

Local Quality of Government Project

QoG Data Team

2025-06-16

Table of contents

1	Home	1
2	About this site	3
3	Project overview	5
4	Conceptual approach	7
4.1	The local map of EU: History of Municipal Borders for Comparative Research	7
4.2	References	10
I	Methodology	11
5	Methodological Overview	13
6	Definition of Unit of Analysis	15
7	Code-Based Change Identification	17
8	Legal Verification of Changes	19
9	Data System	21
10	Limitations	23
II	Results	25
11	Classification of Municipal Changes in the EU (2014–2024)	27
11.1	Geographical changes	27
11.1.1	1. Municipalities are created and dissolved	27
11.1.2	2. Municipalities are created and are not dissolved	28
11.1.3	3. Municipalities are dissolved and are not created	29
11.1.4	4. Municipalities are neither created nor dissolved	29

11.2 Non-geographical changes	30
11.3 Download table	31
11.4 Notes	31
12 Merger	33
12.1 Simple Merger	33
12.1.1 Definition	33
12.1.2 Implication of the change	33
12.1.3 Visual overview	33
12.1.4 Examples	34
12.1.5 Map Plots	35
12.2 Interactive map	35
12.3 Static map	35
12.3.1 How it is recorded in the data system	35
12.4 Multiple Merger	35
12.4.1 Definition	35
12.4.2 Implication of te change	36
12.4.3 Visual overview	36
12.4.4 Examples	36
12.4.5 Map Plots	37
12.4.6 How it is recorded in the data system	37
12.5 References	37
13 Split	39
13.1 Simple Split	39
13.1.1 Definition	39
13.1.2 Implication of the change	39
13.1.3 Visual overview	39
13.1.4 Example	40
13.1.5 Map Plots	40
13.2 Interactive map	40
13.3 Static map	40
13.3.1 How it is recorded in the data system	40
13.4 Multiple Split	40
13.4.1 Definition	40
13.4.2 Implication of the change	40
13.4.3 Visual overview	41
13.4.4 Example	41
13.4.5 Map Plots	41
13.5 Interactive Map	41
13.6 Static Map	41
13.7 References	41
14 Composite Restructuring	43
14.1 Simple Split	43
14.1.1 Definition	43

14.1.2	Implication of the change	43
14.1.3	Visual overview	44
14.1.4	Example	44
14.1.5	Map Plots	44
14.2	Interactive map	44
14.3	Static map	44
14.3.1	How it is recorded in the data system	44
14.4	References	44
15	De-merger	45
15.1	Simple De-merger	45
15.1.1	Definition	45
15.1.2	Implication of the change	45
15.1.3	Visual overview	46
15.1.4	Example	46
15.1.5	Map Plots	46
15.2	Interactive map	46
15.3	Static map	46
15.3.1	How it is recorded in the data system	47
15.4	Multiple De-merger	47
15.4.1	Definition	47
15.4.2	Implication of the change	47
15.4.3	Visual overview	47
15.4.4	Example	47
15.4.5	Map Plots	48
15.5	Interactive Map	48
15.6	Static Map	48
15.7	References	48
16	Separation	49
16.1	Simple Separation (Seccesion)	49
16.1.1	Definition	49
16.1.2	Implication of the change	49
16.1.3	Visual overview	49
16.1.4	Example	50
16.1.5	Map Plots	50
16.2	Interactive map	50
16.3	Static map	50
16.3.1	How it is recorded in the data system	50
16.4	Multiple Separation	50
16.4.1	Definition	50
16.4.2	Implication of the change	50
16.4.3	Visual overview	51
16.4.4	Example	51
16.4.5	Map Plots	51
16.5	Interactive Map	51

16.6 Static Map	51
16.7 References	51
17 Dissolution	53
17.0.1 Definition	53
17.0.2 Implication of the change	53
17.0.3 Visual overview	53
17.0.4 Example	53
17.0.5 Map Plots	54
17.1 Interactive map	54
17.2 Static map	54
17.2.1 How it is recorded in the data system	54
17.3 References	54
18 Nature Integration	55
18.0.1 Definition	55
18.0.2 Implication of the change	55
18.0.3 Visual overview	55
18.0.4 Example	55
18.0.5 Map Plots	56
18.1 Interactive map	56
18.2 Static map	56
18.2.1 How it is recorded in the data system	56
18.3 References	56
19 Territorial Transfers	57
20 Non Geographical Changes	59
 III Data	 61
21 Data Structure Overview	63
22 Instructions for Linking Datasets	65
23 Details of the Geographic Datasets	67
24 Details of the Main Metadata	69
25 Other Auxiliary Files	71
26 Conventions and Standards	73
27 Use Cases/Use Cases and Analysis	75
28 Changelog and Updates	77

<i>TABLE OF CONTENTS</i>	vii
29 Glossary	79
30 Current activities	81
31 Project Status	83
32 Page for Victo’s graph tests	85
32.1 Static map example	85
32.2 Interctive map example	85
33 Graphing Tool	87

Chapter 1

Home

Chapter 2

About this site

This will be filled at the end. For now I use it as a test site.

```
# This is a dummy R example
a %>%
  filter(com_id %in% c("71138", "71578")) %>%
  mutate(
    com_name = str_to_title(com_name),
    label = paste0(
      com_name, ", France", "\n",
      "Year ",
      year, "\n",
      "Municipality Id: ",
      com_id
    )
  )
```

```
import pandas as pd

df = pd.DataFrame({"name": ["Alice", "Bob"], "score": [90, 85]})
print(df.describe())
```


Chapter 3

Project overview

Overview of the project, including both boundary changes and the data aspects

Chapter 4

Conceptual approach

4.1 The local map of EU: History of Municipal Borders for Comparative Research

The literature identifies various types of municipal changes, which can be broadly categorized into geographical and non-geographical changes. Geographical changes involve modifications to municipal boundaries, non-geographical changes, by contrast, affect the legal identifiers of municipalities—such as names or administrative codes—without altering their physical boundaries. In some cases, such non-geographical changes occur independently, with no accompanying changes to the municipality’s territory. For instance, municipalities may undergo name changes to reflect historical, cultural, or political factors, or experience adjustments to their official registry codes. These constitute purely non-geographical changes, as the territorial extent remains constant while the legal attributes are updated (see Figure 4.1). Conversely, geographical boundaries may change while the municipality’s legal identifiers remain unchanged. A typical example of such purely geographical changes is a territorial transfer. In some cases, however, geographical and non-geographical changes occur simultaneously—for example, during municipal mergers or splits, where a change in boundary (geo) coincides with a change in name or administrative code (non-geo).

To date, only a limited number of studies explicitly distinguish between geographical (i.e., boundary-related) changes and non-geographical modifications of municipalities in their analyses [goerlich2018; kociuba2023]. In most cases, researchers focus on a single type of municipal change—typically within the context of a specific territorial reform—without differentiating between changes to boundaries and changes to legal identifiers. Moreover, due to the diversity of procedures and forms that municipal changes can take, most existing studies are confined to a single country, and in some cases, even to a single administrative



Figure 4.1: Intersection of geo and non-geo changes of the municipalities

unit within that country (see [@blesse2016; @heinisch2018; @strebel2018]).

Thus, some papers focus exclusively on mergers processes: for example, in the Netherlands [allers2016], Denmark [hansen2014; blomhansen2016], Finland [moisio2013; harjunen2021], Norway [solvang2025], etc. Others research papers are devoted only to the splits processes: for example, in Sweden [erlingsson2024; brink2004], Slovenia [baclija2021], Czech Republic [lysek2021], Bulgaria, Croatia and Poland [swianiewicz2024]. Some studies examine municipal mergers and splits across multiple countries [klausen2024; swianiewicz2019], but such cross-national research remains uncommon. Similarly, only a few studies consider both mergers and splits within a single country, for example in Hungary [dobos2021]. However, comprehensive analyses covering both types of changes simultaneously remain relatively uncommon.

At the same time, the majority of the papers mentioned above do not focus on analyzing the changes within municipalities themselves, but rather on the causes for these changes or their consequences or effects (see Figure 4.2). As for the causes of such changes, researchers have investigated factors such as financial incentives [strebel2018], the degree of voluntariness—whether changes were initiated by municipalities themselves or imposed top-down by higher levels of government (see [blomhansen2016; swianiewicz2022]), internal dissatisfaction within municipalities [baclija2021], etc. With respect to consequences, studies have explored the impact of changes on local government spending, taxation, and service provision [hansen2014; allers2016; blomhansen2016; erlingsson2024], performance of local governments [swianiewicz2024], political representation [harjunen2021], voter turnout in local elections [heinisch2018], trust in local politicians [solvang2025], etc. A few studies attempt to address both the factors beyond the change and their potential consequences (e.g., [swianiewicz2019]).

This project aims to provide a comprehensive analysis of all identifiable types of municipal-level changes across EU countries during the period 2014–2024. Our approach relies on the systematic comparison of municipal shapefiles from official country sources, offering a novel geo-based method for detecting and classifying these changes. While we do not seek to explore the underlying causes

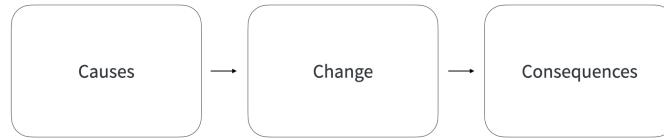


Figure 4.2: How we can understand the process of change: from causes to consequences.

or motivations for each type of change, nor their broader consequences, our analysis enables a comparative assessment of the scale and distribution of these changes—both within individual countries and across the EU as a whole.

One of the main challenges we encountered was the absence of a unified and widely accepted typology of municipal changes in the academic literature. While some attempts have been made to address this gap—most notably in the contexts of Poland, Spain and the Czech Republic [kociuba2023; goerlich2018; paszto2020]—they remain limited in scope. Thus, among the three studies listed above, the study by Goerlich and Ruiz (2018) is particularly relevant to our project, as it proposes a typology of boundary changes in Spanish municipalities between two points in time and distinguishes between territorial and non-territorial changes. However, this approach has certain limitations. First, it is based on a single-country case study, which limits its ability to capture the full range of municipal changes that may occur across different EU countries. Second, the temporal scope of the analysis (1842–2001) restricts its relevance for understanding more recent developments and complicates systematic cross-national comparisons.

Our project addresses these limitations by developing a harmonized typology of municipal changes that can be applied across EU member states and over a consistent time frame. This typology may serve as a foundation for more systematic, comparative studies of municipal restructuring across the EU. To date, no comprehensive source has been identified that captures the full range of municipal changes (geographical and non-geographical) that have occurred in EU countries over the past decade. Moreover, there is a lack of harmonized data that would allow for a detailed examination of how such changes are distributed. This gap in the literature limits the capacity for systematic and comparative assessments of municipal transformations at the EU level.

This project seeks to address this gap through two main objectives. First, it introduces a new classification that systematically categorizes municipal changes in the EU since 2014. This classification encompasses both territorial changes and non-territorial changes, including name changes and updates to administrative codes. Second, the project applies this classification to all EU countries to

illustrate the distribution and frequency of these changes across them.

4.2 References

Part I

Methodology

Chapter 5

Methodological Overview

Chapter 6

Definition of Unit of Analysis

Chapter 7

Code-Based Change Identification

Chapter 8

Legal Verification of Changes

Chapter 9

Data System

Chapter 10

Limitations

Part II

Results

Chapter 11

Classification of Municipal Changes in the EU (2014–2024)

11.1 Geographical changes

11.1.1 1. Municipalities are created and dissolved ¹

Change

Sub-Change

Explanation

Merger

Simple

The creation of a new municipality whose territory results from the union of two pre-existing municipalities.

Multiple ²

The creation of a new municipality whose territory results from the union of more than two pre-existing municipalities.

Split ³

¹By **id** we mean code identifier of the municipality.

²The distinguishing factor from a simple merger is explicitly quantitative (more than two pre-existing municipalities involved), reflecting increased administrative, political, social, and economic complexity due to negotiations among multiple governing authorities.

³The dissolved municipality ceases to exist in legal and administrative terms. Unlike dissolution, all resulting municipalities are new creations, regardless of whether they retain parts

Simple

The dissolution of one municipality, whose territory is divided among two newly established municipalities, neither of which retains the legal or administrative aspects of the original entity.

Multiple

The dissolution of one municipality, whose territory is divided among more than two newly established municipalities, none of which retains legal or administrative aspects of the original entity.

Composite restructuring ⁴

The simultaneous dissolution of one or multiple municipalities and the merger of their entire or partial territories, along with other pre-existing municipalities, into newly created municipalities.

11.1.2 2. Municipalities are created and are not dissolved**Change****Sub-Change****Explanation****De-Merger** ⁵**Simple**

The re-establishment of one municipality that had previously participated in a merger (either simple or multiple) into a new, separate municipality whose territory exactly matches its original boundaries prior to the merger, thereby fully reversing the territorial effects of its inclusion in that merger

Multiple

The re-establishment of more than one municipality that had previously participated in a merger (either simple or multiple) into a new, separate municipalities whose territories exactly match their original boundaries prior to the merger, thereby fully reversing the territorial effects of its inclusion in that merger.

Separation (secession) ⁶

of the name, code, or territory. Unlike separation (secession), no part of the original unit is recognized as its legal continuation.

⁴The key feature is that no resulting municipality is pre-existing (all are established as part of the merger process, and some are composed of parts of previously dissolved municipalities).

⁵This conceptual framework is designed for a study specifically tracking territorial changes in municipalities across Europe within a defined 10-year period (2014–2024). Events falling partially or fully outside this period, although potentially meeting conceptual definitions, are explicitly noted but classified separately due to the temporal constraints of the current project.

⁶The key criterion is the identification of legal or administrative acts of creation. Separation (secession) occurs when the relevant legislation explicitly establishes one or more new municipalities while affirming the continuity of the remaining original municipality. Continu-

Simple

The creation of a new municipality through the separation of a part of the territory from one municipality, which continues to exist.

Multiple

The creation of a new municipality through the separation of a part of the territory from more than one municipality, all of which continue to exist.

11.1.3 3. Municipalities are dissolved and are not created

Change

Sub-Change

Explanation

Dissolution ⁷

Simple

The dissolution of one municipality and the distribution of its territory among two municipalities, neither of which is newly created. The original municipality ceases to exist as a legal-administrative entity.

11.1.4 4. Municipalities are neither created nor dissolved

Change

Sub-Change

Explanation

Nature integration

simple

The integration of a previously non-municipal territory, such as a national park, forest, or uninhabited administrative zone, into two existing municipalities.

multiple

The integration of a previously non-municipal territory, such as a national park, forest, or uninhabited administrative zone, into more than two existing municipalities.

Territorial transfer

ity can be inferred when the remaining entity is not replaced, regardless of whether it retains the same name or administrative code. In cases where legal records are unclear or unavailable, territorial majority may be used as a secondary criterion: if the remaining municipality retains more than 50% of the original area, it may be treated as the continuation of the original unit. This approach ensures consistency across jurisdictions, even where naming conventions or coding systems vary.

⁷Unlike split, no new municipalities are created.

National Transfer

The transfer of part of the territory of one municipality to another, without receiving territory in return, within the same country.

National Exchange

The one-time exchange of territories between two municipalities within the same country.

International Transfer

The transfer of part of the territory of one municipality from one country to another municipality in a neighboring country, without receiving territory in return.

International Exchange

The one-time exchange of territories between two municipalities from neighboring countries.

11.2 Non-geographical changes

All four categories presented above represent situations where municipal boundaries are changing. However, sometimes geographical changes occur simultaneously with changes in the municipalities' legal identifiers (such as code, name, or both). Typical examples include mergers or splits, where boundary changes are accompanied by the municipality's name or code changes. Sometimes the geographical boundaries of a municipality change, while its legal identifiers remain the same. Typical examples include all territorial transfer situations. And sometimes, municipalities' boundaries may remain unchanged while its legal identifiers are modified. We have classified these situations into the following category:

Change**Sub-Change****Explanation****Non-geo****Change name**

The change of a municipality's name.

Change id

The change of a municipality's id.

Change id

The change of a municipality's id.

11.3 Download table

Download table in PDF:

11.4 Notes

Chapter 12

Merger

12.1 Simple Merger

12.1.1 Definition

The creation of a new municipality whose territory results from the union of two pre-existing municipalities.

12.1.2 Implication of the change

Before (year t):

- Municipalities A (with id 1¹) and B (with id 2) exist as separate entities, each with its own name, code, and territory.

After (year $t + 1$):

- Municipalities A and B were dissolved.
- Municipality C was created, covering the combined territory of Municipalities A and B.
- Municipality C either carries forward one predecessor's name/id or receives a new name/id.

12.1.3 Visual overview

Simple Merger

The number of municipal units involved is indicated in brackets under each description.

¹By **id** we mean code identifier of the municipality.

12.1.4 Examples

Based on our cross-country analysis, we identified several configurations in how newly formed municipalities—created through simple mergers—are assigned names and ids. Specifically, we observed four common combinations: (a) a new name with an inherited id, (b) an inherited name with an inherited id, (c) an inherited name with a new id, and (d) a new name with a new id. Below we present illustrative examples from different EU countries for each case.

12.1.4.1 a. New name with an inherited id

The case occurred in 2015 and it was noticeable in 2016.

The new municipality (Commune in France) *Val de Lambronne* (id 11080) was created through the merger of the municipalities *Caudeval* (id 11080) and *Gueytes-et-Labastide* (id 11171). The name Val de Lambronne is new, and the id was inherited from the municipality of *Caudeval*. The case was registered in the metadata dataset under the id: fr-m-34-2015-2016.

Legal verification of the change

Visit Official Resource

12.1.4.2 b. Inherited name and id

The case took place in 2014 and it was noticeable in 2015.

The new municipality (Commune in Luxembourg) *Wiltz* (id 0807) was created through the merger of the municipalities *Wiltz* (id 0807) and *Eschweiler* (id 0803). Both the name and id were inherited from the former *Wiltz* municipality. The case was registered in the metadata dataset under the id: fr-m-34-2015-2016.

In some case, the inherited name of a new municipality formed after a merger sometimes consists of a combination of the names of the municipalities involved, separated by a hyphen. For example, the municipality (Commune in France) *Clux-Villeneuve* (id 71138) was created through the merger of the municipalities *Clux* (id 71138) and *La Villeneuve* (id 71578). The name is new—formed by combining the names of the merged entities—while the id was inherited from *Clux* (Case id: fr-m-10-2014-2015). Similarly, the municipality (Commune in Luxembourg) *Rosport-Mompach* (id 1006) was created through the merger of the municipalities *Rosport* (id 1007) and *Mompach* (id 1006). The name combines the names of both former municipalities, and the id was inherited from *Mompach*. Case id: lu-m-4-2017-2018

Legal verification of the change

Visit Official Resource

12.1.4.3 c. Inherited name with a new id

The case took place in 2017 and it was noticeable in 2018.

The new municipality (Kommune in Norway) *Larvik* (id 0712) was created through the merger of the municipalities *Larvik* (id 0709) and *Lardal* (id 0728). The name *Larvik* is inherited from the former *Larvik* municipality, and the id 0712 was new. The case was registered in the metadata dataset under the id: no-m-2-2017-2018

Legal verification of the change

Visit Official Resource

12.1.4.4 d. New name with a new id

The case occurred in 2017 and it was noticeable in 2018.

The new municipality (Kommune in Norway) *Indre Fosen* (id 5054) was created through the merger of the municipalities *Leksvik* (id 1718) and *Rissa* (id 1624). Both the name and the id are new (source). Case id: no-m-6-2017-2018

Legal verification of the change

Visit Official Resource

12.1.5 Map Plots

The visual example is based on the Norwegian case: d. New name with a new id

12.2 Interactive map

```
<folium.folium.Map at 0x10db3d2b0>
```

12.3 Static map

Before

After

12.3.1 How it is recorded in the data system**12.4 Multiple Merger****12.4.1 Definition**

The creation of a new municipality whose territory results from the union of more than two pre-existing municipalities.

12.4.2 Implication of the change

Before (year t):

- Municipalities A (with id 1), B (with id 2), and C (with id 3) exist as separate entities, each with its own name, id, and territory.

After (year $t + 1$):

- Municipalities A, B, and C were dissolved.
- Municipality D was created, covering the combined territory of Municipalities A, B, and C.
- Municipality D either carries forward one predecessor's name/id or receives a new name/id.

12.4.3 Visual overview

Multiple Merger

The number of municipal units involved is indicated in brackets under each description.

12.4.4 Examples

Based on our cross-country analysis, we identified several configurations in how newly formed municipalities—created through simple mergers—are assigned names and ids. Specifically, we observed four common combinations: (a) a new name with an inherited id, (b) an inherited name with an inherited id, (c) an inherited name with a new id, and (d) a new name with a new id. Below we present illustrative examples from different EU countries for each case.

12.4.4.1 a. New name with an inherited id

The case occurred in 2016 and it was noticeable in 2017.

The new municipality (Commune in France) *Les Trois Châteaux* (id 39378) was created through the merger of the municipalities *L'Aubépin* (id 39023), *Chazelles* (id 39135), and *Nanc-lès-Saint-Amour* (id 39378). The name is new, while the id was inherited from *Nanc-lès-Saint-Amour*. The case was registered in the metadata dataset under the id: fr-m-430-2016-2017.

Legal verification of the change

Visit Official Resource

12.4.4.2 b. Inherited name and id

The case took place in 2014 and it was noticeable in 2015.

The new municipality (Gemeinde in Germany) *Friedland* (id 130715152035) was created through the merger of the municipalities *Eichhorst* (id 130715152031),

Glienke (id 130715152040) and *Friedland* (id 130715152035). Both the name and id were inherited from the former *Friedland* municipality. The case was registered in the metadata dataset under the id: de-m-10-2014-2015

Legal verification of the change

Visit Official Resource

12.4.4.3 c. Inherited name with a new id

The case took place in 2014 and it was noticeable in 2015.

The new municipality (Gemeinde in Austria) *Bad Mitterndorf* (id 61255) was created through the merger of the municipalities *Bad Mitterndorf* (id 61226), *Pichl-Kainisch* (id 61233), and *Tauplitz* (id 61245). The name was inherited from *Bad Mitterndorf*, while the id is new. The case was registered in the metadata dataset under the id: at-m-33-2014-2015

Legal verification of the change

Visit Official Resource

12.4.4.4 d. New name with a new id

The case occurred in 2018 and it was noticeable in 2019.

The new municipality (Gemeente in Belgium) *Lievegem* (id 44085) was created through the merger of the municipalities Waarschoot (id 44072), *Lovendegem* (id 44036), and *Zomergem* (id 44080). Both the name and the id are new. The case was registered in the metadata dataset under the id: be-m-4-2018-2019

Legal verification of the change

Visit Official Resource

12.4.5 Map Plots

12.4.6 How it is recorded in the data system

12.5 References

Chapter 13

Split

13.1 Simple Split

13.1.1 Definition

The dissolution of one municipality, whose territory is divided among two newly established municipalities, neither of which retains the legal or administrative aspects of the original entity.

13.1.2 Implication of the change

Before (year t):

- Municipality A (with id 1^1) exists as a separate entity with its own name, id, and territory

After (year $t + 1$):

- Municipality A was dissolved.
- Municipalities B and C were created, covering the territory of Municipality A.
- Municipalities B and C have their own names and ids, or one of them retains Municipality A's id.

13.1.3 Visual overview

Simple Split

The number of municipal units involved is indicated in brackets under each description.

¹By **id** we mean code identifier of the municipality.

13.1.4 Example

Since 2020, the municipality (dímos in Greece) of *Lesvos* (id 5301) has been dissolved. Two new municipalities were created in its place: *Dytiki Lesvos* (id 5302) and *Mytilini* (id 5301), covering the entire territory of the former municipality of *Lesvos*. *Dytiki Lesvos* received a new id, while the id of *Mytilini* was retained from the former municipality of *Lesvos* (source). The case was registered in the metadata dataset under the id: gr-s-4-2019-2020.

Legal verification of the change

Visit Official Resource

13.1.5 Map Plots

13.2 Interactive map

```
<folium.folium.Map at 0x120e47d10>
```

13.3 Static map

Before

After

13.3.1 How it is recorded in the data system

13.4 Multiple Split

13.4.1 Definition

The dissolution of one municipality, whose territory is divided among more than two newly established municipalities, none of which retains legal or administrative aspects of the original entity.

13.4.2 Implication of the change

Before (year t):

- Municipality A (with id 1) exists as a separate entity with its own name, id, and territory.

After (year $t + 1$):

- Municipality A was dissolved.
- Municipalities B, C, and D were created, covering the territory of Municipality A.
- Municipalities B, C, and D have their own names/ids, or one of them retains Municipality A's id.

13.4.3 Visual overview

Multiple Split

The number of municipal units involved is indicated in brackets under each description.

13.4.4 Example

Since 2020, the municipality (dímos in Greece) of *Kefalonia* (id 3501) has been dissolved. Three new municipalities were created in its place: *Lixouri* (id 3502), *Sami* (id 3503), and *Argostoli* (id 3501), covering the entire territory of the former municipality of *Kefalonia*. *Lixouri* and *Sami* received new ids, while the id of *Argostoli* was retained from the former municipality of *Kefalonia*. The case was registered in the metadata dataset under the id: gr-s-3-2019-2020.

13.4.5 Map Plots

13.5 Interactive Map

<folium.folium.Map at 0x120e47d10>

13.6 Static Map

Before

After

13.7 References

Chapter 14

Composite Restructuring

14.1 Simple Split

14.1.1 Definition

The simultaneous dissolution of one or multiple municipalities and the merger of their entire or partial territories, along with other pre-existing municipalities, into newly created municipalities.

14.1.2 Implication of the change

Before (year t):

- Municipality A (with id ¹), B (with id 2), C (with id 3), D (with id 4), and E (with id 5) exist as separate entities, each with its own name, id, and territory.

After (year $t + 1$):

- Municipality A was dissolved. Part of its territory participated in a merger to create a new Municipality F, while another part participated in a merger to create a new Municipality G.
- Municipalities B and C were dissolved.
- Municipality F was created, covering the combined territory of Municipalities B and C, and a part of territory from Municipality A.
- Municipality F either retains one predecessor's name/od or receives a new name/id.
- Municipalities D and E were dissolved.
- Municipality G was created, covering the combined territory of Municipalities D and E, and another part of territory from Municipality A.

¹By **id** we mean code identifier of the municipality.

- Municipality G either retains one predecessor's name/od or receives a new name/id.

14.1.3 Visual overview

Simple Split

The number of municipal units involved is indicated in brackets under each description.

14.1.4 Example

Since 2018, the municipality *Palupera* (vald in Estonia, id 0582) was dissolved, and its entire territory was divided between two newly created municipalities: *Elva* (id 0171) and *Otepää* (id 0557), each receiving 7 villages. At the same time, the new municipality *Elva* vald (id 0171) was created through the merger of the municipalities *Elva linn* (id 0170), *Konguta* vald (id 0331), *Puhja* vald (id 0605), *Rannu* vald (id 0666), *Rõngu* vald (id 0694), and part of the former *Palupera* municipality (7 villages) (source). The new municipality *Otepää* vald (id 0557) was created through the merger of the municipalities *Otepää* vald (id 0636), part of *Puka* vald (id 0608), *Sangaste* vald (id 0724), and the remaining part of *Palupera* municipality (7 villages). The case was registered in the metadata dataset under the id: ee-cr-1-2017-2018.

Legal verification of the change

Visit Official Resource

14.1.5 Map Plots

14.2 Interactive map

```
<folium.folium.Map at 0x1184df470>
```

14.3 Static map

Before

After

14.3.1 How it is recorded in the data system

14.4 References

Chapter 15

De-merger

15.1 Simple De-merger

15.1.1 Definition

The re-establishment of one municipality that had previously participated in a merger (either simple or multiple) into a new, separate municipality whose territory exactly matches its original boundaries prior to the merger, thereby fully reversing the territorial effects of its inclusion in that merger.

15.1.2 Implication of the change

Even before (year $t-1$):

- Municipalities A (with id 1¹), B (with id 2), C (with id 3), and D (with id 4) exist as separate entities, each with its own name, id, and territory.

Before (year t):

- Municipalities A, B, C, and D were dissolved.
- Municipality E was created, covering the combined territory of Municipalities A, B, C and D.
- Municipality E either retains one predecessor's name/id or receives a new name/id.

After (year $t + 1$):

- Municipality C was re-established as a new, separate municipality whose territory exactly matches its original boundaries prior to the merger (year $t - 1$)

¹By **id** we mean code identifier of the municipality.

- Municipality E, from (year $t + 1$), combines only territories of Municipalities A, B and D.

15.1.3 Visual overview

Simple De-merger

The number of municipal units involved is indicated in brackets under each description.

15.1.4 Example

From 2019, the new municipality (commune in France) *Les Hauts-Talican* (id 60054) was formed by the merger of the municipalities *Beaumont-les-Nonains* (id 60054), *Neuville-Garnier* (id 60455), and *Villotran* (id 60694). The name was new, and the id was inherited from *Beaumont-les-Nonains*. However, from 2024, the municipality *Beaumont-lès-Nonains* is re-established as a new, separate municipality whose territory exactly matches its original boundaries prior to the merger. It reverts to its previous name, *Beaumont-les-Nonains*, and resumes the id 60054. The municipality *Les Hauts-Talican*, now consisting only of the former municipalities *Neuville-Garnier* and *Villotran* (from year $t + 1$), conserves the name *Les Hauts-Talican* but adopts a new id, 60694, inherited from *Villotran*. The case was registered in the metadata dataset under the id: fr-dm-1-2019-2024.

Legal verification of the change

Visit Official Resource

15.1.5 Map Plots

15.2 Interactive map

```
<folium.folium.Map at 0x121366060>
```

15.3 Static map

Before

After

15.3.1 How it is recorded in the data system

15.4 Multiple De-merger

15.4.1 Definition

The re-establishment of more than one municipality that had previously participated in a merger (either simple or multiple) into a new, separate municipalities whose territories exactly match their original boundaries prior to the merger, thereby fully reversing the territorial effects of its inclusion in that merger.

15.4.2 Implication of the change

Even before (year $t-1$):

- Municipalities A (with id 1), B (with id 2), C (with id 3), and D (with id 4) exist as separate entities, each with its own name, id, and territory.

Before (year t):

- Municipalities A, B, C, D were dissolved.
- Municipality E was created, covering the combined territory of Municipalities A, B, C and D.
- Municipality E either retains one predecessor's name/od or receives a new name/id.

After (year $t + 1$):

- Municipalities A and C were re-established as new, separate municipalities whose territory exactly match their original boundaries prior to the merger (year $t - 1$)
- Municipality E, from (year $t + 1$), combines only territories of Municipalities B and D.

15.4.3 Visual overview

Multiple De-merger

The number of municipal units involved is indicated in brackets under each description.

15.4.4 Example

Since 2016, the new municipality (commune in France) *L'Essarts-en-Bocage* (id 85084) was formed by the merger of the municipalities *Les Essarts* (id 85084), *Le Boulougne* (id 85030), *L'Oie* (id 85165), and *Sainte-Florence* (id 85212). The name was new, and the id was inherited from *Les Essarts*. However, since 2024, two municipalities — (1) *L'Oie* and (2) *Sainte-Florence* — are re-established as new, separate municipalities whose territories exactly match their original

boundaries prior to the merger. They revert to their previous names and ids. The municipality *L'Essarts-en-Bocage*, now consisting only of the former municipalities *Les Essarts* and *Le Boulogne* (from year $t + 1$), retains the name *L'Essarts-en-Bocage* and the id 85084, inherited originally from *Les Essarts*. The case was registered in the metadata dataset under: fr-dm-2-2016-2024

Legal verification of the change

Visit Official Resource

15.4.5 Map Plots

15.5 Interactive Map

```
<folium.folium.Map at 0x121366060>
```

15.6 Static Map

Before

After

15.7 References

Chapter 16

Separation

16.1 Simple Separation (Secession)

16.1.1 Definition

The creation of a new municipality through the separation of a part of the territory from one municipality, which continues to exist.

16.1.2 Implication of the change

Before (year t):

- Municipality A (with id 1¹) exists as a separate entity with its own name, id, and territory.

After (year $t + 1$):

- Municipality B was created by separating a part of the territory from Municipality A, which continues to exist.
- Municipality B has its own name and id.

16.1.3 Visual overview

Simple Separation

The number of municipal units involved is indicated in brackets under each description.

¹By **id** we mean code identifier of the municipality.

16.1.4 Example

Since 2021, the new municipality (comune in Italy) *Misiliscemi* (id 081025) was created through the separation of part of the territory from the municipality of *Trapani* (id 081021), which continues to exist. The municipality Trapani retained both its name and id. The municipality *Misiliscemi* has a new name and a new id. Case id: The case was registered in the metadata dataset under the id: it-se-2-2020-2021.

Legal verification of the change

Visit Official Resource

16.1.5 Map Plots

16.2 Interactive map

<folium.folium.Map at 0x1231fe600>

16.3 Static map

Before

After

16.3.1 How it is recorded in the data system

16.4 Multiple Separation

16.4.1 Definition

The creation of a new municipality through the separation of a part of the territory from more than one municipality, all of which continue to exist.

16.4.2 Implication of the change

Before (year t):

- Municipalities A (with id 1) and B (with id 2) exist as separate entities, each with its own name, id, and territory.

After (year $t + 1$):

- Municipality C was created by separating a part of the territory from Municipalities A and B, which continue to exist.
- Municipality C has its own name and id.

16.4.3 Visual overview

Multiple Separation

The number of municipal units involved is indicated in brackets under each description.

16.4.4 Example

Since 2021, the new municipality (comune in Italy) Mappano (id 001316) was created through the separation of parts of the territory from four existing municipalities: Borgaro Torinese (id 001028), Caselle Torinese (id 001063), Leini (id 001130), and Settimo Torinese (id 001265), all of which continue to exist with their original names and ids. The municipality Mappano has a new name and a new id (source). The case was registered in the metadata dataset under: it-se-1-2017-2018

Legal verification of the change

Visit Official Resource

16.4.5 Map Plots

16.5 Interactive Map

<folium.folium.Map at 0x1231fe600>

16.6 Static Map

Before

After

16.7 References

Chapter 17

Dissolution

17.0.1 Definition

The dissolution of one municipality and the distribution of its territory among two municipalities, neither of which is newly created. The original municipality ceases to exist as a legal-administrative entity.

17.0.2 Implication of the change

Before (year t):

- Municipalities A (with id 1¹), B (with id 2), and C (with id 3) exist as separate entities, each with its own name, id, and territory.

After (year $t + 1$):

- Municipality A was dissolved, and its entire territory was distributed between Municipalities B and C.
- Municipalities B and C did not change their names or ids.

17.0.3 Visual overview

Dissolution

The number of municipal units involved is indicated in brackets under each description.

17.0.4 Example

Since 2019, the municipality (gmina in Poland) *Ostrowice* (id 3203042) has been dissolved, and its entire territory has been divided between the municipalities

¹By **id** we mean code identifier of the municipality.

Drawsko Pomorskie (id 3002032) and *Złocieniec* (id 3203063). The receiving municipalities retained their existing names and ids without any changes. The case was registered in the metadata dataset under the id: pl-d-1-2018-2019.

Legal verification of the change

Visit Official Resource

17.0.5 Map Plots

17.1 Interactive map

<folium.folium.Map at 0x11e463800>

17.2 Static map

Before

After

17.2.1 How it is recorded in the data system

17.3 References

Chapter 18

Nature Integration

18.0.1 Definition

The integration of a previously non-municipal territory, such as a national park, forest, or uninhabited administrative zone, into one already existing municipality.

18.0.2 Implication of the change

Before (year t):

- Municipality A (with id 1^1) exists as a separate entity with its own name, id, and territory.

After (year $t + 1$):

- Municipality A integrated a non-municipal territory, such as a national park, forest, or uninhabited administrative zone, into its own territory.
- Municipality A did not change its name or id.

18.0.3 Visual overview

Nature Integration

The number of municipal units involved is indicated in brackets under each description.

18.0.4 Example

Since 2021, the municipality (Gemeinde in Germany) Kelheim (id 92730137137) integrated the non-municipal territory of Hienheimer Forst (forest) into its own

¹By **id** we mean code identifier of the municipality.

territory. The municipality Kelheim retained both its name and id (source). The case was registered in the metadata dataset under the: de-n-8-2021-2022.

Legal verification of the change

Visit Official Resource

18.0.5 Map Plots

18.1 Interactive map

<folium.folium.Map at 0x110ba7f50>

18.2 Static map

Before

After

18.2.1 How it is recorded in the data system

18.3 References

Chapter 19

Territorial Transfers

Chapter 20

Non Geographical Changes

Part III

Data

Chapter 21

Data Structure Overview

Chapter 22

Instructions for Linking Datasets

Chapter 23

Details of the Geographic Datasets

Chapter 24

Details of the Main Metadata

Chapter 25

Other Auxiliary Files

Chapter 26

Conventions and Standards

Chapter 27

Use Cases/Use Cases and Analysis

Chapter 28

Changelog and Updates

Chapter 29

Glossary

Chapter 30

Current activities

What the team is doing currently

- Papers
- Conferences

Chapter 31

Project Status

Chapter 32

Page for Victo's graph tests

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32.1 Static map example

Before

After

32.2 Interctive map example

<folium.folium.Map at 0x116a2e030>

Chapter 33

Graphing Tool

