 |
| 1886 | 2 | 0.03 | 0.16 |
| 1887 | 1 | 0.01 | 0.18 |
| 1889 | 2 | 0.03 | 0.21 |
| 1892 | 1 | 0.01 | 0.22 |
| 1894 | 2 | 0.03 | 0.25 |
| 1895 | 2 | 0.03 | 0.28 |
| 1896 | 2 | 0.03 | 0.31 |
| 1897 | 6 | 0.09 | 0.40 |
| 1898 | 1 | 0.01 | 0.41 |
| 1899 | 2 | 0.03 | 0.44 |
| 1901 | 2 | 0.03 | 0.47 |
| 1903 | 1 | 0.01 | 0.49 |
| 1906 | 1 | 0.01 | 0.50 |
| 1907 | 1 | 0.01 | 0.52 |
| 1908 | 1 | 0.01 | 0.53 |
| 1909 | 4 | 0.06 | 0.59 |
| 1910 | 2 | 0.03 | 0.62 |
| 1911 | 3 | 0.04 | 0.66 |
| 1913 | 2 | 0.03 | 0.69 |
| 1919 | 6 | 0.09 | 0.78 |
| 1920 | 1 | 0.01 | 0.80 |
| 1921 | 4 | 0.06 | 0.85 |
| 1922 | 6 | 0.09 | 0.94 |
| 1923 | 2 | 0.03 | 0.97 |
| 1924 | 2 | 0.03 | 1.00 |
| 1925 | 2 | 0.03 | 1.03 |
| 1926 | 4 | 0.06 | 1.09 |

(continued)

| ausfertigung_jahr | N | roundedpercent | cumulpercent |
|-------------------|----|----------------|--------------|
| 1927 | 5 | 0.07 | 1.16 |
| 1928 | 4 | 0.06 | 1.22 |
| 1929 | 4 | 0.06 | 1.28 |
| 1930 | 3 | 0.04 | 1.33 |
| 1931 | 5 | 0.07 | 1.40 |
| 1933 | 9 | 0.13 | 1.53 |
| 1934 | 7 | 0.10 | 1.64 |
| 1935 | 3 | 0.04 | 1.68 |
| 1936 | 9 | 0.13 | 1.81 |
| 1937 | 9 | 0.13 | 1.95 |
| 1938 | 10 | 0.15 | 2.09 |
| 1939 | 11 | 0.16 | 2.26 |
| 1940 | 7 | 0.10 | 2.36 |
| 1941 | 2 | 0.03 | 2.39 |
| 1942 | 2 | 0.03 | 2.42 |
| 1943 | 1 | 0.01 | 2.43 |
| 1944 | 4 | 0.06 | 2.49 |
| 1945 | 1 | 0.01 | 2.51 |
| 1946 | 12 | 0.18 | 2.68 |
| 1947 | 11 | 0.16 | 2.84 |
| 1948 | 13 | 0.19 | 3.04 |
| 1949 | 18 | 0.27 | 3.30 |
| 1950 | 22 | 0.32 | 3.63 |
| 1951 | 39 | 0.57 | 4.20 |
| 1952 | 24 | 0.35 | 4.55 |
| 1953 | 45 | 0.66 | 5.22 |
| 1954 | 26 | 0.38 | 5.60 |
| 1955 | 33 | 0.49 | 6.09 |
| 1956 | 53 | 0.78 | 6.87 |

(continued)

| ausfertigung_jahr | N | roundedpercent | cumulpercent |
|-------------------|----|----------------|--------------|
| 1957 | 55 | 0.81 | 7.68 |
| 1958 | 35 | 0.52 | 8.20 |
| 1959 | 47 | 0.69 | 8.89 |
| 1960 | 44 | 0.65 | 9.54 |
| 1961 | 67 | 0.99 | 10.52 |
| 1962 | 40 | 0.59 | 11.11 |
| 1963 | 33 | 0.49 | 11.60 |
| 1964 | 41 | 0.60 | 12.21 |
| 1965 | 61 | 0.90 | 13.10 |
| 1966 | 36 | 0.53 | 13.64 |
| 1967 | 50 | 0.74 | 14.37 |
| 1968 | 48 | 0.71 | 15.08 |
| 1969 | 69 | 1.02 | 16.10 |
| 1970 | 54 | 0.80 | 16.89 |
| 1971 | 66 | 0.97 | 17.87 |
| 1972 | 63 | 0.93 | 18.79 |
| 1973 | 68 | 1.00 | 19.80 |
| 1974 | 59 | 0.87 | 20.67 |
| 1975 | 72 | 1.06 | 21.73 |
| 1976 | 79 | 1.16 | 22.89 |
| 1977 | 70 | 1.03 | 23.92 |
| 1978 | 56 | 0.83 | 24.75 |
| 1979 | 55 | 0.81 | 25.56 |
| 1980 | 66 | 0.97 | 26.53 |
| 1981 | 46 | 0.68 | 27.21 |
| 1982 | 46 | 0.68 | 27.89 |
| 1983 | 38 | 0.56 | 28.45 |
| 1984 | 52 | 0.77 | 29.22 |
| 1985 | 50 | 0.74 | 29.95 |

(continued)

| ausfertigung_jahr | N | roundedpercent | cumulpercent |
|-------------------|-----|----------------|--------------|
| 1986 | 73 | 1.08 | 31.03 |
| 1987 | 45 | 0.66 | 31.69 |
| 1988 | 61 | 0.90 | 32.59 |
| 1989 | 55 | 0.81 | 33.40 |
| 1990 | 170 | 2.51 | 35.91 |
| 1991 | 80 | 1.18 | 37.09 |
| 1992 | 89 | 1.31 | 38.40 |
| 1993 | 95 | 1.40 | 39.80 |
| 1994 | 183 | 2.70 | 42.50 |
| 1995 | 112 | 1.65 | 44.15 |
| 1996 | 99 | 1.46 | 45.61 |
| 1997 | 129 | 1.90 | 47.51 |
| 1998 | 132 | 1.95 | 49.45 |
| 1999 | 87 | 1.28 | 50.74 |
| 2000 | 70 | 1.03 | 51.77 |
| 2001 | 115 | 1.70 | 53.46 |
| 2002 | 143 | 2.11 | 55.57 |
| 2003 | 110 | 1.62 | 57.19 |
| 2004 | 145 | 2.14 | 59.33 |
| 2005 | 145 | 2.14 | 61.47 |
| 2006 | 134 | 1.98 | 63.44 |
| 2007 | 111 | 1.64 | 65.08 |
| 2008 | 140 | 2.06 | 67.14 |
| 2009 | 155 | 2.28 | 69.43 |
| 2010 | 127 | 1.87 | 71.30 |
| 2011 | 128 | 1.89 | 73.19 |
| 2012 | 112 | 1.65 | 74.84 |
| 2013 | 176 | 2.59 | 77.43 |
| 2014 | 95 | 1.40 | 78.83 |

(continued)

| ausfertigung_jahr | N | roundedpercent | cumulpercent |
|-------------------|------|----------------|--------------|
| 2015 | 129 | 1.90 | 80.73 |
| 2016 | 144 | 2.12 | 82.86 |
| 2017 | 170 | 2.51 | 85.36 |
| 2018 | 89 | 1.31 | 86.67 |
| 2019 | 109 | 1.61 | 88.28 |
| 2020 | 156 | 2.30 | 90.58 |
| 2021 | 227 | 3.35 | 93.93 |
| 2022 | 143 | 2.11 | 96.03 |
| 2023 | 170 | 2.51 | 98.54 |
| 2024 | 99 | 1.46 | 100.00 |
| Total | 6784 | 100.00 | 100.00 |

Frequency Table for Variable: doi_concept

1 unique value(s) detected.

| doi_concept | N | roundedpercent | cumulpercent |
|------------------------|------|----------------|--------------|
| 10.5281/zenodo.3832111 | 6784 | 100 | 100 |
| Total | 6784 | 100 | 100 |

Frequency Table for Variable: doi_version

1 unique value(s) detected.

| doi_version | N | roundedpercent | cumulpercent |
|-------------------------|------|----------------|--------------|
| 10.5281/zenodo.13871896 | 6784 | 100 | 100 |
| Total | 6784 | 100 | 100 |

Frequency Table for Variable: version

1 unique value(s) detected.

| version | N | roundedpercent | cumulpercent |
|------------|------|----------------|--------------|
| 2024-10-02 | 6784 | 100 | 100 |
| Total | 6784 | 100 | 100 |

Frequency Table for Variable: lizenz

1 unique value(s) detected.

| | lizenz | N | roundedpercent | cumulpercent |
|---|--------|------|----------------|--------------|
| Creative Commons Zero 1.0 Universal (CC Zero 1.0) | | 6784 | 100 | 100 |
| | Total | 6784 | 100 | 100 |

```
cat(readLines(tar_read(changelog)),  
    sep = "\n")
```

11 Changelog

11.1 Version 2024-10-02

- Vollständige Aktualisierung der Daten
- Überarbeitung der Berechnung linguistischer Kennzahlen
- Erweiterung des Lösch-Skriptes
- Download-Timeout nun bei 300 sek
- Anzahl paralleler Downloads kann separat konfiguriert werden

11.2 Version 2024-07-04

- Vollständige Aktualisierung der Daten
- LIZENZÄNDERUNG: Source Code jetzt unter GNU General Public License Version 3 (GPLv3) oder später lizenziert
- Docker Image auf R 4.4.0 aktualisiert (wegen CVE-2024-27322)
- Python Toolchain entfernt

11.3 Version 2024-04-03

- Vollständige Aktualisierung der Daten
- Aktualisierung der Python Toolchain
- Aktualisierung des Public GPG Keys im Repository

11.4 Version 2024-01-07

- Vollständige Aktualisierung der Daten

11.5 Version 2023-10-03

- Vollständige Aktualisierung der Daten

11.6 Version 2023-07-09

- Vollständige Aktualisierung der Daten
- Konfigurations-Dateien in etc/ verschoben

11.7 Version 2023-04-07

- Vollständige Aktualisierung der Daten
- Gesamte Laufzeitumgebung nun mit Docker versionskontrolliert
- Download-Manifest wird nun spätestens nach 24h Stunden invalidiert, damit keine alten Daten aus früheren Kompilierungen den Prozess zum Absturz bringen
- ZIP-Archiv der TXT-Dateien wird nun auch gehasht
- Verbesserte Formatierung von Warnungen und Fehlermeldungen im Compilation Report
- Veränderung der Download-Reihenfolge
- Falls im ersten Download-Durchlauf Dateien fehlen werden die Folgeversuche nun korrekt durchgeführt

- Die Pipeline mit allen Zwischenergebnissen wird nun automatisch in “output/” archivierte
- Source Code ZIP-Archiv wird nun anhand des git-Manifestes generiert
- README im Hinblick auf Docker aktualisiert
- Struktur des Compilation Reports angepasst, um Warnungen und Fehler prominenter anzuzeigen
- Zusätzliche Unit Tests

11.8 Version 2023-01-05

- Vollständige Aktualisierung der Daten
- Neuer Entwurf des gesamten Source Codes im {targets} Framework
- Zusätzliche Netzwerk-Diagramme für alle Rechtsakte: Sunburst und Circlepacking
- Reguläre Netzwerk-Diagramme nun in blau auf schwarzem Hintergrund
- Manche finale Dateinamen nun mit Trennstrichen statt Pascal Case
- TXT-Konvertierung bricht bei Fehler nicht ab, dokumentiert aber fehlende TXT-Dateien
- Einführung eines separaten Berichts für Robustness Checks

11.9 Version 2022-08-05

- Vollständige Aktualisierung der Daten
- Wenn der Download einer Datei scheitert wird der Kompilierungs-Prozess nicht mehr abgebrochen; Kontrolle über Datenabgleich im Compilation Report
- Diagramme für Norm/Rechtsakt/Metadaten je Periodikum sind nun logarithmisch skaliert
- Technischer Bugfix bei der Berechnung von Netzwerkdiagrammen
- Neuer Unit Test um identische Länge von HTML-Links und extrahierten PDF- und EPUB-Dateinamen
- Fehlende PDF- oder EPUB-Dateien führen nun nicht mehr zu Fehlern in der Pipeline
- Unterscheidung zwischen VBVG 2005 und VBVG 2023

11.10 Version 2022-05-22

- Vollständige Aktualisierung der Daten
- README und CHANGELOG sind nun externe Dateien die bei der Kompilierung automatisch eingebunden werden
- Das für *renv* notwendige Skript activate.R ist im ZIP-Archiv in den Ordner “renv” sortiert

11.11 Version 2022-01-12

- Vollständige Aktualisierung der Daten
- Strenge Versionskontrolle aller R packages
- Der Prozess der Kompilierung ist jetzt detailliert konfigurierbar, insbesondere die Parallelisierung
- Parallelisierung der XML-Parser deaktiviert, weil instabil
- Parallelisierung nun vollständig mit *future* statt mit *foreach* und *doParallel*
- Fehlerhafte Kompilierungen werden beim vor der nächsten Kompilierung vollautomatisch aufgeräumt

- Alle Ergebnisse werden automatisch fertig verpackt in den Ordner »output« sortiert
- Source Code des Changelogs zu Markdown konvertiert
- Einführung eines Debugging-Modus um die Entwicklung zu beschleunigen

11.12 Version 2021-09-16

- Vollständige Aktualisierung der Daten
- Einfügung von Kurzbezeichnungen der Rechtsakte in die Dateinamen der Netzwerkanalysen
- Einfügung der ID der Rechtsakte in die CSV-Tabelle aller Kurz- und Langtitel

11.13 Version 2021-07-30

- Vollständige Aktualisierung der Daten
- Einführung von neuen Variablen für letzte Änderung (Datum), Neufassung (Datum), Aufhebung (Datum jeweils für Verkündung und Wirkung), Lizenz und hierarchische Ketten von Gliederungsbezeichnungen und -titeln
- Parallelisierung der Downloads um Kompilierung des Korpus zu beschleunigen
- Korrektur bei den Dateinamen der Allgemeinen Eisenbahngesetze: GII weist zwei gleichnamige Rechtsakte (»Allgemeines Eisenbahngesetz«) nach. Beide werden nun mit dem Jahr ihrer Ausfertigung 1951 und 1993 im Langtitel differenziert. In der Vorversion wurde das neuere AEG noch mit dem Jahr 1994 (Inkrafttreten) beschriftet und das andere AEG ohne Jahreszahl.
- Einführung von Netzwerkanalysen (experimentell!)
- Variablen in CSV-Dateien sind nun semantisch sortiert
- Neues Diagramm für Verteilung von Zeichen
- Falls die XML-Datei mehrere Bemerkungen für Hinweise, Änderung, Neufassung, den Stand oder sonstige Angaben aufweist werden diese nun durch einen vertikalen Strich getrennt (vorher nur mehrere Leerzeichen).
- Kleinere Korrekturen und Ergänzungen im Codebook

11.14 Version 2021-01-05

- Vollständige Aktualisierung der Daten
- Komplette Überarbeitung des Source Codes
- Erstveröffentlichung eines Codebooks
- Einführung der vollautomatischen Erstellung von Datensatz und Codebook
- Einführung von Compilation Reports um den Erstellungsprozess exakt zu dokumentieren
- CSV-Dateien werden durch Parsing der XML-Dateien erstellt
- Automatisierung und deutliche Erweiterung der Qualitätskontrolle
- Einführung von Diagrammen zur Visualisierung von Prüfergebnissen
- Einführung kryptographischer Signaturen

11.15 Version 2020-10-09

- Vollständige Aktualisierung der Daten
- Erstveröffentlichung des Source Codes
- XML-Daten nun fehlerfrei. In Version 2020-07-08 waren XML-Dateien mit Anhängen fehlerhaft.

11.16 Version 2020-07-08

- Vollständige Aktualisierung der Daten

11.17 Version 2020-05-18

- Erstveröffentlichung

12 Parameter für strenge Replikationen

```
system2("openssl", "version", stdout = TRUE)
```

```
## [1] "OpenSSL 3.0.2 15 Mar 2022 (Library: OpenSSL 3.0.2 15 Mar 2022)"
```

```
sessionInfo()
```

```
## R version 4.4.0 (2024-04-24)
## Platform: x86_64-pc-linux-gnu
## Running under: Ubuntu 22.04.4 LTS
##
## Matrix products: default
## BLAS: /usr/lib/x86_64-linux-gnu/openblas-pthread/libblas.so.3
## LAPACK: /usr/lib/x86_64-linux-gnu/openblas-pthread/libopenblas-p-r0.3.20.so;
## LAPACK version 3.10.0
##
## locale:
## [1] LC_CTYPE=en_US.UTF-8 LC_NUMERIC=C
## [3] LC_TIME=en_US.UTF-8 LC_COLLATE=en_US.UTF-8
## [5] LC_MONETARY=en_US.UTF-8 LC_MESSAGES=en_US.UTF-8
## [7] LC_PAPER=en_US.UTF-8 LC_NAME=C
## [9] LC_ADDRESS=C LC_TELEPHONE=C
## [11] LC_MEASUREMENT=en_US.UTF-8 LC_IDENTIFICATION=C
##
## time zone: Europe/Berlin
## tzcode source: system (glibc)
##
## attached base packages:
## [1] stats graphics grDevices utils datasets methods base
##
## other attached packages:
## [1] future.apply_1.11.2 future_1.33.2 quanteda_4.0.2
## [4] readtext_0.91 data.table_1.15.4 scales_1.3.0
## [7] igraph_2.0.3 ggraph_2.2.1 ggplot2_3.5.1
## [10] pdftools_3.4.0 kableExtra_1.4.0 knitr_1.46
## [13] rvest_1.0.4 xml2_1.3.6 httr_1.4.7
## [16] mgsub_1.7.3 zip_2.3.1 fs_1.6.4
## [19] testthat_3.2.1.1 RcppTOML_0.2.2 tarchetypes_0.9.0
## [22] targets_1.7.0
##
## loaded via a namespace (and not attached):
## [1] tidyselect_1.2.1 viridisLite_0.4.2 dplyr_1.1.4
## [4] farver_2.1.1 viridis_0.6.5 fastmap_1.1.1
## [7] tweenr_2.0.3 stringfish_0.16.0 digest_0.6.35
## [10] base64url_1.4 lifecycle_1.0.4 secretbase_0.5.0
## [13] qpdf_1.3.3 waldo_0.5.2 processx_3.8.4
## [16] magrittr_2.0.3 compiler_4.4.0 rlang_1.1.3
## [19] tools_4.4.0 utf8_1.2.4 yaml_2.3.8
```

```

## [22] labeling_0.4.3      askpass_1.2.0      stopwords_2.3
## [25] graphlayouts_1.1.1  curl_5.2.1         pkgload_1.3.4
## [28] withr_3.0.0         purrr_1.0.2        desc_1.4.3
## [31] grid_4.4.0          polyclip_1.10-6    fansi_1.0.6
## [34] colorspace_2.1-0    globals_0.16.3     MASS_7.3-60.2
## [37] cli_3.6.2           rmarkdown_2.26     generics_0.1.3
## [40] RcppParallel_5.1.7  rstudioapi_0.16.0  RApiSerialize_0.1.2
## [43] cachem_1.0.8        ggforce_0.4.2      stringr_1.5.1
## [46] parallel_4.4.0      selectr_0.4-2      vctrs_0.6.5
## [49] Matrix_1.7-0        callr_3.7.6        ggrepel_0.9.5
## [52] listenv_0.9.1       systemfonts_1.0.6  tidyr_1.3.1
## [55] glue_1.7.0          parallelly_1.37.1  codetools_0.2-20
## [58] ps_1.7.6            stringi_1.8.4      gtable_0.3.5
## [61] munsell_0.5.1       tibble_3.2.1       pillar_1.9.0
## [64] htmltools_0.5.8.1  brio_1.1.5         R6_2.5.1
## [67] rprojroot_2.0.4     tidygraph_1.3.1    evaluate_0.23
## [70] lattice_0.22-6      qs_0.26.1          backports_1.4.1
## [73] memoise_2.0.1       Rcpp_1.0.12        fastmatch_1.1-4
## [76] svglite_2.1.3       gridExtra_2.3      xfun_0.43
## [79] pkgconfig_2.0.3

```

Literaturverzeichnis

- Allaire, JJ, Yihui Xie, Christophe Dervieux, Jonathan McPherson, Javier Luraschi, Kevin Ushey, Aron Atkins, et al. 2024. *Rmarkdown: Dynamic Documents for R*. <https://github.com/rstudio/rmarkdown>.
- Barrett, Tyson, Matt Dowle, Arun Srinivasan, Jan Gorecki, Michael Chirico, and Toby Hocking. 2024. *Data.table: Extension of 'Data.frame'*. <https://r-datatable.com>.
- Bengtsson, Henrik. 2021. "A Unifying Framework for Parallel and Distributed Processing in R Using Futures." *The R Journal* 13 (2): 208–27. <https://doi.org/10.32614/RJ-2021-048>.
- . 2024a. *Future.apply: Apply Function to Elements in Parallel Using Futures*. <https://future.apply.futureverse.org>.
- . 2024b. *Future: Unified Parallel and Distributed Processing in R for Everyone*. <https://future.futureverse.org>.
- Benoit, Kenneth, and Adam Obeng. 2024. *Readtext: Import and Handling for Plain and Formatted Text Files*. <https://github.com/quanteda/readtext>.
- Benoit, Kenneth, Kohei Watanabe, Haiyan Wang, Paul Nulty, Adam Obeng, Stefan Müller, and Akitaka Matsuo. 2018. "Quanteda: An R Package for the Quantitative Analysis of Textual Data." *Journal of Open Source Software* 3 (30): 774. <https://doi.org/10.21105/joss.00774>.
- Benoit, Kenneth, Kohei Watanabe, Haiyan Wang, Paul Nulty, Adam Obeng, Stefan Müller, Akitaka Matsuo, and William Lowe. 2024. *Quanteda: Quantitative Analysis of Textual Data*. <https://quanteda.io>.
- Csárdi, Gábor. 2024. *Zip: Cross-Platform Zip Compression*. <https://github.com/r-lib/zip>.
- Csardi, Gabor, and Tamas Nepusz. 2006. "The Igraph Software Package for Complex Network Research." *InterJournal Complex Systems*: 1695. <https://igraph.org>.
- Csárdi, Gábor, Tamás Nepusz, Vincent Traag, Szabolcs Horvát, Fabio Zanini, Daniel Noom, and Kirill Müller. 2024. *Igraph: Network Analysis and Visualization*. <https://r.igraph.org/>.
- Eddelbuettel, Dirk. 2023. *RcppTOML: Rcpp Bindings to Parser for "Tom's Obvious Markup Language"*. <http://dirk.eddelbuettel.com/code/rcpp.toml.html>.
- Landau, William Michael. 2021a. *Tarchetypes: Archetypes for Targets*.
- . 2021b. "The Targets R Package: A Dynamic Make-Like Function-Oriented Pipeline Toolkit for Reproducibility and High-Performance Computing." *Journal of Open Source Software* 6 (57): 2959. <https://doi.org/10.21105/joss.02959>.
- . 2024a. *Tarchetypes: Archetypes for Targets*. <https://docs.ropensci.org/tarchetypes/>.
- . 2024b. *Targets: Dynamic Function-Oriented Make-Like Declarative Pipelines*. <https://docs.ropensci.org/targets/>.
- Ooms, Jeroen. 2023. *Pdftools: Text Extraction, Rendering and Converting of Pdf Documents*. <https://docs.ropensci.org/pdftools/>.
- . 2024a. *Magick: Advanced Graphics and Image-Processing in R*. <https://docs.ropensci.org/magick/%0Ahttps://ropensci.r-universe.dev/magick>.

- . 2024b. *Openssl: Toolkit for Encryption, Signatures and Certificates Based on Openssl*. <https://jeroen.r-universe.dev/openssl>.
- Pedersen, Thomas Lin. 2024. *Ggraph: An Implementation of Grammar of Graphics for Graphs and Networks*. <https://ggraph.data-imaginist.com>.
- Ushey, Kevin, and Hadley Wickham. 2024. *Renv: Project Environments*. <https://rstudio.github.io/renv/>.
- Wickham, Hadley. 2016. *Ggplot2: Elegant Graphics for Data Analysis*. Springer-Verlag New York. <https://ggplot2.tidyverse.org>.
- . 2024. *Rvest: Easily Harvest (Scrape) Web Pages*. <https://rvest.tidyverse.org/>.
- Wickham, Hadley, Winston Chang, Lionel Henry, Thomas Lin Pedersen, Kohske Takahashi, Claus Wilke, Kara Woo, Hiroaki Yutani, Dewey Dunnington, and Teun van den Brand. 2024. *Ggplot2: Create Elegant Data Visualisations Using the Grammar of Graphics*. <https://ggplot2.tidyverse.org>.
- Wickham, Hadley, Jim Hester, and Jeroen Ooms. 2023. *Xml2: Parse Xml*. <https://xml2.r-lib.org/>.
- Wickham, Hadley, Thomas Lin Pedersen, and Dana Seidel. 2023. *Scales: Scale Functions for Visualization*. <https://scales.r-lib.org>.
- Xie, Yihui. 2014. “Knitr: A Comprehensive Tool for Reproducible Research in R.” In *Implementing Reproducible Computational Research*, edited by Victoria Stodden, Friedrich Leisch, and Roger D. Peng. Chapman; Hall/CRC.
- . 2015. *Dynamic Documents with R and Knitr*. 2nd ed. Boca Raton, Florida: Chapman; Hall/CRC. <https://yihui.org/knitr/>.
- . 2024. *Knitr: A General-Purpose Package for Dynamic Report Generation in R*. <https://yihui.org/knitr/>.
- Xie, Yihui, J. J. Allaire, and Garrett Golemund. 2018. *R Markdown: The Definitive Guide*. Boca Raton, Florida: Chapman; Hall/CRC. <https://bookdown.org/yihui/rmarkdown>.
- Xie, Yihui, Christophe Dervieux, and Emily Riederer. 2020. *R Markdown Cookbook*. Boca Raton, Florida: Chapman; Hall/CRC. <https://bookdown.org/yihui/rmarkdown-cookbook>.
- Zhu, Hao. 2024. *KableExtra: Construct Complex Table with Kable and Pipe Syntax*. <http://haozhu233.github.io/kableExtra/>.