

# Package ‘igoR’

January 27, 2021

**Title** Intergovernmental Organizations Database

**Version** 0.1.1

**Description** Tools to extract information from the Intergovernmental Organizations (‘IGO’) Database , version 3, provided by the Correlates of War Project <<https://correlatesofwar.org/>>. See also Pevehouse, J. C. et al. (2020), <doi:10.1177/0022343319881175>. Version 3 includes information from 1815 to 2014.

**License** GPL (>= 3)

**BugReports** <https://github.com/dieghernan/igoR/issues>

**URL** <https://dieghernan.github.io/igoR/>,  
<https://github.com/dieghernan/igoR>

**Encoding** UTF-8

**LazyData** true

**RoxygenNote** 7.1.1

**Depends** R (>= 2.10)

**Suggests** countrycode (>= 1.1.0), dplyr (>= 1.0.2), tinytest, ggplot2,  
knitr, rmarkdown

**VignetteBuilder** knitr

**NeedsCompilation** no

**Author** Diego Hernangómez [aut, cre, cph]  
(<<https://orcid.org/0000-0001-8457-4658>>),  
The Correlates of War Project [cph] (for the data set)

**Maintainer** Diego Hernangómez <[diego.hernangomezherrero@gmail.com](mailto:diego.hernangomezherrero@gmail.com)>

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igoR-package	<i>igoR package</i>
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## Description

Tools to extract information from the Intergovernmental Organizations Database ('IGO'), version 3, provided by the Correlates of War Project <https://correlatesofwar.org/>.

Version 3 includes information from 1815 to 2014.

## Details

```

Package:    igoR
Type:      Package
Version:   See sessionInfo() or DESCRIPTION file
Date:     2021
License:   GPL-3
LazyLoad: yes

```

## Author(s)

dieghernan, <https://github.com/dieghernan/>

## Source

<https://correlatesofwar.org/data-sets/IGOs>

## References

See citation("igoR") for the **R** package.

Pevehouse, Jon CW, Timothy Nordstrom, Roseanne W McManus, and Anne Spencer Jamison. "Tracking Organizations in the World: The Correlates of War IGO Version 3.0 Datasets." *Journal of Peace Research* 57, no. 3 (May 2020): 492-503. doi: [10.1177/0022343319881175](https://doi.org/10.1177/0022343319881175).

## See Also

Useful links:

- <https://dieghernan.github.io/igoR/>
- <https://github.com/dieghernan/igoR>
- Report bugs at <https://github.com/dieghernan/igoR/issues>

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igo\_dyadic

*Extract the Joint Membership of a pair of Countries across IGOs.*

---

## Description

Dyadic version of the data. The unit of observation is a dyad of countries. It provides a summary of the joint memberships of two IGOs over time.

## Usage

```
igo_dyadic(country1, country2, year = 1816:2014, ioname = NULL)
```

## Arguments

country1	A single state, used as a base of comparison. It could be any valid name or code of a state as specified on <a href="#">states2016</a> .
country2	A state of vector of states to be compared with country1.
year	Year to be assessed, an integer or an array of year.
ioname	Optional. ioname or vector of ioname corresponding to the IGOs to be assessed. If NULL (the default), all IGOs would be extracted. See codes on <a href="#">igo_search</a> .

## Details

This function tries to replicate the information contained in the original file distributed by The Correlates of War Project (dyadic\_format3.dta). That file is not included in this package due to its size.

The result is a data frame containing the common years of the states selected via country1, country2, year by rows.

An additional column dyadid, computed as  $(1000 * ccode1) + ccode2$  is provided in order to identify relationships.

For each IGO selected via ioname (or all if the default option has been used) a column (using lowercase ioname as identifier) is provided with the following code system:

Category	Numerical Value
----------	-----------------

No Joint Membership	0
Joint Full Membership	1
Missing data	-9
State Not System Member	-1

If one state in an IGO is a full member but the other is an associate member or observer, that IGO is not coded as a joint membership.

#### Differences with the original dataset

There are some differences on the results provided by this function and the original dataset on some IGOs regarding the "Missing Data" (-9) and "State Not System Member" (-1). However it is not clear how to fully replicate those values.

See **Codebook Version 3 IGO Data**

#### Value

A coded data frame representing the years and country dyad (rows) and the IGOs selected (columns).  
See Details

#### Source

**Codebook Version 3 IGO Data** for full reference.

#### References

Pevehouse, Jon CW, Timothy Nordstrom, Roseanne W McManus, and Anne Spencer Jamison. "Tracking Organizations in the World: The Correlates of War IGO Version 3.0 Datasets." *Journal of Peace Research* 57, no. 3 (May 2020): 492-503. doi: [10.1177/0022343319881175](https://doi.org/10.1177/0022343319881175).

#### See Also

[state\\_year\\_format3](#), [states2016](#), [igo\\_search](#).

#### Examples

```
USA_CAN <- igo_dyadic("USA", "Spain")
nrow(USA_CAN)
ncol(USA_CAN)

# Using custom parameters
igo_dyadic(
  country1 = "France",
  country2 =
    c("Sweden", "Austria"),
  year = 1992:1995,
  ioname = "EU"
)
```

---

`igo_members`*Extract Members of an IGO*

---

## Description

Extract all the countries belonging to an IGO on a specific date.

## Usage

```
igo_members(ioname, year = NULL, status = "Full Membership")
```

## Arguments

<code>ioname</code>	Any valid ioname of an IGO as specified on <a href="#">igo_year_format3</a> . It could be also a vector of IGOs.
<code>year</code>	Year to be assessed, an integer or an array of year. If NULL the latest year available of the IGO would be extracted.
<code>status</code>	Character or vector with the membership status to be extracted. See Details on <a href="#">state_year_format3</a> .

## Value

A dataframe.

## See Also

[igo\\_year\\_format3](#), [igo\\_search](#), [state\\_year\\_format3](#).

## Examples

```
# Composition on two different dates
igo_members("EU", year = 1993)
igo_members("EU")
igo_members("NAFTA", year = c(1995:1998))

# Extract different status
igo_members("ACCT", status = c("Associate Membership", "Observer"))

# States no members of the UN
igo_members("UN", status = "No Membership")

# Vectorized
igo_members(c("NAFTA", "EU"), year = 1993)

# Use countrycodes package to get additional codes
if (requireNamespace("countrycode", quietly = TRUE)) {
  library(countrycode)
```

```

EU <- igo_members("EU")
EU$iso3c <- countrycode(EU$ccode, origin = "cown",
                        destination = "iso3c")
EU$continent <- countrycode(EU$ccode, origin = "cown",
                             destination = "continent")

head(EU)
}

```

---

 igo\_search

*Search and Find an IGO*


---

### Description

Search any IGO by name or string pattern.

### Usage

```
igo_search(pattern = NULL, exact = FALSE)
```

### Arguments

pattern	regex pattern. If NULL the function returns a dataset with all the IGOs on <a href="#">igo_year_format3</a> . Integer values are accepted.
exact	Logical. When TRUE only exact matches are returned.

### Details

The information of each IGO is retrieved based on the last year available on [igo\\_year\\_format3](#). An additional column label is provided. This column is a clean version of longorgname

### Value

A dataframe.

### See Also

[igo\\_year\\_format3](#)

### Examples

```

# All values
all <- igo_search()

nrow(all)
colnames(all)

# Search by pattern
igo_search("EU")[,1:3]

```

```
igo_search("EU", exact = TRUE)[, 1:3]

# With integers
igo_search(10)[, 1:3]

igo_search(10, exact = TRUE)[, 1:3]

# Several patterns (regex style)
igo_search("NAFTA|UN|EU")[, 1:3]

# Several patterns Exact (regex style)
igo_search("^NAFTA$|^UN$|^EU$")[, 1:3]
```

---

igo\_search\_states      *Finds codes and names of a state*

---

## Description

Extract all the memberships of a state on a specific date.

## Usage

```
igo_search_states(state)
```

## Arguments

state                    Any valid name or code of a state as specified on [states2016](#). It could be also an array of states.

## Value

A dataframe.

## See Also

[states2016](#).

## Examples

```
igo_search_states("Spain")

igo_search_states(c(20, 150))

igo_search_states("congo")

igo_search_states(c("Germany", "papal states"))

igo_search_states(c("FRN", "United Kingdom", 240, "italy"))
```

---

igo\_state\_membership *Extract Memberships of a State*

---

### Description

Extract all the memberships of a state on a specific date.

### Usage

```
igo_state_membership(state, year = NULL, status = "Full Membership")
```

### Arguments

state	Any valid name or code of a state as specified on <a href="#">states2016</a> . It could be also a vector of states
year	Year to be assessed, an integer or an array of year. If NULL the latest year available of the state would be extracted.
status	Character or vector with the membership status to be extracted. See Details on <a href="#">igo_year_format3</a> .

### Value

A dataframe.

### See Also

[igo\\_year\\_format3](#), [igo\\_search\\_states](#), [states2016](#).

### Examples

```
# Memberships on two different dates
igo_state_membership("Spain", year = 1850)
igo_state_membership("Spain", year = 1870)
igo_state_membership("Spain", year = 1880:1882)

# Last year
igo_state_membership("ZAN")[, 1:7]

# Use codes to get countries
igo_state_membership("2", year = 1865)

# Extract different status
igo_state_membership("kosovo",
                    status = c("Associate Membership",
                              "Observer",
                              "Full Membership"))
```



```

# Vectorized
igo_state_membership(c("usa", "spain"),
                    year = 1870:1871)

# Use countrycodes package to get additional codes
if (requireNamespace("countrycode", quietly = TRUE)) {
  library(countrycode)
  IT <- igo_state_membership("Italy", year = 1880)
  IT$iso3c <- countrycode(IT$ccode, origin = "cown",
                        destination = "iso3c")
  head(IT)
}

```

---

igo\_year\_format3      *Intergovernmental Organizations (IGO) by year*

---

## Description

Data on IGOs from 1815-2014, at the IGO-year level. Contains one record per IGO-year (with years listed at 5 year intervals through 1965, and annually thereafter).

## Format

data frame with 19335 rows. Relevant fields:

- **ioname**: Short abbreviation of the IGO name.
- **orgname**: Full IGO name.
- **year**: Calendar Year.
- **afghanistan...zimbabwe**: status of that state in the IGO:

Category	Numerical Value
No Membership	0
Full Membership	1
Associate Membership	2
Observer	3
Missing data	-9
State Not System Member	-1

- **sdate**: start date (year) that the IGO started.
- **deaddate**: dead date (year) that the IGO dead.
- **longorgname**: a longer version of the IGOs name (including previous names)
- **ionum**: IGO id number in v2.1 and v3.0 of the data.
- **version**: COW version number.

See [Codebook Version 3 IGO Data](#) for full reference.

**Note**

Raw data used internally by **igoR**

**Source**

**Intergovernmental Organizations (v3)**, The Correlates of War Project (IGO Data Stata Files)

**References**

Pevehouse, Jon CW, Timothy Nordstrom, Roseanne W McManus, and Anne Spencer Jamison. "Tracking Organizations in the World: The Correlates of War IGO Version 3.0 Datasets." *Journal of Peace Research* 57, no. 3 (May 2020): 492-503. doi: [10.1177/0022343319881175](https://doi.org/10.1177/0022343319881175).

**See Also**

[state\\_year\\_format3](#)

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states2016

*State System Membership (v2016)*

---

**Description**

The list of states with COW abbreviations and ID numbers, plus the field state from [state\\_year\\_format3](#).

**Format**

data frame with 243 rows:

- **ccode**: COW country number.
- **stateabb**: COW state abbreviation (3 characters).
- **statenme**: COW state name.
- **styear...endday**: Fields to identify the beginning and the end of each tenure.
- **version**: Data file version number.
- **state**: Abbreviated state name as appear in [state\\_year\\_format3](#).

**Details**

This data set contains the list of states in the international system as updated and distributed by the Correlates of War Project.

This data set contains the list of states in the international system as updated and distributed by the Correlates of War Project. These data sets identify states, their standard Correlates of War "country code" or state number (used throughout the Correlates of War project data sets), state abbreviations, and dates of membership as states and major powers in the international system.

The Correlates of War project includes a state in the international system from 1816-2016 for the following criteria:

- **Prior to 1920** the entity must have had a population greater than 500,000 and have had diplomatic missions at or above the rank of charge d'affaires with Britain and France.
- **After 1920** the entity must be a member of the League of Nations or the United Nations, or have a population greater than 500,000 and receive diplomatic missions from two major powers.

### Note

state variable added to original data to help comparison across datasets on this package.

### Source

[State System Membership \(v2016\)](#), The Correlates of War Project.

### References

Correlates of War Project. 2017 "State System Membership List, v2016." Online, <https://correlatesofwar.org/>.

### See Also

[state\\_year\\_format3](#), [igo\\_year\\_format3](#).

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state\_year\_format3      *Country membership to IGO by year*

---

### Description

Data on IGOs from 1815-2014, at the country-year level. Contains one record per country-year (with years listed at 5 year intervals through 1965, and annually thereafter).

### Format

data frame with 15557 rows. Relevant fields:

- **ccode**: COW country number, see [states2016](#).
- **year**: Calendar Year.
- **state**: Abbreviated state name, identical to variable names in [igo\\_year\\_format3](#)
- **aaaid...wassen**: IGO variables containing information on state membership status:

Category	Numerical Value
No Membership	0
Full Membership	1
Associate Membership	2
Observer	3
Missing data	-9
IGO Not In Existence	-1

See **Codebook Version 3 IGO Data**

**Note**

Raw data used internally by **igoR**

**Source**

**Intergovernmental Organizations (v3)**, The Correlates of War Project (IGO Data Stata Files)

**References**

Pevehouse, Jon CW, Timothy Nordstrom, Roseanne W McManus, and Anne Spencer Jamison. "Tracking Organizations in the World: The Correlates of War IGO Version 3.0 Datasets." *Journal of Peace Research* 57, no. 3 (May 2020): 492-503. doi: [10.1177/0022343319881175](https://doi.org/10.1177/0022343319881175).

**See Also**

[igo\\_year\\_format3](#), [states2016](#). See also [countrycode](#) to convert between different country code schemes.

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