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COUNCIL'S OPEN DATASETS

# **USER'S MANUAL**

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# 1 INTRODUCTION

In April 2015, the Council of the EU released its first dataset as open data. It concerned the Council's voting results on legislative acts since the entry into force of the Lisbon Treaty, on 1 December 2009. This pilot project project was named CODI (Council's Open Data Initiative).

CODI-2 solution for publishing Linked Open Data for the Council is a continuation of the solution applied in CODI-1. CODI-2 concerns the following data:

- Metadata on requests for public access to documents (registered in DTA),
- Metadata of the Council's Public Register of documents,
- Linking between DTA, Public register and Voting results, and
- Linking to external sources.

The overall approach is very similar to CODI-1, but the new datasets provide additional data challenges (such as the management of controlled vocabularies and the relationships between the datasets) and additional technical challenges such as a larger volume.

During the project the initial independent treated datasets DTA and the Public Register got merged into one coherent data story. The already published dataset on the Voting Results has been assessed for integration. A straightforward connection was unfortunately not possible. The correct integration requires adaptations to the Voting Results dataset. Those are planned to be taken into account in the near future.

This document provides insight in the machine readable structure in which the data is made public. The dataset is published following Linked Open Data principles. The data items are identified according to a URI schema, the information structure (which properties and relationships, their semantics, etc.) is reflected in a CODI-2 vocabulary. This vocabulary reuse when possible and adequate elements from external vocabularies.

During the publication preparation process, the published data went through a data quality process. Problematic low quality data has been excluded, and where possible data quality improvements have been done. These activities have been performed in order to provide the user a more coherent and complete dataset. Data quality is an ongoing activity. It may require future updates to the vocabulary and the supporting taxonomies.

This document is structured as follows: the second chapter describes the provided data, the used controlled vocabularies and the data model (both intentionally as the machine readable instance of it). The third chapter explores the data using SPARQL queries that reflect the tables of the Council's Annual Report on Access to Documents. In this same

chapter, there is a separate section with basic SPARQL queries that might help the user in exploring the datasets.

## 2 MACHINE READABLE DATA

This chapter provides insight in all the data modeling and transformation aspects to create the machine readable data that has been published as open data.

### 2.1 Ontology

The ontology creation task concerns the modeling of the information the datasets contain. The followed modeling principles are:

- modeling the information, not the application use,
- reuse, where possible, existing vocabularies and ontologies, and
- document modeling decisions

The ontology contains 3 aspects:

- A graphical overview of the information structure as it is being published,
- A documented ontology describing the information structure. It will come as an RDF/OWL file.
- An [end-user description](#) of the disclosed information with a mapping to the information structure

#### 2.1.1 REUSED DOMAIN MODELS

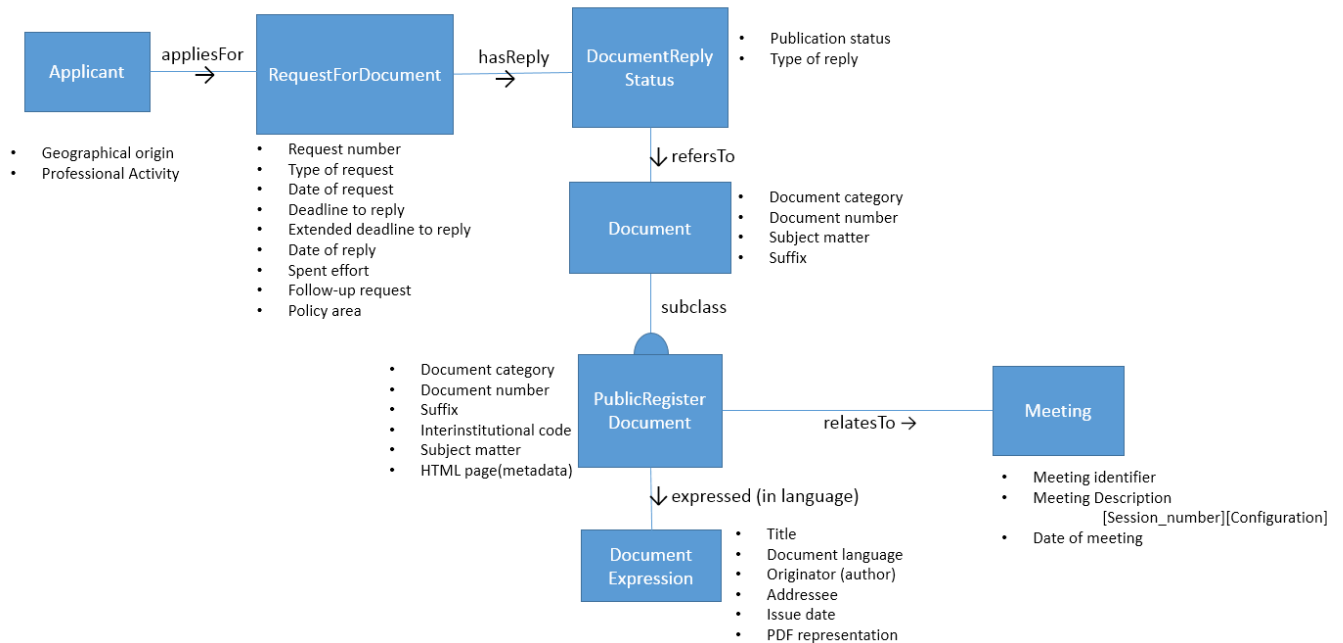
The ontology reuses and takes inspiration of these models:

- Dublin Core (<http://dublincore.org/documents/dcmi-terms/>): Dublin Core metadata vocabulary has been designed for document publications. Hence for the Public Register modeling the overlap exists.
- FRBR ([http://archive.ifla.org/VII/s13/frbr/frbr\\_current3.htm](http://archive.ifla.org/VII/s13/frbr/frbr_current3.htm)): FRBR is a generic abstract structuring of publications. Its main principles of Work, Expression and Manifestation are applied for the Public Register modeling
- Cellar (<http://publications.europa.eu/mdr/cdm/index.html>): The Cellar ontology from the Publications Office is based on FRBR. Some documents produced and published by GSC are made publicly available via the Publications Office channels. Therefore the interest in the model goes beyond the FRBR instantiation: some fields like the inter-institutional code can be reused.
- SKOS (<https://www.w3.org/2004/02/skos/>): For the controlled vocabularies SKOS is being used to represent the concept schemes and their content.

In addition to the inspiration and direct reuse of the above vocabularies, actual taxonomies managed by the Publications Office are being reused. For these see section 2.3 Controlled Vocabularies.

### 2.1.2 GRAPHICAL OVERVIEW

The data model is depicted below. The data model covers the data of the requests for documents and of the Public Register. The future integration with the voting results has not been included.



### 2.1.3 TABLE OVERVIEW

- prefix codi = <http://data.consilium.europa.eu/def/codi/>
- prefix dcterms = <http://purl.org/dc/terms/>
- prefix foaf = <http://xmlns.com/foaf/0.1/>
- prefix owl = <http://www.w3.org/2002/07/owl#>
- prefix cellar = <http://publications.europa.eu/ontology/cdm#>
- prefix schema = <https://schema.org/>

The following table provides a condensed overview of the model.

Class	Property	URI	Description/ Usage Note	Subclass/ Sub-property of
Applicant		foaf:Agent	An applicant is a citizen/legal person that applies for public access to documents  To completely anonymize personal data for each request an applicant is generated.	
	Geographical origin	codi:geographicalOrigin		
	Professional Activity	codi:professionalActivity		
	appliesFor	codi:appliesFor	The request for access that the agent has submitted	
RequestForDocument		codi:RequestForDocument		
	Request number	dcterms:identifier		
	Type of request	codi:requestType		dcterms:type
	Date of request	codi:dateAccepted		dcterms:dateAccepted
	Deadline to reply	codi:deadlineToReply		
	Extended deadline to reply	codi:extendedDeadlineToReply		
	Date of reply	codi:dateReply		dcterms:issued
	Effort spent	codi:spentEffort		dcterms:extent
	Follow-up request	codi:hasFollowupRequest		
	hasReply	codi:hasReply		
	Policy area	codi:policyArea		
DocumentReplyStatus		codi:DocumentReplyStatus		

Class	Property	URI	Description/ Usage Note	Subclass/ Sub-property of
	Publication status	codi:replyPublicationStatus	The publication status of the document at the time of the response	
	Type of reply	dcterms:accessRights		
	refersTo	codi:refersTo		dcterms:references
Document		codi:Document		cellar:work dcterms:Bibliographic Resource
	Document number	dcterms:identifier		
	Suffix	codi:suffix		
	Subject matter	dcterms:subject		
	document category	codi:documentCategory		
		owl:sameAs	When the doc exists in the public register, this links to the public identifier of the doc	
PublicRegisterDocument		codi:PublicRegisterDocument		
	Document Number	dcterms:identifier		
	Document category	codi:documentCategory		
	Suffix	codi:documentSuffix		
	Interinstitutional code	codi:interinstitutionalCode	The code used to identify a document within the EU (connects to cellar)	cellar:procedure_code_interinstitutional_number_procedure
	Subject matter	dcterms:subject		
	HTML page (metadata)	foaf:page		
	expressed	codi:expressed		cellar:work_has_expression



Class	Property	URI	Description/ Usage Note	Subclass/ Sub-property of
DocumentExpression		codi:DocumentExpression		cellar:expression
	Title	dcterms:title		
	Document language	dcterms:language		cellar:expression_uses_language
	Originator (author)	dcterms:creator		
	Addressee	dcterms:audience		
	Issue Date	dcterms:issued		
	PDF representation	foaf:page		
		codi:relatesTo	Relates to the meeting	
Meeting		schema:BusinessEvent		
	Date of Meeting	codi:dateOfMeeting		
	Meeting Description	dcterms:description		

## 2.2 URI Schema

This section describes the basic principles/rules that were followed for the URIs creation.

### 2.2.1 DOMAINS

The following 2 domains are being used to construct the RDF representation of the data.

- codi-id = <<http://data.consilium.europa.eu/id/>>
- codi-def = <http://data.consilium.europa.eu/def/>

## 2.2.2 GENERAL PRINCIPLES

The ontological/terminological level are within the *codi-def* space, whereas the data items are within the *codi-id* space. The choice is also supported by the expected change rate of the items belonging to a topic.

Topic	Space	Expected change rate
Class	codi-def	low
Property	codi-def	low
taxonomy	codi-def	Low
Concept	codi-id	medium
Datasets	codi-id	medium
a data-entry	codi-id	high

The following table provides the details per topic.

Topic (class/property)	Scheme	Example
Class instance	{Codi-id}/{category}/{id}	Each instance is categorized according to a category. Within that category the instance has an unique identifier  Categories = {request, agent, document, documentreply, meeting}
DTA request	{Codi-id}request/{id}	<a href="http://data.consilium.europa.eu/id/request/18818">http://data.consilium.europa.eu/id/request/18818</a>
DTA agent	{Codi-id}/agent/{id}	<a href="http://data.consilium.europa.eu/id/applicant/18426">http://data.consilium.europa.eu/id/applicant/18426</a>
DTA document status	{Codi-id}/documentstatus/{requestid}/{DTAdocid}	<a href="http://data.consilium.europa.eu/id/documentstatus/30551/112052">http://data.consilium.europa.eu/id/documentstatus/30551/112052</a>
DTA document	{Codi-id}/document/{id}	<a href="http://data.consilium.europa.eu/id/document/112052">http://data.consilium.europa.eu/id/document/112052</a>
PubReg Document	{Codi-id}/document/{id}	<a href="http://data.consilium.europa.eu/id/document/ST-8286-2010-INIT">http://data.consilium.europa.eu/id/document/ST-8286-2010-INIT</a>
PubReg DocumentExpression	{Codi-id}/document/{id}/{lan}	<a href="http://data.consilium.europa.eu/id/document/ST-8286-2010-INIT/en">http://data.consilium.europa.eu/id/document/ST-8286-2010-INIT/en</a>

Topic (class/property)	Scheme	Example
property of the document class	{Codi-def}/codi/{property}	<a href="http://data.consilium.europa.eu/def/codi/suffix">http://data.consilium.europa.eu/def/codi/suffix</a>
A class in the DTA ontology	{Codi-def}/codi/{name-class}	<a href="http://data.consillium.europa.eu/def/codi/RequestForDocument">http://data.consillium.europa.eu/def/codi/RequestForDocument</a>
A property in the DTA ontology	{Codi-def}/codi/{name-property}	<a href="http://data.consilium.europa.eu/def/codi/deadlineToReply">http://data.consilium.europa.eu/def/codi/deadlineToReply</a>
A taxonomy	{Codi-def}taxonomy/{name-taxonomy}	<a href="http://data.consilium.europa.eu/def/taxonomy/policyarea">http://data.consilium.europa.eu/def/taxonomy/policyarea</a>

## 2.3 Controlled Vocabularies

The publishing of the datasets requires the publishing of several controlled vocabularies. Controlled Vocabularies will be published as independent datasets. These datasets are supporting datasets for the datasets which the CODI-2 project publishes. Publishing them independently allows them to be reused in future publications (internally as externally the Council).

Controlled vocabularies are published according the SKOS standard.

The taxonomies are available in the SPARQL endpoint, each of them in an independent graph.

### 2.3.1 CODI-2 SPECIFIC SUPPORTING TAXONOMIES

The Council specific supporting taxonomies are enumerated in the table below.

Taxonomy Title	Graph name (skos:inScheme)
Geographical Origin	<a href="http://data.consilium.europa.eu/def/taxonomy/GeographicalOrigin">http://data.consilium.europa.eu/def/taxonomy/GeographicalOrigin</a>
Request Type	<a href="http://data.consilium.europa.eu/def/taxonomy/RequestType">http://data.consilium.europa.eu/def/taxonomy/RequestType</a>
Type Of Reply	<a href="http://data.consilium.europa.eu/def/taxonomy/TypeOfReply">http://data.consilium.europa.eu/def/taxonomy/TypeOfReply</a>
Document Publication Status	<a href="http://data.consilium.europa.eu/def/taxonomy/DocumentPublicationStatus">http://data.consilium.europa.eu/def/taxonomy/DocumentPublicationStatus</a>
Interinstitutional Code	<a href="http://data.consilium.europa.eu/def/taxonomy/InterinstitutionalCode">http://data.consilium.europa.eu/def/taxonomy/InterinstitutionalCode</a>
Professional Activity	<a href="http://data.consilium.europa.eu/def/taxonomy/ProfessionalActivity">http://data.consilium.europa.eu/def/taxonomy/ProfessionalActivity</a>
Council Document Suffix	<a href="http://data.consilium.europa.eu/def/taxonomy/CouncilDocumentSuffix">http://data.consilium.europa.eu/def/taxonomy/CouncilDocumentSuffix</a>

Policy Area	<a href="http://data.consilium.europa.eu/def/taxonomy/PolicyArea">http://data.consilium.europa.eu/def/taxonomy/PolicyArea</a>
Subject Matters	<a href="http://data.consilium.europa.eu/def/taxonomy/SubjectMatter">http://data.consilium.europa.eu/def/taxonomy/SubjectMatter</a>
Document Category	<a href="http://data.consilium.europa.eu/def/taxonomy/DocumentCategory">http://data.consilium.europa.eu/def/taxonomy/DocumentCategory</a>

### 2.3.2 EXTERNAL SUPPORTING TAXONOMIES

Another set of already existing external supporting taxonomies is being used and are attached below. In the current version of the data the following external taxonomies are being used:

Taxonomy Title	Graph name/notes
Countries	<a href="http://publications.europa.eu/resource/authority/country">http://publications.europa.eu/resource/authority/country</a>
Languages	<a href="http://publications.europa.eu/resource/authority/language">http://publications.europa.eu/resource/authority/language</a>
Corporate Bodies	<i>used within DCAT-AP Dataset Descriptions</i>

There are other taxonomies that will be used in the future, such as:

Taxonomy title	Graph name/notes
Data theme	<i>used within DCAT-AP Dataset Descriptions</i>
Continents	Originates from the <i>Publications Office</i> and might be linked to the already used taxonomy <i>Countries</i> which comes from the same source.

## 3 SPARQL EXAMPLES

### 3.1 Report queries

The Council receives requests for public access to documents from citizens or legal persons from all over the world. These requests are managed via the application DTA. Based on operational data (who, when, what, response), the Council publishes an annual report summarizing information about the requests.<sup>1</sup> The ambition of this project is to publish anonymized operational data as Linked Data so that the tables of the annual report can be created using SPARQL queries.

The Council has selected information that can be made public. In the document "Understanding the Council's open datasets" a full explanation is given about the published data. The published information is about agents that put forward a request for access to documents and the answer that is given to them. Because of privacy and security, the published information is anonymized prior to publication.

The queries below are a starting point for obtaining the results used in the annual report. In order to visualize the results of the queries, [YASGUI](#) is used. The results have been reformatted using the pivot table option so that they conform more to the presentation of the tables as in the printed previous documents.

#### 3.1.1 NUMBER OF APPLICANTS PURSUANT TO REGULATION 1049/2001

```
PREFIX codi: <http://data.consilium.europa.eu/def/codi/>
PREFIX skos: <http://www.w3.org/2004/02/skos/core#>
```

```
select year(?date) count( distinct ?r)
where {
  ?r codi:dateAccepted ?date.
  ?r codi:requestType ?type.
  FILTER(str(year(?date)) >= "2011")
} group by year( ?date ) order by year(?date)
```

---

<sup>1</sup> Officially entitled: "ANNUAL REPORT OF THE COUNCIL ON THE IMPLEMENTATION OF REGULATION No 1049/2001 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 30 MAY 2001 REGARDING PUBLIC ACCESS TO EUROPEAN PARLIAMENT, COUNCIL AND COMMISSION DOCUMENTS". See [list of previous annual reports](#).

Output

Year	2011	2012	2013	2014	2015	2016
No. of app.	2143	1894	2238	2393	2810	626

PREFIX codi: <http://data.consilium.europa.eu/def/codi/>  
PREFIX skos: <http://www.w3.org/2004/02/skos/core#>

```
select year(?date) ?cl count(?r)
where {
  ?r codi:dateAccepted ?date.
  ?r codi:requestType ?c.
  ?c skos:prefLabel ?cl.
  FILTER(str(year(?date)) >= "2011")
} group by year( ?date ) ?cl order by year( ?date )
```

Output

Year	2011		2012		2013		2014		2015		2016	
No. of app	27	2116	23	1871	26	2212	40	2353	24	2786	3	623
Type	confirmatory application	initial request	confirmatory application	initial request	confirmatory application	initial request	confirmatory application	initial request	confirmatory application	initial request	confirmatory application	initial request

### 3.1.2 NUMBER OF DOCUMENTS REQUESTED BY INITIAL APPLICATIONS

PREFIX codi: <http://data.consilium.europa.eu/def/codi/>  
PREFIX skos: <http://www.w3.org/2004/02/skos/core#>

```
select year(?date) count(distinct ?doc)
where {
  ?r codi:dateAccepted ?date.
  ?r codi:requestType ?c.
  ?c skos:notation "I".
  ?r codi:hasReply ?reply.
  ?reply codi:refersTo ?doc.
  FILTER(str(year(?date)) >= "2011")
} group by year( ?date ) order by year( ?date )
```

Output

Year	2011	2012	2013	2014	2015	2016
Documents requested	9162	6234	6647	8433	11339	1930

### 3.1.3 DOCUMENTS RELEASED BY THE GSC AT THE INITIAL STAGE

PREFIX codi: <http://data.consilium.europa.eu/def/codi/>

PREFIX skos: <http://www.w3.org/2004/02/skos/core#>

```
select year(?date) count(distinct ?doc) ?status
```

```
where {
```

```
  ?r codi:dateAccepted ?date.
```

```
  ?r codi:requestType ?c.
```

```
  ?c skos:notation "I".
```

```
  ?r codi:hasReply ?reply.
```

```
  ?reply codi:refersTo ?doc.
```

```
  ?reply codi:replyPublicationStatus ?status.
```

```
  FILTER(str(year(?date)) >= "2011")
```

```
  FILTER(?status !=
```

```
<http://data.consilium.europa.eu/id/taxonomy/DocumentPublicationStatus/concept/refused>)
```

```
} group by year( ?date ) ?status order by year( ?date )
```

Output

	Year	2011	2012	2013	2014	2015	2016	Total
<b>Status</b>								
<b>Partial access</b>		889	985	666	661	1053	101	<b>4355</b>
<b>Public</b>		7310	4373	4772	6335	9263	1517	<b>33570</b>
<b>Totals</b>		<b>8199</b>	<b>5358</b>	<b>5438</b>	<b>6996</b>	<b>10316</b>	<b>1618</b>	<b>37925</b>

### 3.1.4 NUMBER OF CONFIRMATORY APPLICATIONS

```
PREFIX codi: <http://data.consilium.europa.eu/def/codi/>
PREFIX skos: <http://www.w3.org/2004/02/skos/core#>
```

```
select year(?date) as ?year count(?r) as ?confirmapp
where {
  ?r codi:dateAccepted ?date.
  ?r codi:requestType ?c.
  ?c skos:notation "C".
  FILTER(str(year(?date)) >= "2011")
} group by year( ?date ) order by year( ?date )
```

Output

Year	2011	2012	2013	2014	2015	2016
<b>Confirmatory app.</b>	27	23	26	40	24	3

### 3.1.5 NUMBER OF DOCUMENTS REQUESTED BY CONFIRMATORY APPLICATIONS

```
PREFIX codi: <http://data.consilium.europa.eu/def/codi/>
PREFIX skos: <http://www.w3.org/2004/02/skos/core#>
```

```
select year(?date) as ?Year count(?doc) as ?NumberOfDocuments
where {
  ?r codi:dateAccepted ?date.
  ?r codi:requestType ?c.
  ?c skos:notation "C".
  ?r codi:hasReply ?doc.
  FILTER(str(year(?date)) >= "2011")
} group by year( ?date ) order by year( ?date )
```

Output

Year	2011	2012	2013	2014	2015	2016
<b>NumberOfDocuments</b>	60	78	64	399	127	4



### 3.1.6 NUMBER OF DOCUMENTS RELEASED FOLLOWING CONFIRMATORY APPLICATIONS

```

PREFIX codi: <http://data.consilium.europa.eu/def/codi/>
PREFIX skos: <http://www.w3.org/2004/02/skos/core#>

select year(?date) count(?doc) ?status
where {
  ?r codi:dateAccepted ?date.
  ?r codi:requestType ?c.
  ?c skos:notation "C".
  ?r codi:hasReply ?reply.
  ?reply codi:refersTo ?doc.
  ?reply codi:replyPublicationStatus ?status.
  FILTER(str(year(?date)) >= "2011")
  FILTER(?status !=
<http://data.consilium.europa.eu/id/taxonomy/DocumentPublicationStatus/concept/refused>)
} group by year( ?date ) ?status order by year( ?date )

```

Output

Year	2011	2012	2013	2014	2015	2016	Totals
<b>Status</b>							
<b>Partial access</b>	15	17	29	132	38	0	<b>231</b>
<b>Public</b>	26	10	6	27	23	3	<b>95</b>
<b>Totals</b>	<b>41</b>	<b>27</b>	<b>35</b>	<b>159</b>	<b>61</b>	<b>3</b>	<b>326</b>

### 3.1.7 RATE OF DOCUMENT RELEASED FOR THE PROCEDURE AS A WHOLE

```

PREFIX codi: <http://data.consilium.europa.eu/def/codi/>
PREFIX skos: <http://www.w3.org/2004/02/skos/core#>

select year(?date) count(?doc) ?status
where {
  ?r codi:dateAccepted ?date.
  ?r codi:hasReply ?reply.
  ?reply codi:refersTo ?doc.
  ?reply codi:replyPublicationStatus ?status.
  FILTER(str(year(?date)) >= "2011")
} group by year( ?date ) ?status order by year( ?date )

```

Output

Year	2011	2012	2013	2014	2015	2016	Totals
<b>Status</b>							
<b>Partial Access</b>	1120	1131	922	897	1298	112	<b>5480</b>
<b>Public</b>	8007	4860	5547	7541	10939	1720	<b>38614</b>
<b>Refused</b>	1164	1176	1618	2074	1638	410	<b>8080</b>
<b>Totals</b>	<b>10291</b>	<b>7167</b>	<b>8087</b>	<b>10512</b>	<b>13875</b>	<b>2242</b>	<b>52174</b>

### 3.1.8 NUMBER OF DOCUMENTS REFERRED TO IN THE PUBLIC REGISTER

```
prefix owl: <http://www.w3.org/2002/07/owl#>
prefix codi: <http://data.consilium.europa.eu/def/codi/>
select year( ?date) count(?doc)
where {
  ?doc a codi:PublicRegisterDocument.
  ?doc codi:expressed ?exp.
  ?exp <http://purl.org/dc/terms/issued> ?date.
  FILTER(str(year(?date)) >= "2011")
}group by year( ?date ) order by year( ?date )
```

Output

Year	2011	2012	2013	2014	2015	2016	Totals
<b>Totals</b>	97532	94760	91023	104713	84217	5906	<b>478155</b>

### 3.1.9 NUMBER OF PUBLIC/DOWNLOADABLE DOCUMENTS

```

prefix codi: <http://data.consilium.europa.eu/def/codi/>
prefix foaf: <http://xmlns.com/foaf/0.1/>
select year( ?date) count( distinct ?page)
where {
  ?doc a codi:PublicRegisterDocument.
  ?doc <http://data.consilium.europa.eu/def/codi/expressed> ?expression.
  ?expression foaf:page ?page.
  ?expression <http://purl.org/dc/terms/issued> ?date.
  FILTER(str(year(?date)) >= "2011")
}group by year( ?date ) order by year( ?date ).

```

Output

Year	2011	2012	2013	2014	2015	2016	Totals
Totals	77390	76029	76107	87760	68233	4760	<b>390282</b>

### 3.1.10 PROFESSIONAL PROFILE OF THE APPLICANTS (INITIAL APPLICATIONS)

```

PREFIX codi: <http://data.consilium.europa.eu/def/codi/>
PREFIX skos: <http://www.w3.org/2004/02/skos/core#>
PREFIX foaf: <http://xmlns.com/foaf/0.1/>

select year( ?date) ?profparent ?prof2 count(distinct ?r)
where {
  ?agent a foaf:Agent.
  ?agent codi:professionalActivity ?prof_uri.
  ?prof_uri skos:prefLabel ?prof2.
  optional {?prof_uri skos:broader ?broader.
    ?broader skos:prefLabel ?profparent.}
  ?agent codi:appliesFor ?r.
  ?r codi:dateAccepted ?date.
  ?r codi:requestType <http://data.consilium.europa.eu/id/taxonomy/RequestType/concept/i>.
  FILTER(str(year(?date)) >= "2010")
} group by ?prof2 ?profparent year( ?date ) order by year( ?date )

```

Output

Year		2010	2011	2012	2013	2014	2015		
Prof-activity								2016	Totals
academic world	library	32	25	12	13	19	12		113
	university research	845	600	422	407	430	721	139	3564
civil society	consultant	301	236	379	534	568	436	49	2503
	environmental lobby	36	4	2	1	1	1	1	46
	industrial/commercial sector	363	249	240	372	336	373	29	1962
	NGOs	105	43	68	104	99	130	24	573
	other institutions	52	65	53	59	70	81	31	411
null	agency	13	2	6	10	12	13	3	59
	european agency	19	13	10	2	3	1	2	50
	international organization	29	17	17	15	7	16	4	105
	journalist	67	155	69	47	116	148	95	697
	lawyer	286	242	164	156	161	268	35	1312
	lobbies	166	203	194	238	296	227	27	1351
	member of the E.P.	1				1	1		3
	member state				3	16	7	6	32
	MEP or Assistant of MEP	20	10	11	11	3	18	7	80
	missions	52	15	6	12	12	13	4	114
	not specified	281	204	186	203	181	177	104	1336
	others	72	23	25	16	18	140	62	356
politician	13	10	7	9	4	3	1	47	
<b>Totals</b>		<b>2753</b>	<b>2116</b>	<b>1871</b>	<b>2212</b>	<b>2353</b>	<b>2786</b>	<b>623</b>	<b>14714</b>

### 3.1.11 PROFESSIONAL PROFILE OF THE APPLICANTS (CONFIRMATORY APPLICATIONS)

PREFIX codi: <http://data.consilium.europa.eu/def/codi/>  
 PREFIX skos: <http://www.w3.org/2004/02/skos/core#>  
 PREFIX foaf: <http://xmlns.com/foaf/0.1/>

```
select year( ?date) ?profparent ?prof2 count(distinct ?r)
where {
    ?agent a foaf:Agent.
    ?agent codi:professionalActivity ?prof_uri.
    ?prof_uri skos:prefLabel ?prof2.
    optional {?prof_uri skos:broader ?broader.
        ?broader skos:prefLabel ?profparent.}
    ?agent codi:appliesFor ?r.
    ?r codi:dateAccepted ?date.
    ?r codi:requestType <http://data.consilium.europa.eu/id/taxonomy/RequestType/concept/c>.
    FILTER(str(year(?date)) >= "2010")
} group by ?prof2 ?profparent year( ?date ) order by year( ?date )
```

#### Output

Year		2010	2011	2012	2013	2014	2015	2016	Totals
<b>Prof-activity</b>									
<b>academic world</b>	<b>university research</b>	11	9	5	12	7	8	1	<b>53</b>
<b>civil society</b>	<b>consultant</b>	1	1		2	1			<b>5</b>
	<b>industrial/commercial sector</b>		2			2			<b>4</b>
	<b>NGOs</b>	1	1	5	3	4	2		<b>16</b>
	<b>other institutions</b>					1			<b>1</b>
<b>null</b>	<b>international organization</b>		2						<b>2</b>
	<b>journalist</b>	2	3	1		1	1		<b>8</b>
	<b>lawyer</b>	3	4	3	3	20	8		<b>41</b>
	<b>lobbies</b>	5	2	4	1	1	1		<b>14</b>
	<b>MEP or Assistant of MEP</b>		1	1			1	1	<b>4</b>
	<b>missions</b>				1				<b>1</b>
	<b>not specified</b>	3	2	3	4	3	3		<b>18</b>
	<b>others</b>	2		1				1	<b>4</b>
<b>Totals</b>	<b>28</b>	<b>27</b>	<b>23</b>	<b>26</b>	<b>40</b>	<b>24</b>	<b>3</b>	<b>171</b>	

### 3.1.12 GEOGRAPHICAL DISTRIBUTION OF APPLICANTS (INITIAL APPLICATIONS)

```

PREFIX skos:<http://www.w3.org/2004/02/skos/core#>
PREFIX foaf:<http://xmlns.com/foaf/0.1/>
PREFIX codi:<http://data.consilium.europa.eu/def/codi/>
PREFIX codi-req:<http://data.consilium.europa.eu/id/taxonomy/RequestType/concept/>

select distinct year(?date) as ?year ?country count(distinct ?agent) as ?agents
where {
  ?agent a foaf:Agent.
  ?agent codi:geographicalOrigin ?geo.
  ?agent codi:appliesFor ?r.
  ?geo skos:prefLabel ?country.
  filter (lang(?country) = 'en')
  ?r codi:dateAccepted ?date.
  ?r codi:requestType codi-req:i.
  FILTER(str(year(?date)) >= "2011")
} group by ?country year(?date) order by ?agents

```

#### Output

Year	2011	2012	2013	2014	2015	2016	Totals
<b>Argentina</b>			1		1		<b>2</b>
<b>Australia</b>		1					<b>1</b>
<b>Austria</b>	27	19	18	28	23	22	<b>137</b>
<b>Belarus</b>	1						<b>1</b>
<b>Belgium</b>	826	838	963	1054	1036	216	<b>4933</b>
<b>Belize</b>					1		<b>1</b>
<b>Bosnia and Herzegovina</b>	2		8	3	4	1	<b>18</b>
<b>Bulgaria</b>	6	2	11	1	6	4	<b>30</b>
<b>Canada</b>	3	2	1	2	3		<b>11</b>
<b>China</b>	1						<b>1</b>
<b>Croatia</b>	7	2	2	1	5		<b>17</b>
<b>Cyprus</b>	2	2	2	1	2		<b>9</b>
<b>Czech Republic</b>	12	7	13	18	6	1	<b>57</b>
<b>Denmark</b>	11	5	25	24	44	10	<b>119</b>
<b>Dominican Republic</b>				1			<b>1</b>
<b>Estonia</b>			4	1	2		<b>7</b>

<b>Faroe Islands</b>			1				<b>1</b>
<b>Fiji</b>	1						<b>1</b>
<b>Finland</b>	4	5	23	17	21	4	<b>74</b>
<b>France</b>	124	90	74	69	92	32	<b>481</b>
<b>Germany</b>	224	194	241	185	283	113	<b>1240</b>
<b>Greece</b>	38	9	15	2	10	2	<b>76</b>
<b>Guatemala</b>			1				<b>1</b>
<b>Guinea-Bissau</b>	2						<b>2</b>
<b>Hungary</b>	9	2	4	11	3	1	<b>30</b>
<b>Iceland</b>			3	2	2		<b>7</b>
<b>India</b>	1	2	1	1			<b>5</b>
<b>internal request</b>	13	3		2	2	1	<b>21</b>
<b>Iran</b>			1			1	<b>2</b>
<b>Ireland</b>	10	15	10	21	17		<b>73</b>
<b>Israel</b>	2		1	1	2		<b>6</b>
<b>Italy</b>	126	86	50	55	60	33	<b>410</b>
<b>Japan</b>	8	11	2	3	4		<b>28</b>
<b>Jordan</b>			1				<b>1</b>
<b>Latvia</b>	3	1	2	1	3		<b>10</b>
<b>Liechtenstein</b>	1			2	2	1	<b>6</b>
<b>Lithuania</b>	1		4				<b>5</b>
<b>Luxembourg</b>	16	13	16	17	5	6	<b>73</b>
<b>Malaysia</b>			1				<b>1</b>
<b>Malta</b>	2	2	1	5	2		<b>12</b>
<b>Monaco</b>	1						<b>1</b>
<b>Montenegro</b>			1				<b>1</b>
<b>Morocco</b>	1			1		1	<b>3</b>
<b>Netherlands</b>	151	74	66	97	222	47	<b>657</b>
<b>Norway</b>	15	6	6	7	7		<b>41</b>
<b>not known</b>	15	70	124	280	391	38	<b>918</b>
<b>Paraguay</b>			2				<b>2</b>
<b>Peru</b>			1				<b>1</b>

<b>Poland</b>	23	26	15	23	24	5	<b>116</b>
<b>Portugal</b>	15	6	3	9	6	4	<b>43</b>
<b>Romania</b>	5	2		4	4	1	<b>16</b>
<b>Russia</b>	2	2		1	1		<b>6</b>
<b>Serbia</b>			2	1	3	1	<b>7</b>
<b>Serbia and Montenegro</b>		2					<b>2</b>
<b>Slovakia</b>	3	4	1	1	5	4	<b>18</b>
<b>Slovenia</b>	2	1	2	2	2		<b>9</b>
<b>South Africa</b>	3						<b>3</b>
<b>Spain</b>	65	32	47	52	85	12	<b>293</b>
<b>Sudan</b>	1						<b>1</b>
<b>Sweden</b>	38	17	17	9	9	4	<b>94</b>
<b>Switzerland</b>	7	11	2	13	9	2	<b>44</b>
<b>Taiwan</b>	1						<b>1</b>
<b>Turkey</b>				2	2		<b>4</b>
<b>Ukraine</b>		1			2		<b>3</b>
<b>United Arab Emirates</b>	2						<b>2</b>
<b>United Kingdom</b>	273	297	420	319	365	52	<b>1726</b>
<b>United States</b>	10	8	3	4	8	4	<b>37</b>
<b>Venezuela</b>		1					<b>1</b>
<b>Totals</b>	<b>2116</b>	<b>1871</b>	<b>2212</b>	<b>2353</b>	<b>2786</b>	<b>623</b>	<b>11961</b>



### 3.1.13 GEOGRAPHICAL DISTRIBUTION OF APPLICANTS (CONFIRMATORY APPLICATIONS)

```
PREFIX skos: <http://www.w3.org/2004/02/skos/core#>
PREFIX foaf: <http://xmlns.com/foaf/0.1/>
PREFIX codi: <http://data.consilium.europa.eu/def/codi/>
PREFIX codi-req: <http://data.consilium.europa.eu/id/taxonomy/RequestType/concept/>
```

```
select distinct year(?date) as ?year ?country count(distinct ?agent) as ?agents
where {
  ?agent a foaf:Agent.
  ?agent codi:geographicalOrigin ?geo.
  ?agent codi:appliesFor ?r.
  ?geo skos:prefLabel ?country.
  filter (lang(?country) = 'en')
  ?r codi:dateAccepted ?date.
  ?r codi:requestType codi-req:c.
  FILTER(str(year(?date)) >= "2011")
} group by ?country year(?date) order by ?agents
```

#### Output

Year	2011	2012	2013	2014	2015	2016	Totals
<b>Austria</b>				5			<b>5</b>
<b>Belgium</b>	6	9	6	8	10	2	<b>41</b>
<b>Bosnia and Herzegovina</b>			1				<b>1</b>
<b>Croatia</b>			1	1			<b>2</b>
<b>Denmark</b>	1			1			<b>2</b>
<b>Finland</b>			3	2			<b>5</b>
<b>France</b>	2	3	1	2	1		<b>9</b>
<b>Germany</b>	5	4	5	2	3		<b>19</b>
<b>Greece</b>					1		<b>1</b>
<b>Ireland</b>				1			<b>1</b>
<b>Italy</b>	2		1	1			<b>4</b>
<b>Netherlands</b>	2	1	2	2	2	1	<b>10</b>
<b>not known</b>		3	3	1	4		<b>11</b>
<b>Poland</b>			1				<b>1</b>
<b>South Africa</b>	1						<b>1</b>
<b>Spain</b>	1						<b>1</b>
<b>United Kingdom</b>	7	3	2	14	3		<b>29</b>
<b>Totals</b>	<b>27</b>	<b>23</b>	<b>26</b>	<b>40</b>	<b>24</b>	<b>3</b>	<b>143</b>

### 3.1.14 POLICY AREA

```

PREFIX skos:<http://www.w3.org/2004/02/skos/core#>
PREFIX foaf:<http://xmlns.com/foaf/0.1/>
PREFIX codi:<http://data.consilium.europa.eu/def/codi/>

select year(?date) as ?year ?policy count(distinct ?r) as ?agents
where {
  ?agent a foaf:Agent.
  ?agent codi:appliesFor ?r.
  ?r codi:dateAccepted ?date.
  ?r codi:policyArea ?pol.
  ?pol skos:prefLabel ?policy.
  FILTER(str(year(?date)) >= "2011")
} group by ?policy year(?date) order by ?agents

```

Output

Year	2011	2012	2013	2014	2015	2016	Totals
<b>agriculture, fishing</b>	76	98	72	109	102	30	<b>487</b>
<b>assistance for development</b>	3		9	2	1		<b>15</b>
<b>civilian protection</b>		12	19	14	9	2	<b>56</b>
<b>competitiveness</b>	30	31	28	26	12	1	<b>128</b>
<b>consumer protection</b>	30	25	16	11	13		<b>95</b>
<b>culture</b>	5	13	12	11	10	5	<b>56</b>
<b>defence and military matters</b>	48	53	60	20	41	3	<b>225</b>
<b>DEVGEN</b>	3	2	8	2	3	6	<b>24</b>
<b>domestic market</b>	174	191	282	166	238	35	<b>1086</b>
<b>economical and monetary policy</b>	129	135	210	96	244	55	<b>869</b>
<b>education/youth</b>	9	4	15	12	14	3	<b>57</b>
<b>energy</b>	46	54	48	31	25	2	<b>206</b>
<b>enlargement</b>	21	23	11	11	17	4	<b>87</b>
<b>environment</b>	199	150	306	325	229	30	<b>1239</b>
<b>financing of the Union</b>	4	15	9	5	2	1	<b>36</b>
<b>fiscalité</b>	274	131	89	107	123	41	<b>765</b>
<b>foreign policy (PESC)</b>	279	210	196	264	362	69	<b>1380</b>

functioning of the institutions	51	47	67	71	95	46	<b>377</b>
general political questions	13	13	27	45	47	22	<b>167</b>
health	48	44	92	135	135	26	<b>480</b>
industry	2	1	11	6	1	1	<b>22</b>
juridical questions	68	106	123	89	63	21	<b>470</b>
justice and home affaires (JAI)	424	356	404	586	785	139	<b>2694</b>
others	8		9	1	1	1	<b>20</b>
parliamentary questions	65	49	17	13	32	8	<b>184</b>
regional policy and economical/social cohesion	2	8	3	7	1		<b>21</b>
research	8	19	50	29	2	1	<b>109</b>
social policy	60	77	126	127	116	13	<b>519</b>
tax questions	274	131	89	107	123	41	<b>765</b>
transparency	5	24	12	12	15	11	<b>79</b>
transports	32	27	62	93	93	43	<b>350</b>
various	5	3	3	5			<b>16</b>
WTO	58	41	23	29	30	9	<b>190</b>
<b>Totals</b>	<b>2453</b>	<b>2093</b>	<b>2508</b>	<b>2567</b>	<b>2984</b>	<b>669</b>	<b>13274</b>

### 3.1.15 REASONS FOR REFUSING ACCESS (REPLIES PROVIDED BY THE GSC - INITIAL APPLICATIONS)

```

PREFIX codi: <http://data.consilium.europa.eu/def/codi/>
PREFIX skos: <http://www.w3.org/2004/02/skos/core#>
PREFIX foaf: <http://xmlns.com/foaf/0.1/>
PREFIX dt: <http://dbpedia.org/datatype/>
PREFIX co: <http://rhizomik.net/ontologies/copyrightonto.owl#>

select distinct year(?date) ?notation ?accessRightDefinition count(distinct ?r)
where {
  ?r codi:dateAccepted ?date.
  ?r codi:requestType <http://data.consilium.europa.eu/id/taxonomy/RequestType/concept/i>.
  ?r codi:hasReply ?ds.
  ?ds <http://purl.org/dc/terms/accessRights> ?c.
  ?c skos:prefLabel ?notation.
  ?c skos:definition ?accessRightDefinition.
  FILTER(strlen(?notation)>=4)
  FILTER(str(year(?date)) >= "2011")
  FILTER(!contains(?accessRightDefinition, "partial") )
} group by year( ?date ) ?notation ?accessRightDefinition order by year( ?date )

```

## Output

		Year							
Notation	Access Rights Definition	2011	2012	2013	2014	2015	2016	Totals	
4.1a.1	This value means that the General Secretariat/Council refused access to protect the public interest as regards public security. If preceded by the value 1.pa, only parts of the document were refused based on this exception.	96	102	75	68	118	20	479	
4.1a.2	This value means that the General Secretariat/Council refused access to protect the public interest as regards defence and military matters. If preceded by the value 1.pa, only parts of the document were refused based on this exception.	21	22	22	14	36	6	121	
4.1a.3	This value means that the General Secretariat/Council refused access to protect the public interest as regards international relations. If preceded by the value 1.pa, only parts of the document were refused based on this exception.	293	229	242	237	258	59	1318	
4.1a.4	This value means that the General Secretariat/Council refused access to protect the public interest as regards the financial, monetary or economic policy of the EU or a Member State. If preceded by the value 1.pa, only parts of the document were refused based on this exception.	8	12	22	13	27	20	102	
4.1b	This value means that the General Secretariat/Council refused access to protect personal data. If preceded by the value 1.pa, only parts of the document were refused based on this exception.	39	39	33	53	76	18	258	
4.2.1	This value means that the General Secretariat/Council refused access to protect commercial interests. If preceded by the value 1.pa, only parts of the document were refused based on this exception.		3	2	4	6	1	16	
4.2.2	This value means that the General Secretariat/Council refused access to protect court proceedings and legal advice. If preceded by the value 1.pa, only parts of the document were refused based on this exception.	92	106	108	109	73	17	505	
4.2.3	This value means that the General			1	1	10		12	

	<b>Secretariat/Council refused access to protect inspections, investigations and audits. If preceded by the values 1.pa, only parts of the document were refused based on this exception.</b>							
<b>4.3(i)</b>	<b>This value means that the General Secretariat/Council refused access to protect its decision-making process during ongoing negotiations. If preceded by the values 1.pa, only parts of the document were refused based on this exception.</b>	578	625	819	480	593	113	<b>3208</b>
<b>4.3(ii)</b>	<b>This value means that the General Secretariat/Council refused access to protect its decision-making process after the decision is taken. If preceded by the values 1.pa, only parts of the document were refused based on this exception.</b>	48	23	31	40	27	8	<b>177</b>
<b>Totals</b>		<b>1175</b>	<b>1161</b>	<b>1355</b>	<b>1019</b>	<b>1224</b>	<b>262</b>	<b>6196</b>

### 3.1.16 REASONS FOR REFUSING ACCESS (REPLIES PROVIDED BY THE GSC - CONFIRMATORY APPLICATIONS)

```

PREFIX codi: <http://data.consilium.europa.eu/def/codi/>
PREFIX skos: <http://www.w3.org/2004/02/skos/core#>
PREFIX foaf: <http://xmlns.com/foaf/0.1/>
PREFIX dt: <http://dbpedia.org/datatype/>
PREFIX co: <http://rhizomik.net/ontologies/copyrighntonto.owl#>

select distinct year(?date) ?notation ?accessRightDefinition count(distinct ?r)
where {
  ?r codi:dateAccepted ?date.
  ?r codi:requestType <http://data.consilium.europa.eu/id/taxonomy/RequestType/concept/c>.
  ?r codi:hasReply ?ds.
  ?ds <http://purl.org/dc/terms/accessRights> ?c.
  ?c skos:prefLabel ?notation.
  ?c skos:definition ?accessRightDefinition.
  FILTER(strlen(?notation)>=4)
  FILTER(str(year(?date)) >= "2011")
  FILTER(!contains(?accessRightDefinition, "partial") )
} group by year( ?date ) ?notation ?accessRightDefinition order by year( ?date )

```

Notation	Access Rights Definition	Year							Totals
		2011	2012	2013	2014	2015	2016		
4.1a.1	This value means that the General Secretariat/Council refused access to protect the public interest as regards public security. If preceded by the value 1.pa, only parts of the document were refused based on this exception.	2	2	3	4	8		19	
4.1a.2	This value means that the General Secretariat/Council refused access to protect the public interest as regards defence and military matters. If preceded by the value 1.pa, only parts of the document were refused based on this exception.			1		1		2	
4.1a.3	This value means that the General Secretariat/Council refused access to protect the public interest as regards international relations. If preceded by the value 1.pa, only parts of the document were refused based on this exception.	12	6	4	20	11	1	54	
4.1a.4	This value means that the General Secretariat/Council refused access to protect the public interest as regards the financial, monetary or economic policy of the EU or a Member State. If preceded by the value 1.pa, only parts of the document were refused based on this exception.	1	2	1	1	1		6	
4.1b	This value means that the General Secretariat/Council refused access to protect personal data. If preceded by the value 1.pa, only parts of the document were refused based on this exception.	1	1	2	9	4		17	
4.2.1	This value means that the General Secretariat/Council refused access to protect commercial interests. If preceded by the value 1.pa, only parts of the document were refused based on this exception.				1	1		2	
4.2.2	This value means that the General Secretariat/Council refused access to protect court proceedings and legal advice. If preceded by the value 1.pa, only parts of the document were refused based on this exception.	6	8	9	5	5		33	

4.2.3	This value means that the General Secretariat/Council refused access to protect inspections, investigations and audits. If preceded by the values 1.pa, only parts of the document were refused based on this exception.				1			1
4.3(i)	This value means that the General Secretariat/Council refused access to protect its decision-making process during ongoing negotiations. If preceded by the values 1.pa, only parts of the document were refused based on this exception.	4	6	8	5	8	1	32
4.3(ii)	This value means that the General Secretariat/Council refused access to protect its decision-making process after the decision is taken. If preceded by the values 1.pa, only parts of the document were refused based on this exception.		1	2	5	1		9
<b>Totals</b>		<b>26</b>	<b>26</b>	<b>30</b>	<b>51</b>	<b>40</b>	<b>2</b>	<b>175</b>

### 3.1.17 AVERAGE NUMBER OF WORKING DAYS TO REPLY TO AN APPLICATION

PREFIX codi: <http://data.consilium.europa.eu/def/codi/>  
 PREFIX skos: <http://www.w3.org/2004/02/skos/core#>

```
select distinct year(?date) AVG(?t) as ?replyTime ?requestType
where {
  ?r codi:dateAccepted ?date.
  ?r codi:requestType ?requestType.
  ?r codi:spentEffort ?time.
  bind (xsd:integer(?time) as ?t)
  FILTER(str(year(?date)) >= "2011")
} group by year(?date) ?requestType order by year(?date)
```

Output

Year	2011	2012	2013	2014	2015	2016
<b>Request Type</b>						
<b>Confirmatory Request</b>	28	27	26	27	29	28
<b>Initial Request</b>	16	16	18	16	16	12

### 3.1.18 NUMBER OF APPLICATIONS WITH AN EXTENDED DEADLINE

```
PREFIX codi: <http://data.consilium.europa.eu/def/codi/>

select year(?accDate) as ?year count (distinct ?req) ?type WHERE {
  ?req codi:dateAccepted ?accDate.
  ?req codi:requestType ?type.
  ?req codi:extendedDeadlineToReply ?extdate.
  FILTER(str(year(?accDate)) >= "2011")
} group by year(?accDate) ?type order by year(?accDate)
```

Output

Year	2011	2012	2013	2014	2015	2016	Totals
<b>Request Type</b>							
<b>Confirmatory Request</b>	24	20	21	39	22	2	<b>128</b>
<b>Initial Request</b>	513	452	587	580	671	88	<b>2891</b>
<b>Totals</b>	<b>537</b>	<b>472</b>	<b>608</b>	<b>619</b>	<b>693</b>	<b>90</b>	<b>3019</b>

## 3.2 Exploring the data

The most important place where to look when starting exploring the data is the [ontology](#). The way data is structured in DTA as well as in Public Register is shown there.

However, in order to have a hands-on experience with the data available, it is useful to dive-in using SPARQL. Below there is a sample set of basic queries that could help one have a better understanding of the data.

### 3.2.1 QUERIES

#### 3.2.1.1 Get all graphs

```
SELECT distinct ?g
WHERE {
  GRAPH ?g {?s ?p ?o.}}
```

Output

Graph
http://publications.europa.eu/resource/authority/country
http://data.consilium.europa.eu/id/dataset/docRequests



Graph
<a href="http://data.consilium.europa.eu/id/dataset/PublicRegister">http://data.consilium.europa.eu/id/dataset/PublicRegister</a>
<a href="http://data.consilium.europa.eu/def/taxonomy/PolicyArea">http://data.consilium.europa.eu/def/taxonomy/PolicyArea</a>
<a href="http://data.consilium.europa.eu/def/taxonomy/CouncilDocumentSuffix">http://data.consilium.europa.eu/def/taxonomy/CouncilDocumentSuffix</a>
<a href="http://data.consilium.europa.eu/def/taxonomy/DocumentCategory">http://data.consilium.europa.eu/def/taxonomy/DocumentCategory</a>
<a href="http://data.consilium.europa.eu/def/taxonomy/DocumentPublicationStatus">http://data.consilium.europa.eu/def/taxonomy/DocumentPublicationStatus</a>
<a href="http://data.consilium.europa.eu/def/taxonomy/GeographicalOrigin">http://data.consilium.europa.eu/def/taxonomy/GeographicalOrigin</a>
<a href="http://data.consilium.europa.eu/def/taxonomy/InterinstitutionalCode">http://data.consilium.europa.eu/def/taxonomy/InterinstitutionalCode</a>
<a href="http://data.consilium.europa.eu/def/taxonomy/ProfessionalActivity">http://data.consilium.europa.eu/def/taxonomy/ProfessionalActivity</a>
<a href="http://data.consilium.europa.eu/def/taxonomy/RequestType">http://data.consilium.europa.eu/def/taxonomy/RequestType</a>
<a href="http://data.consilium.europa.eu/def/taxonomy/TypeOfReply">http://data.consilium.europa.eu/def/taxonomy/TypeOfReply</a>
<a href="http://data.consilium.europa.eu/def/taxonomy/SubjectMatter">http://data.consilium.europa.eu/def/taxonomy/SubjectMatter</a>
<a href="http://publications.europa.eu/resource/authority/language">http://publications.europa.eu/resource/authority/language</a>

### 3.2.1.2 Get all predicates

```
SELECT distinct ?p ?g
WHERE {
  GRAPH ?g {?s ?p ?o.}}
```

### 3.2.1.3 Get a supporting taxonomy and its properties

```
SELECT distinct *
WHERE {
  GRAPH <http://data.consilium.europa.eu/def/taxonomy/DocumentCategory>
  {?s ?p ?o}}
```

### 3.2.1.4 Get a request with all its properties

```
PREFIX codi: <http://data.consilium.europa.eu/def/codi/>
PREFIX skos: <http://www.w3.org/2004/02/skos/core#>

select distinct *
where {
  <http://data.consilium.europa.eu/id/request/03-01-14> ?p ?o.
}
```

Output

Predicate	Value
<a href="http://www.w3.org/1999/02/22-rdf-syntax-ns#type">http://www.w3.org/1999/02/22-rdf-syntax-ns#type</a>	<a href="http://data.consilium.europa.eu/def/codi/RequestForDocument">http://data.consilium.europa.eu/def/codi/RequestForDocument</a>
<a href="http://purl.org/dc/terms/identifier">http://purl.org/dc/terms/identifier</a>	"03/01/14"
<a href="http://data.consilium.europa.eu/def/codi/dateAccepted">http://data.consilium.europa.eu/def/codi/dateAccepted</a>	2013-12-10
<a href="http://data.consilium.europa.eu/def/codi/dateReply">http://data.consilium.europa.eu/def/codi/dateReply</a>	2014-01-20
<a href="http://data.consilium.europa.eu/def/codi/deadlineToReply">http://data.consilium.europa.eu/def/codi/deadlineToReply</a>	2014-01-10
<a href="http://data.consilium.europa.eu/def/codi/hasFollowupRequest">http://data.consilium.europa.eu/def/codi/hasFollowupRequest</a>	<a href="http://data.consilium.europa.eu/id/request/39157">http://data.consilium.europa.eu/id/request/39157</a>
<a href="http://data.consilium.europa.eu/def/codi/requestType">http://data.consilium.europa.eu/def/codi/requestType</a>	<a href="http://data.consilium.europa.eu/id/taxonomy/RequestType/concept/c">http://data.consilium.europa.eu/id/taxonomy/RequestType/concept/c</a>
<a href="http://data.consilium.europa.eu/def/codi/spentEffort">http://data.consilium.europa.eu/def/codi/spentEffort</a>	"22"

### 3.2.1.5 Get a document with all its expressions and their details

```
prefix codi: <http://data.consilium.europa.eu/def/codi/>
prefix foaf: <http://xmlns.com/foaf/0.1/>

select distinct ?expression ?page ?p ?o
where {
  <http://data.consilium.europa.eu/id/document/ST-5762-2004-INIT> a codi:PublicRegisterDocument.
  <http://data.consilium.europa.eu/id/document/ST-5762-2004-INIT> codi:expressed ?expression.
  ?expression foaf:page ?page.
  ?expression ?p ?o.
}order by ?expression
```

Output

Document URI	Expression	PDF file link	Concept type	Value
<a href="http://data.consilium.europa.eu/id/document/ST-5762-2004-INIT/DA">http://data.consilium.europa.eu/id/document/ST-5762-2004-INIT/DA</a>		" <a href="http://data.consilium.europa.eu/doc/document/ST-5762-2004-INIT/DA/pdf">http://data.consilium.europa.eu/doc/document/ST-5762-2004-INIT/DA/pdf</a> "	<a href="http://www.w3.org/1999/02/22-rdf-syntax-ns#type">http://www.w3.org/1999/02/22-rdf-syntax-ns#type</a>	<a href="http://data.consilium.europa.eu/def/codi/DocumentExpression">http://data.consilium.europa.eu/def/codi/DocumentExpression</a>
<a href="http://data.consilium.europa.eu/id/document/ST-5762-2004-INIT/DA">http://data.consilium.europa.eu/id/document/ST-5762-2004-INIT/DA</a>		" <a href="http://data.consilium.europa.eu/doc/document/ST-5762-2004-INIT/DA/pdf">http://data.consilium.europa.eu/doc/document/ST-5762-2004-INIT/DA/pdf</a> "	<a href="http://purl.org/dc/terms/issued">http://purl.org/dc/terms/issued</a>	2004-04-02
<a href="http://data.consilium.europa.eu/id/document/ST-5762-2004-INIT/DA">http://data.consilium.europa.eu/id/document/ST-5762-2004-INIT/DA</a>		" <a href="http://data.consilium.europa.eu/doc/document/ST-5762-2004-INIT/DA/pdf">http://data.consilium.europa.eu/doc/document/ST-5762-2004-INIT/DA/pdf</a> "	<a href="http://purl.org/dc/terms/language">http://purl.org/dc/terms/language</a>	<a href="http://publications.europa.eu/resource/authority/language/DAN">http://publications.europa.eu/resource/authority/language/DAN</a>

Document URI	Expression	PDF file link	Concept type	Value
http://data.consilium.europa.eu/id/document/ST-5762-2004-INIT/DA		"http://data.consilium.europa.eu/doc/document/ST-5762-2004-INIT/DA/pdf"	http://purl.org/dc/terms/title	"Fælles holdning vedtaget af Rådet med henblik på vedtagelse af Europa-Parlamentets og Rådets beslutning om ændring af beslutning nr. 1692/96/EF om Fællesskabets retningslinjer for udvikling af det transeuropæiske transportnet"@da
http://data.consilium.europa.eu/id/document/ST-5762-2004-INIT/DA		"http://data.consilium.europa.eu/doc/document/ST-5762-2004-INIT/DA/pdf"	http://xmlns.com/foaf/0.1/page	"http://data.consilium.europa.eu/doc/document/ST-5762-2004-INIT/DA/pdf"
http://data.consilium.europa.eu/id/document/ST-5762-2004-INIT/DE		"http://data.consilium.europa.eu/doc/document/ST-5762-2004-INIT/DE/pdf"	http://www.w3.org/1999/02/22-rdf-syntax-ns#type	http://data.consilium.europa.eu/def/codi/DocumentExpression
http://data.consilium.europa.eu/id/document/ST-5762-2004-INIT/DE		"http://data.consilium.europa.eu/doc/document/ST-5762-2004-INIT/DE/pdf"	http://purl.org/dc/terms/issued	2004-04-02

### 3.2.1.6 Get a meeting and the documents related to it

```

PREFIX codi: <http://data.consilium.europa.eu/def/codi/>
PREFIX skos: <http://www.w3.org/2004/02/skos/core#>

select distinct ?m ?doc
where {
  ?m ^codi:relatesTo ?doc.
  ?doc a codi:PublicRegisterDocument.
  ?m codi:dateOfMeeting "2014-10-23"^^xsd:date.
  ?m <http://purl.org/dc/terms/description> "CONSEIL EUROPEEN".
}

```

Output

Meeting	Document
http://data.consilium.europa.eu/id/codi/meeting/221185	http://data.consilium.europa.eu/id/document/ST-10897-2014-INIT
http://data.consilium.europa.eu/id/codi/meeting/221185	http://data.consilium.europa.eu/id/document/ST-12783-2014-INIT
http://data.consilium.europa.eu/id/codi/meeting/221185	http://data.consilium.europa.eu/id/document/ST-5644-2014-INIT
http://data.consilium.europa.eu/id/codi/meeting/221185	http://data.consilium.europa.eu/id/document/ST-5644-2014-REV-1
http://data.consilium.europa.eu/id/codi/meeting/221185	http://data.consilium.europa.eu/id/document/ST-12780-2014-INIT

Meeting	Document
<a href="http://data.consilium.europa.eu/id/codi/meeting/221185">http://data.consilium.europa.eu/id/codi/meeting/221185</a>	<a href="http://data.consilium.europa.eu/id/document/ST-163-2014-COR-3">http://data.consilium.europa.eu/id/document/ST-163-2014-COR-3</a>
<a href="http://data.consilium.europa.eu/id/codi/meeting/221185">http://data.consilium.europa.eu/id/codi/meeting/221185</a>	<a href="http://data.consilium.europa.eu/id/document/ST-12781-2014-INIT">http://data.consilium.europa.eu/id/document/ST-12781-2014-INIT</a>
<a href="http://data.consilium.europa.eu/id/codi/meeting/221185">http://data.consilium.europa.eu/id/codi/meeting/221185</a>	<a href="http://data.consilium.europa.eu/id/document/ST-10409-2014-REV-1">http://data.consilium.europa.eu/id/document/ST-10409-2014-REV-1</a>
<a href="http://data.consilium.europa.eu/id/codi/meeting/221185">http://data.consilium.europa.eu/id/codi/meeting/221185</a>	<a href="http://data.consilium.europa.eu/id/document/ST-10897-2014-REV-1">http://data.consilium.europa.eu/id/document/ST-10897-2014-REV-1</a>
<a href="http://data.consilium.europa.eu/id/codi/meeting/221185">http://data.consilium.europa.eu/id/codi/meeting/221185</a>	<a href="http://data.consilium.europa.eu/id/document/ST-163-2014-COR-1">http://data.consilium.europa.eu/id/document/ST-163-2014-COR-1</a>

### 3.2.1.7 Get the DTA documents existing in the public register

```

prefix owl: <http://www.w3.org/2002/07/owl#>
prefix codi: <http://data.consilium.europa.eu/def/codi/>
select distinct ?doc ?pub
where {
  ?doc a codi:Document.
  ?doc owl:sameAs ?pub.
}limit 100

```

Output

Document	Public Register Document
<a href="http://data.consilium.europa.eu/id/document/100000">http://data.consilium.europa.eu/id/document/100000</a>	<a href="http://data.consilium.europa.eu/id/document/ST-13530-2009-INIT">http://data.consilium.europa.eu/id/document/ST-13530-2009-INIT</a>
<a href="http://data.consilium.europa.eu/id/document/100001">http://data.consilium.europa.eu/id/document/100001</a>	<a href="http://data.consilium.europa.eu/id/document/ST-13149-2009-INIT">http://data.consilium.europa.eu/id/document/ST-13149-2009-INIT</a>
<a href="http://data.consilium.europa.eu/id/document/100002">http://data.consilium.europa.eu/id/document/100002</a>	<a href="http://data.consilium.europa.eu/id/document/ST-13150-2009-INIT">http://data.consilium.europa.eu/id/document/ST-13150-2009-INIT</a>
<a href="http://data.consilium.europa.eu/id/document/100003">http://data.consilium.europa.eu/id/document/100003</a>	<a href="http://data.consilium.europa.eu/id/document/ST-12287-2009-INIT">http://data.consilium.europa.eu/id/document/ST-12287-2009-INIT</a>
<a href="http://data.consilium.europa.eu/id/document/100004">http://data.consilium.europa.eu/id/document/100004</a>	<a href="http://data.consilium.europa.eu/id/document/ST-12293-2009-INIT">http://data.consilium.europa.eu/id/document/ST-12293-2009-INIT</a>
<a href="http://data.consilium.europa.eu/id/document/100005">http://data.consilium.europa.eu/id/document/100005</a>	<a href="http://data.consilium.europa.eu/id/document/ST-10504-2009-REV-2">http://data.consilium.europa.eu/id/document/ST-10504-2009-REV-2</a>
<a href="http://data.consilium.europa.eu/id/document/100006">http://data.consilium.europa.eu/id/document/100006</a>	<a href="http://data.consilium.europa.eu/id/document/ST-11534-2009-INIT">http://data.consilium.europa.eu/id/document/ST-11534-2009-INIT</a>
<a href="http://data.consilium.europa.eu/id/document/100007">http://data.consilium.europa.eu/id/document/100007</a>	<a href="http://data.consilium.europa.eu/id/document/ST-10464-2009-INIT">http://data.consilium.europa.eu/id/document/ST-10464-2009-INIT</a>
<a href="http://data.consilium.europa.eu/id/document/100008">http://data.consilium.europa.eu/id/document/100008</a>	<a href="http://data.consilium.europa.eu/id/document/ST-12197-2009-REV-2">http://data.consilium.europa.eu/id/document/ST-12197-2009-REV-2</a>
<a href="http://data.consilium.europa.eu/id/document/100010">http://data.consilium.europa.eu/id/document/100010</a>	<a href="http://data.consilium.europa.eu/id/document/DS-757-2008-INIT">http://data.consilium.europa.eu/id/document/DS-757-2008-INIT</a>

### 3.2.1.8 Applicants-their properties, requests + the reply they received

```

PREFIX skos:<http://www.w3.org/2004/02/skos/core#>
PREFIX foaf: <http://xmlns.com/foaf/0.1/>
PREFIX codi: <http://data.consilium.europa.eu/def/codi/>
PREFIX codi-req: <http://data.consilium.europa.eu/id/taxonomy/RequestType/concept/>
prefix codi_id:<http://data.consilium.europa.eu/id/codi/>

select distinct str(?prof_act) as ?Applicant_Professional_Activity str(?country) as
?Applicant_Country str(?ReqType) as ?Request_Type str(?policy) as ?Request_policy_Area year(?date)
as ?Year_Of_Application str(?availability) as ?Document_Status

where {
  ?Applicant a foaf:Agent.
  ?Applicant codi:geographicalOrigin ?geo.
  ?geo skos:prefLabel ?country.
  filter (lang(?country) = 'en')
  ?Applicant codi:professionalActivity ?act.
  ?act skos:prefLabel ?prof_act.
  ?Applicant codi:appliesFor ?Request.
  ?Request codi:dateAccepted ?date.
  ?Request codi:requestType ?type.
  ?type skos:prefLabel ?ReqType.
  ?Request codi:hasReply ?reply.
  ?reply codi:replyPublicationStatus ?status.
  ?status skos:prefLabel ?availability.
  ?Request codi:policyArea ?pol.
  ?pol skos:prefLabel ?policy.
  FILTER(str(year(?date)) = "2015")
} group by ?country year(?date) order by desc(?Applicant)
limit 15

```

#### Output

Applicant_Professional_Activity	Applicant_Country	Request_Type	Request_policy_Area	Year_Of_Application	Document_Status
NGOs	Netherlands	initial request	foreign policy (PESC)	2015	public
Consultant	not known	initial request	fiscalité	2015	refused
university research	Germany	initial request	agriculture, fishing	2015	partial access
Journalist	Germany	initial request	economical and monetary policy	2015	public
university research	Slovenia	initial request	functioning of the institutions	2015	public
Consultant	Belgium	initial request	education/youth	2015	public

Applicant_Professional_Activity	Applicant_Country	Request_Type	Request_policy_Area	Year_Of_Ap p	Document_Status
Consultant	Canada	initial request	health	2015	public
university research	not known	initial request	justice and home affaires (JAI)	2015	refused
Journalist	Belgium	initial request	competitiveness	2015	refused
not specified	not known	initial request	defence and military matters	2015	public
university research	United States	initial request	foreign policy (PESC)	2015	public
Lobbies	Belgium	initial request	health	2015	public
industrial/commercial sector	Belgium	initial request	Health	2015	public

## 4 CONCLUSIONS

This User's Manual provides an overview of CODI-2 datasets, starting from explaining, visualizing the data model and how the URIs were constructed in a Linked Open Data way. When possible and adequate, existing external/internal vocabularies and datasets have been reused. This facilitates the understanding of this document and the use of the datasets.

The advantage is that these controlled vocabularies are easily managed externally, aside from the dataset that uses them. Theoretically, it is possible to create a supporting taxonomy (controlled vocabulary) out of any fixed list of elements that is used in the dataset repeatedly.

Understanding SPARQL is vital when trying to explore Linked Open Data. The statistics that the Council publishes in the annual reports were reproduced out of the same data, this time using SPARQL queries.

The annual report queries are described in this document, in addition to other basic SPARQL queries which were included to help users in getting acquainted with the dataset and with the query syntax. Users are encouraged to explore the dataset further, testing and expanding the queries presented in this document.

The published datasets are subject to change: More data is made regularly available. The Council also evaluates the published data in order to improve its quality and the interlinking with external data. This is why user's feedback is extremely valuable. Please address any undetected incoherencies and requests for explanations on the content to [public.records@consilium.europa.eu](mailto:public.records@consilium.europa.eu).