# Territorial typologies manual - cities, commuting zones and functional urban areas

Statistics Explained

This article forms part of Eurostat 's *methodology manual on territorial typologies* .

A city is a local administrative unit (LAU) where a majority of the population lives in an urban centre of at least 50 000 inhabitants.

A commuting zone contains the surrounding travel-to-work areas of a city where at least 15% of employed residents are working in the city.

A functional urban area consists of a city and its commuting zone. Functional urban areas therefore consist of a*densely inhabited city and a less densely populated commuting zone whose labour market is highly integrated with the city* (OECD, 2012).

## Classes for the typology and their conditions

### Details of the typology

Functional urban areas are a classification based on the following 2 categories

- **cities** , otherwise referred to as densely populated areas
- **commuting zones** .

Note these 2 categories aren't exhaustive; they don't cover the whole territory.

### Methodology for the typology

The starting point for defining a city and its commuting zone is to consider what features form a city. The definition used builds on the idea of a city as a place with a relatively high spatial concentration of population.

The main building blocks are data for 1 km² population grid cells . Each grid cell has the same shape and surface area, thereby avoiding distortions caused by using units varying in size. This is a considerable advantage when compared with alternative approaches such as those based on the use of administrative data for LAUs (such as municipalities).

### Step 1: classifying grid cells

These 1 km² population grid cells are plotted in relation to their neighbouring cells to identify cluster types; note this is the same process that is used for the degree of urbanisation typology (see Chapter 2 ). The cluster type used to identify cities is that of

- urban centres (or high-density clusters): a cluster of non-diagonal contiguous grid cells (in other words, excluding those cells with only touching corners) having a population density of at least 1 500 inhabitants per km² and collectively at least 50 000 inhabitants after gap-filling.

For a more detailed explanation of how densely populated grid cells are classified to urban centres (including the gap-filling process), see Chapter 1 .

**Step 2: classifying cities**

The typology for functional urban areas is established at the level of local administrative units (LAUs). Once all grid cells have been classified and urban centres identified, the next step concerns overlaying these results onto LAUs, to identify cities

- **cities** (densely populated areas) – where at least 50% of the population lives in 1 or more urban centres (note this definition is identical to that used for the degree of urbanisation typology).

A city is defined in an identical way to the approach adopted for the degree of urbanisation (see Chapter 2 ) when identifying densely populated areas (and thereafter cities). In both of these typologies, cities are covered by the exact same local administrative units. There is, however, a difference in the coding of the 2 concepts. The degree of urbanisation classifies all local administrative units in 3 groups, which means that all the densely populated areas or all cities get the same code. Each city is assigned an individual code, which allows LAUs for each city to be grouped and classified (by population size). In simple terms, the degree of urbanisation typology results in data that may be analysed at an aggregate level for all of the cities in a specific country, while the functional urban area definition allows data to be analysed at the level of each individual city.

In most cases, defining a city is a simple task, insofar as the city consists of a single administrative unit that covers the entire urban centre. However, in some cases the relationship between LAUs and urban centres may be more complex – these are examined below.

**The urban centre is much bigger than the 'central' administrative unit**

In some cases, the urban centre may stretch far beyond the boundaries of the 'central' LAU (or municipality). This is often the case with large capital cities that have outgrown the small LAU that carries their name. To strictly define the city as the central LAU would create a problem of 'under-bounding', in other words the city would be too small relative to its urban centre and a large share of the population living in the urban centre would inhabit areas outside the city. As the methodological definition of a city states that all LAUs with at least 50% of their population in the urban centre are part of the city, the boundaries of the city are extended to include these units (in order to better capture and represent all urban centres).

Although, particularly in urbanised areas, morphological definitions typically reflect reality in terms of actual urban characteristics and human activities better than administrative definitions, the latter are often more firmly anchored in people's minds and are more often used as reference geographies in research, urban planning and policymaking. However, misunderstandings can arise when there is uncertainty about the geographical reference area under consideration. For example, the morphological definition of the city of Paris, based on the degree of urbanisation, includes 295 municipalities with a population of around 10 million inhabitants. However, the administrative and conventional definition of the city of Paris only includes the municipality of Paris with its 20 arrondissements and a population of around 2.2 million inhabitants. In order to draw attention to this discrepancy and to make the spatial references of city statistics published by Eurostat transparent, the attribute (greater city) has been added to all city names for which the morphological definition of the city doesn't correspond to its conventional, administrative definition.

It is important to note that in contrast to the territorial classification used for Urban Audit up until 2017, 'greater city' is no longer used as a spatial concept (see the 'Historical developments' section below). Rather, a 'greater city' is an attribute that is intended to serve the purpose of better understanding geographical references in European city statistics. Eurostat has therefore modified the coding system for city statistics such that the default level of analysis is the harmonised code ('C') – composed of greater cities and all other cities (for which no information is available at the level of the greater city).

**The urban centre covers 2 (or more) distinct cities**

Some urban centres cover more than 1 (distinct) city. This can be due to inaccuracies in the population grid or because 2 (or more) cities have almost grown together – but remain functionally distinct. In such cases, a national statistical authority may choose to create multiple cities to cover the single urban centre. Note that when multiple cities are defined as covering a single urban centre, each of the (distinct) cities should have a population of at least 50 000 inhabitants.

Ulm in Germany (see Figure 1) provides an example: it has an urban centre that is composed of 2 cities, namely those of Ulm and Neu-Ulm, divided by the river Danube. This single urban centre is considerably larger in size than the administrative boundaries of the city of Ulm. Note: these distinct cities – in this case, Ulm and Neu-Ulm – may belong to
the same (single) commuting zone if 1 of the cities has a flow of commuters to the other city that reaches at least 15%.

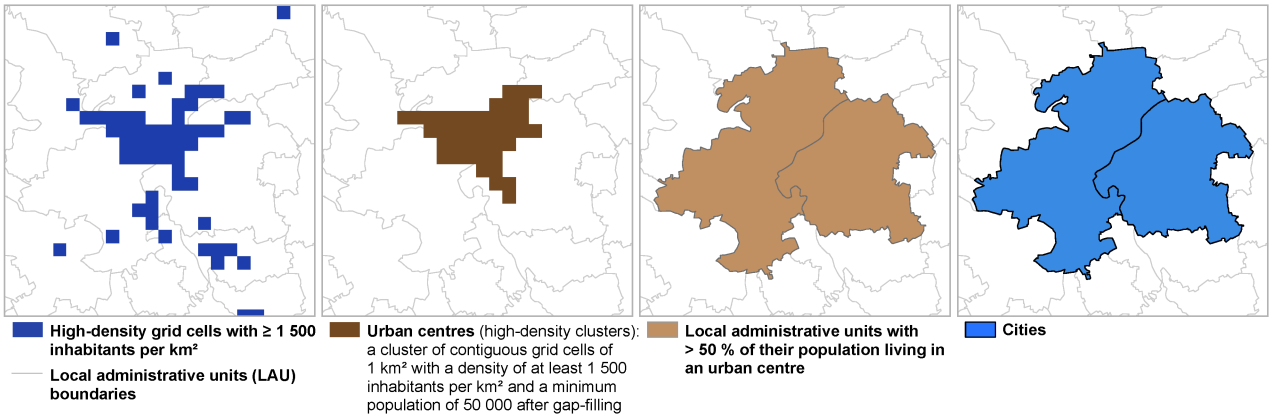



**Figure 1: High-density grid cells, urban centres and city boundaries – an example for Ulm Source: Eurostat**

### A city includes more than 1 urban centre

This situation is usually caused by topographical features, such as a wide river/estuary or a mountain ridge that may lead to an urban centre being split into 2 unique parts; this occurs, for example, in Tromsø (Norway). In such a case, the city is defined to cover both urban centres.

### The administrative unit is located between 2 urban centres

If an LAU has a share of its population in 2 urban centres, the unit should belong to the urban centre that captures the largest share of its population; even if that share is below 50%. For example, if an LAU has 40% of its population in urban centre A and 20% of its population in urban centre B, then it should be classified as part of the city that represents urban centre A.

### Cross-border cities

The definition used for cross-border cities follows and complies with the definition used for cities as laid out in the degree of urbanisation methodology. In the case of cross-border cities, the urban centre (cross-border cluster) need to extend across national borders. As for cities in general, the building block used to identify a cross-border city is a 1 km² population grid, where each grid cell has the same shape and surface area. A city is composed of small spatial units – local administrative units (LAUs) where a majority of the population lives in an urban centre. An urban centre is a cluster of non-diagonal contiguous grid cells of 1 km² with a population density of at least 1 500 inhabitants per km² and collectively at least 50 000 inhabitants after gap-filling.

Adjustments can be made for special cases that concern LAUs that form part of a cross-border city. If for instance, the cross-border urban centre extends to an LAU that isn't considered part of the city definition, that LAU may nevertheless be excluded from the cross-border city. On the other hand, the opposite is also valid. If the urban centre of a cross-border city doesn't meet the population threshold of 50%, that LAU may still be included in the cross-border city. The flexibility to decide rests on the cross-border cities themselves. All urban centres should be updated following the revision of the degree of urbanisation (to align with the most recent population figures from the population and housing census).

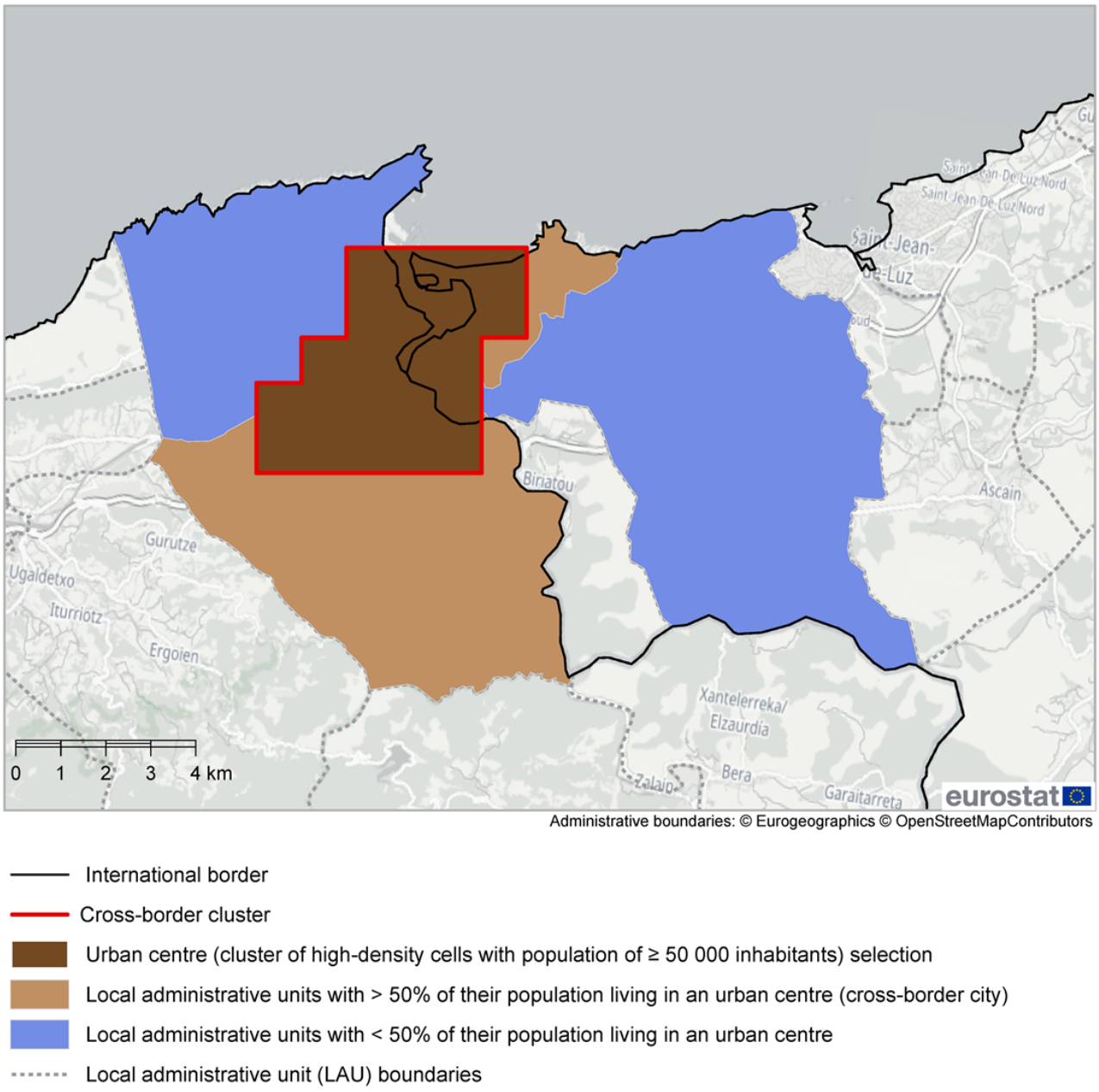



**Figure 2: Cross-border cities – an example for Irun and Hendaye Source: Eurostat**

### Step 3: classifying commuting zones

As a final step, the commuting zone is defined. The city plus its commuting zone forms what is known as a functional urban area

- **commuting zones** – are based on commuting patterns
  - if at least 15% of employed people living in a particular city work in another, these cities are treated as a single destination for the commuting analysis
  - all LAUs from which at least 15% of the employed residents commute to the city are identified as commuting zones
  - enclaves (LAUs surrounded by a single functional urban area) are included as part of the commuting zone and exclaves (non-contiguous LAUs) are excluded from commuting zones
- **functional urban areas** – are defined as a city and its commuting zone. In cases where cities are connected by commuting, the functional urban area may consist of multiple cities and their single commuting zone. There are a few cases where cities don't have a commuting zone – for these, the city is equal to the functional urban area.

A **city** is a local administrative unit (LAU) where the majority of the population lives in an urban centre of at least 50 000 inhabitants. The city of Milano has 1 346 000 inhabitants.

A **functional urban area** consists of a city and its commuting zone. The functional urban area of Milano has 5 111 000 inhabitants.

**Metropolitan regions** are NUTS 3 regions or a combination of NUTS 3 regions which represent all agglomerations of at least 250 000 inhabitants. These agglomerations were identified using the functional urban area. Each agglomeration is represented by at least one NUTS 3 region. If in an adjacent NUTS 3 region more than 50% of the population also lives within this agglomeration, it is included in the metropolitan region. The metropolitan region of Milano has 4 316 000 inhabitants.

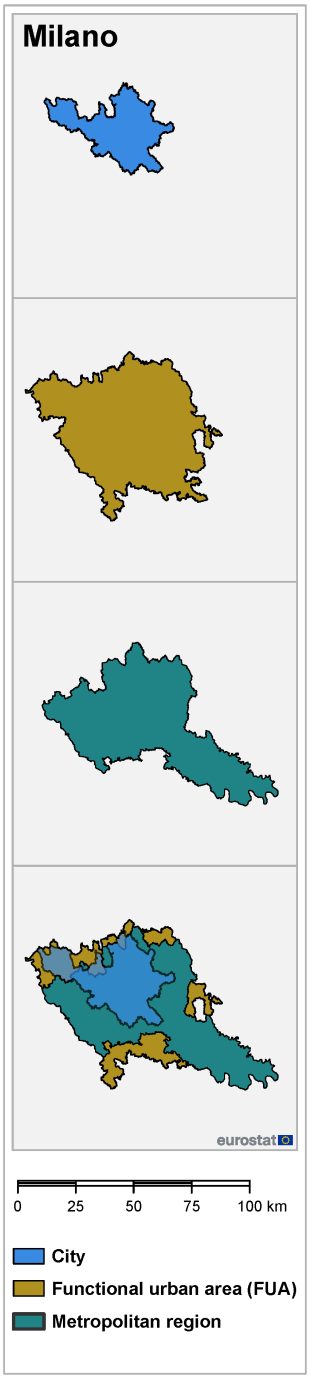



**Figure 3: City and related typologies – an example for Milano Source: Eurostat**

The destination to be used for identifying commuting flows should be the best approximation of the urban centre. For cities where their boundary is adjusted (see below) to match the boundaries of a city administration, the commuting zone should ideally be based on the unadjusted boundaries, in other words, before adding or excluding LAUs.

Data availability can also require the commuting zone to be defined at a more aggregated geographical level. For example at NUTS level 3 instead of for LAUs. In such cases, it is better to 1st define the commuting zone at the LAU level and only subsequently match this with NUTS level 3 regions. The OECD uses the same approach in the United States, where commuting zones are 1st defined at the census tract level, which is subsequently matched with data for counties.

**Identifying unique commuting zones**

To classify commuting zones the 1st step is to identify if there are any polycentric developments, in other words,

commuting zones that are characterised by 2 (or more) cities that are linked by their commuting flows. If city A has 15% of its employed residents commuting to city B, then the 2 cities are classified as sharing a single commuting zone; note that city B doesn't also need to have a flow of at least 15% of its employed residents commuting to city A.

In more complex cases involving 3 cities, the following rules should be applied

- if both city A and city B have commuting flows of more than 15% of their employed residents to city C, then all 3 cities share a single (unique) commuting zone
- if city A has a commuting flow of 20% to city B, while all remaining commuting flows between cities A, B and C are less than 15%, then cities A and B will have a shared commuting zone, while city C will have its own, (individual) commuting zone.

Cross-border commuting zones should follow, as closely as possible, the national definitions that are used for commuting zones. Commuting zones may be identified for LAUs on 1 side of an international border in those cases where at least 15% of employed residents commute to a city on the other side of a national border. If an LAU has commuting flows of more than 15% to 2 (or more) different foreign cities, it is classified as part of the commuting zone for the city to which it has its biggest flow of commuters. In case there is a lack of cross-border commuting data, other approximative methods might be considered.

**Assigning local administrative units to commuting zones**

The next step is to determine if the remaining LAUs (outside of the city) belong to a commuting zone, again based on identifying all LAUs with at least 15% of their employed residents working in the city (or 2 or more cities in those cases where cities share a commuting zone).

If an LAU has a commuting flow of more than 15% of its employed residents to more than 1 city, it should become part of the commuting zone of that city for which it has the largest commuting flow. For example, if an LAU has a commuting flow of 20% of its employed residents to city A and 17% of its employed residents to city B, then it should be considered as part of the commuting zone for city A.

An enclave is defined as an LAU that shares 100% of its land border with a single (unique) functional urban area; water borders aren't considered. In such a case, the LAU is assigned to the commuting zone. By contrast, exclaves (or non-contiguous LAUs), in other words, those LAUs that do not share a common border with the functional urban area should be dropped from the commuting zone. As a
result, the resulting commuting zone should be an integrated, contiguous area around the city (as shown in Figure 4).

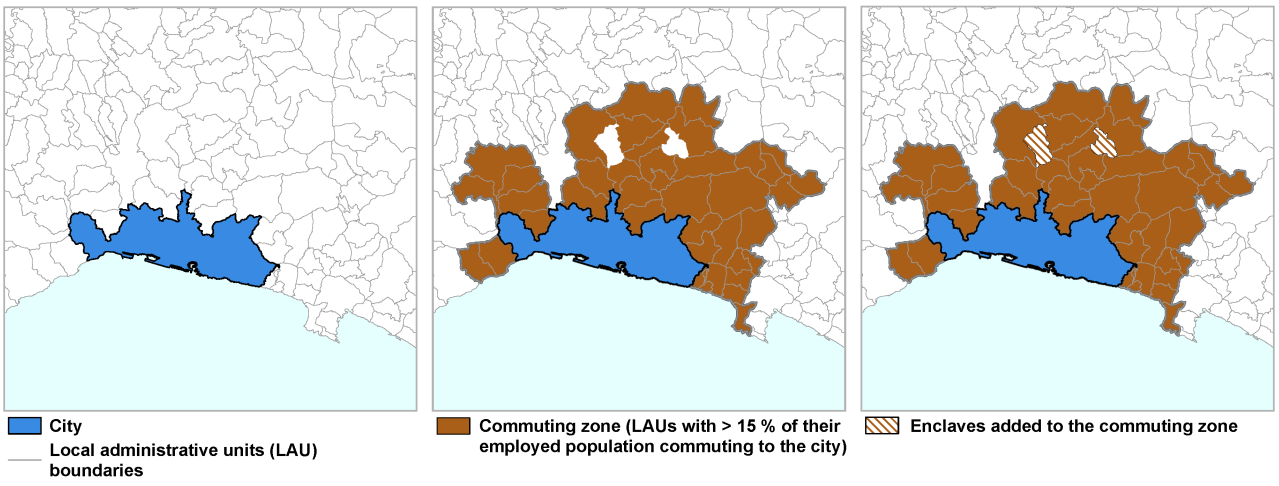



**Figure 4: A city and its commuting zone – an example for Genoa Source: Eurostat**

**Further adjustments for cities and their commuting zones**

As noted above, the typology for cities is based on information for 1 km² population grid cells, which helps overcome problems associated with units that vary in size. This methodology usually results in a closer match

between urban centres and densely populated LAUs for those EU countries that are characterised by relatively small LAUs, as these minimise any shifts in population between the grid classification and the classification of LAUs. Despite making use of the grid concept, there may be a variety of distortions when defining city boundaries that are linked to the size of LAUs and the political/administrative organisation of cities (these are discussed below). The adjustments that are made to take account of these distortions generally result from requests made by national statistical authorities, which are subsequently verified by the European Commission .

**Large local administrative units may lead to an urban centre that isn't represented by a city**

Large LAUs may result in an urban centre not having a single LAU with at least 50% of its population in that urban centre; this is more likely to happen for relatively small urban centres (with a population just above 50 000 inhabitants).

In such a case, there are 2 options, neither of which is ideal

- classify the LAU with the highest share of its population in that urban centre as a city
- don't classify any LAU as a city.

The 1st option leads to an over-representation of the population in the urban centre, the 2nd leads to an under-representation (or non-representation) of the population in the urban centre. The latter usually arises for those EU countries characterised by relatively large LAUs: indeed, they are systematically biased towards an under-representation of smaller cities. For example, if a country has administrative units composed of at least 200 000 residents, then the urban centre will need to have a population of at least 100 000 residents for it to be classified as a city.

**Small local administrative units may impact on links to the city administration**

In those EU countries characterised by fairly large LAUs, most cities consist of a single administrative unit. However, in countries characterised by smaller administrative units, individual cities may be composed of multiple administrative units.

Some EU countries are characterised by cities being administered at a more aggregated level than other parts of their territory. For example, in Portugal part of the degree of urbanisation classification (for towns and suburbs and for rural areas) is applied at the parish level (freguesia), whereas cities are organised at the municipal level (municipio or concelho); note that the level applied for cities has to be identical for both the degree of urbanisation and functional urban areas. Other countries have created a unique level of administration to govern their largest cities: for example, France has 21 métropoles for administering its biggest cities.

In order to facilitate a better link to these different levels of administration, which don't emerge automatically if using smaller administrative units, the following 2 cases may be applied when classifying cities

- a local unit with at least 50% of its population in an urban centre can be excluded from the city as long as 75% of the population of the urban centre is covered by that city (case 1)
- a local unit without 50% of its population in an urban centre can be added to a city if that unit is included as part of the city administration and at least 50% of the population of the 'expanded' city lives in the urban centre (case 2).

These 2 cases provide clear statistical limits to the changes that may be made, insofar as all cities should have at least 50% of their population living in an urban centre and all urban centres should have at least 75% of their population living in a city.

*Case 1: excluding local administrative units*

An example of the 1st case is provided by the Austrian capital of Vienna (Wien). Several LAUs just south of the city have 50% or more of their population in the urban centre of Vienna, although they aren't within the boundaries of the city's single administrative body. As more than 75% of the population of the urban centre live in the city of Vienna, these administrative units (Gemeinden shown in orange outside of the blue city area in the right hand part of Figure 5) can be dropped from the city without significantly compromis-
ing the comparability of the results, thereby ensuring a direct link to the political/administrative organisation of the city.

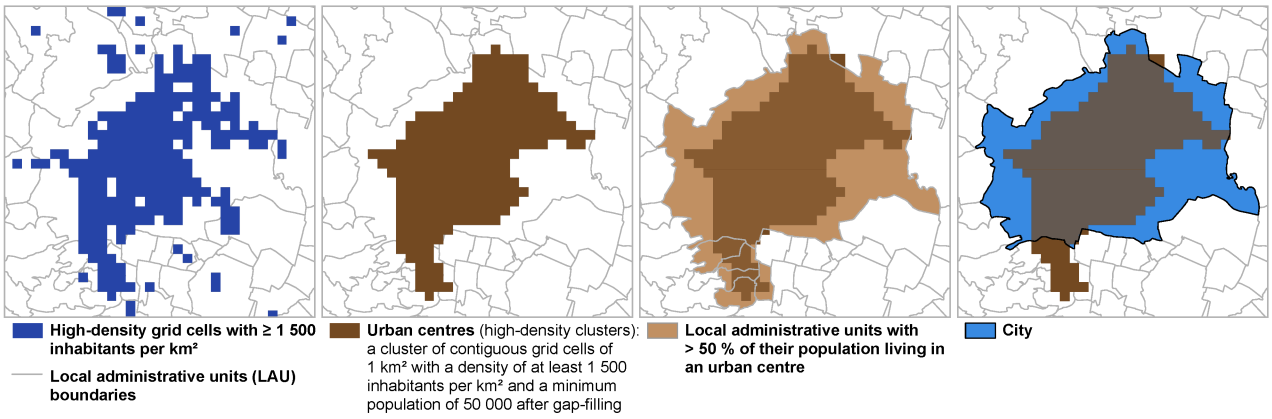



**Figure 5: High-density grid cells, urban centres and city boundaries – an example for Wien Source: Eurostat**

*Case 2: adding local administrative units*

An example of the 2nd case is provided by the Portuguese city of Braga. The Munícipo de Braga (the municipality of Braga in the north of Portugal) is delineated by an area that is somewhat bigger than that initially identified for the collection of city statistics. However, as more than 50% of the population of Braga still live within the urban centre, several relatively small administrative units (freguesias) around the city have been added to its definition without significantly compromising the comparability of the results (see Figure 6),
thereby ensuring a direct link between the statistics presented and the political/administrative organisation of the city.

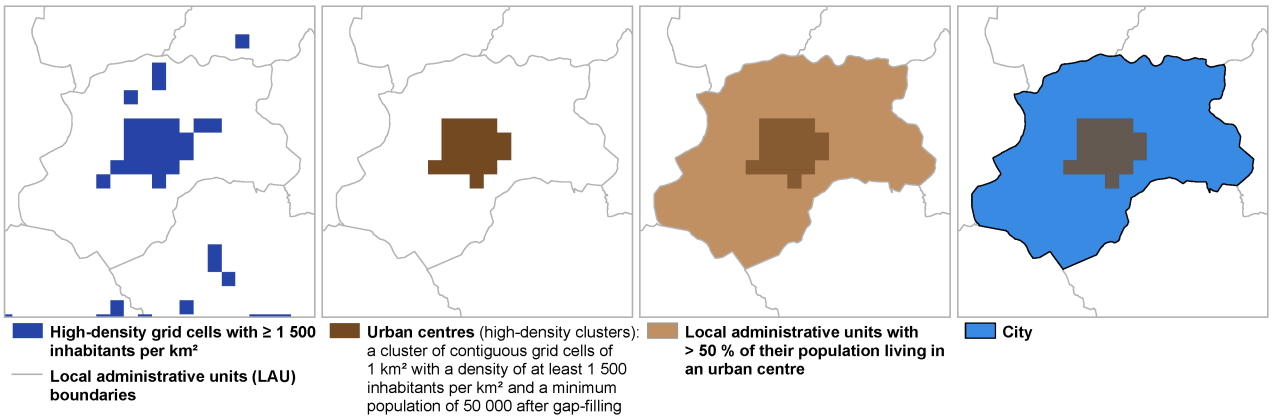



**Figure 6: High-density grid cells, urban centres and city boundaries – an example for Braga Source: Eurostat**

**Urban centres that have a population that is close to the threshold of 50 000 inhabitants**

The methodology provides an estimate of the population for an urban centre. 2 elements may reduce the accuracy of this estimate: i) geographic features and ii) the source of the population grid data.

The methodology doesn't take into account the specific geography/topography of a city. Some features, such as steep slopes, cliffs or bodies of water may lead to an underestimation of population size for urban centres: this may affect, in particular, those cities characterised by a small urban centre; in these cases, an expert decision should be taken.

**Defining cities with a strong separation of functions**

In those EU countries where land use planning enforces a strong separation of functions (industrial, commercial and residential) and where there is a relatively low level of population density in cities, the methodology may lead to excessive fragmentation of urban centres. In these cases, grid cells with shopping malls, transport infrastructure or business parks are unlikely to reach the population density threshold and hence are excluded from urban centres,

creating non-contiguous, fragmented grid cells for urban centres.

To resolve this issue, population grid cells which are at least 50% built-up may be added to the urban centre. This resolves the problem for this specific type of city and has little to no impact on those cities which are more densely populated, as virtually all of their grid cells which are at least 50% built-up have a population density above the threshold or are added as part of the gap-filling process.

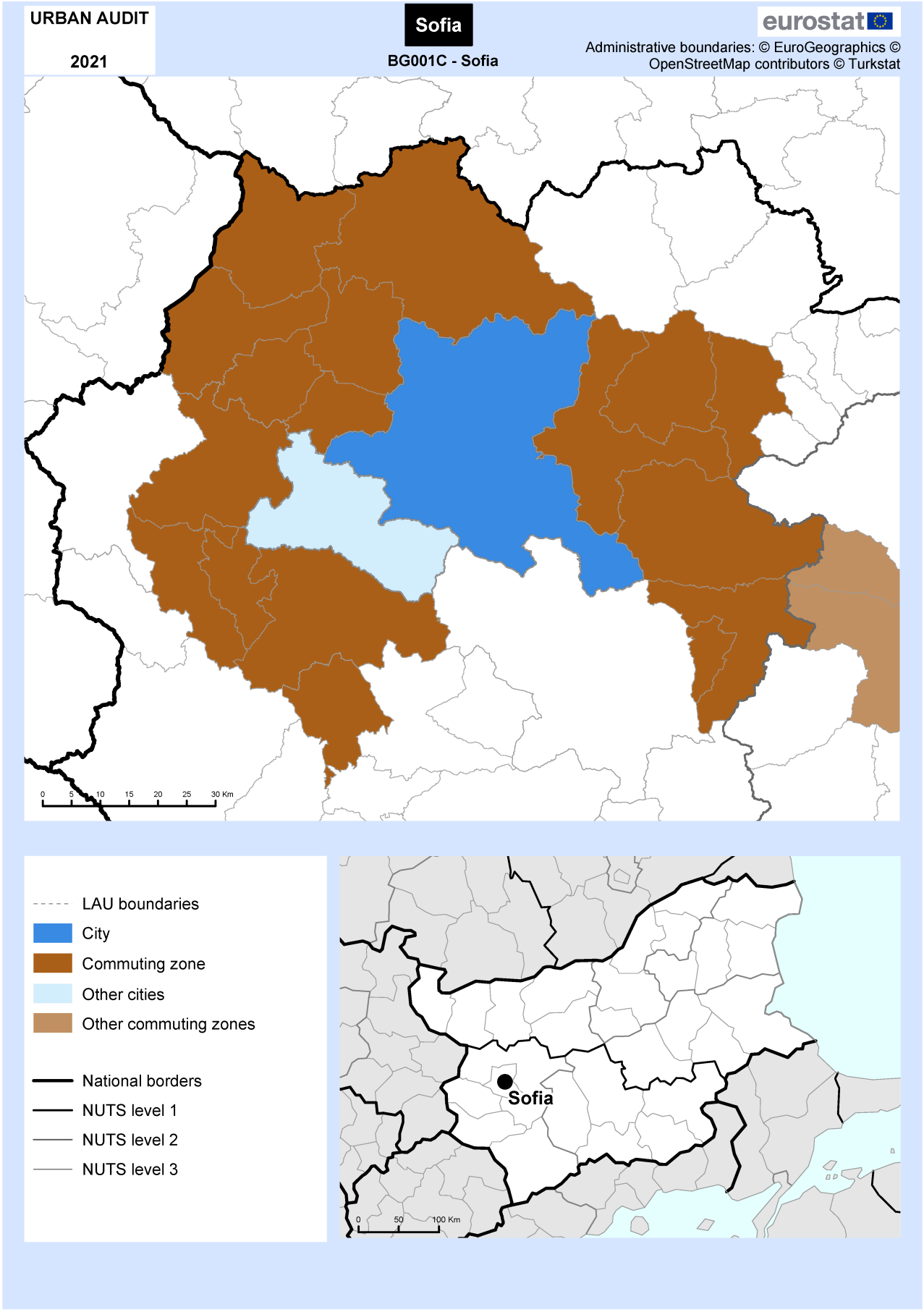
**Case studies**

The 3 maps which follow illustrate some specific cases.

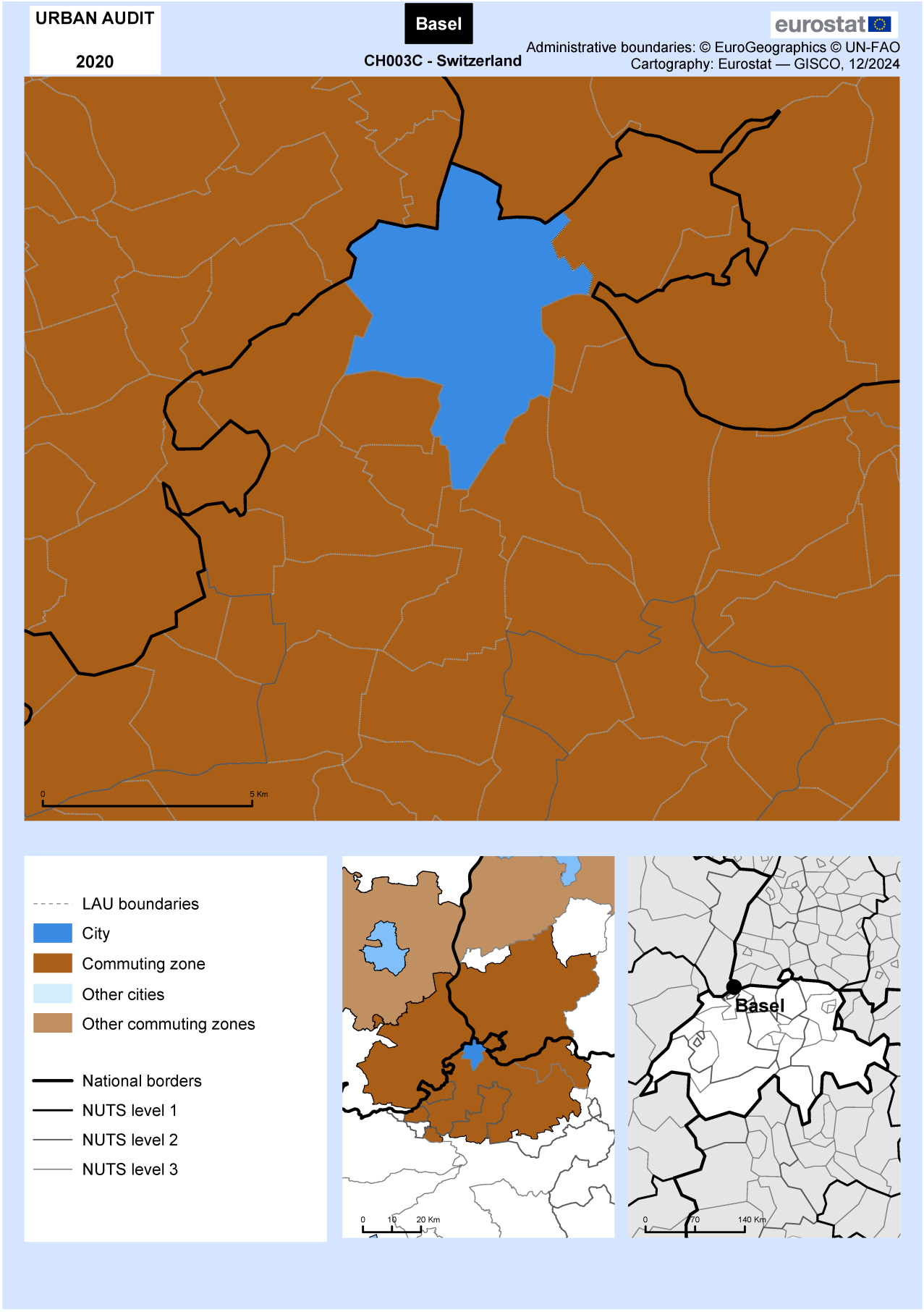
Map 1 shows the development of the city of Sofia. It has a relatively large commuting zone around its boundaries on the flatter plains, in contrast to its southern boundaries that are characterised by mountainous areas and a national park. The city of Pernik lies in close proximity to the west of Sofia; it is the 2nd largest town in western Bulgaria.

Map 2 provides an example of a transnational functional urban area, delineating the functional urban area of Basel in Switzerland. The functional urban area of Basel includes the region of Basel-Stadt, while the commuting zone extends into parts of the surrounding region of Basel-Landschaft, as well as across the border to cover some LAUs in the neighbouring regions of Haut-Rhin (France) and Lörrach (Germany). Note that national functional urban areas (based on commuting flows within a single country) can't overlap, whereas transnational functional urban areas (based on national and transnational commuting flows) may overlap with national functional urban areas. For instance, the French administrative unit of Petit-Landau (FR68254) is part of the transnational functional urban area of Basel in Switzerland (CH003T2) and is also part of the national functional urban area of Mulhouse in France (FR040L2).

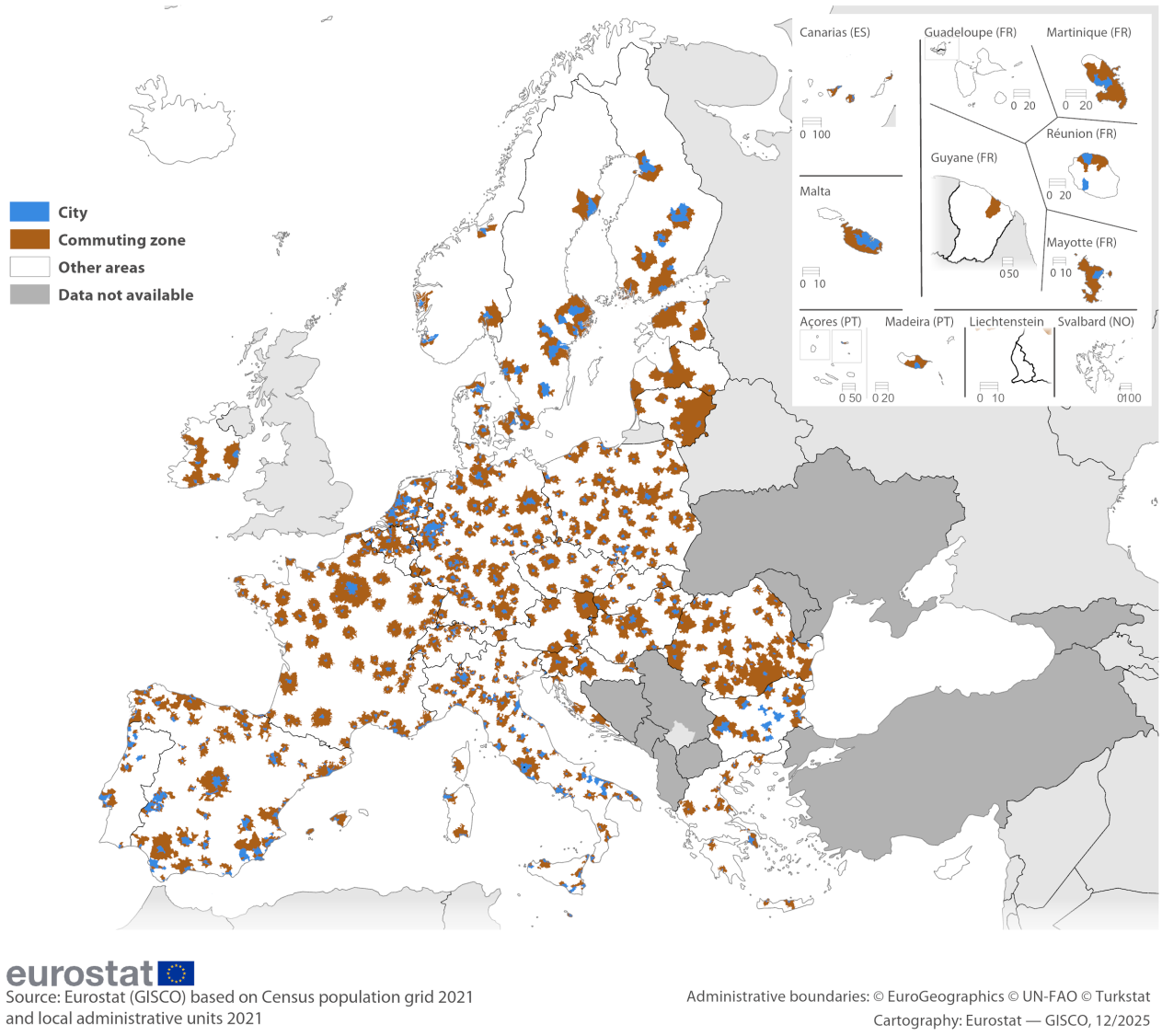
Map 3 provides a general overview of the typology for cities and commuting zones in the EU Member States and EFTA countries. It details the typology according to the latest available data on commuting zones and the grid from the population and housing census (reference year, 2021).




**Map 1: A city and its commuting zone – an example for Sofia Source: Eurostat (GISCO)**




**Map 2: A city and its commuting zone – an example for Basel/Basle Source: Eurostat (GISCO)**




**Map 3: Cities and commuting zones Source: Eurostat (GISCO) based on census population grid 2021 and local administrative units 2021**

## Links to other spatial concepts/typologies

As shown in Figure 2 in the introductory chapter and in the specific example of Figure 3 above, the local typologies for functional urban areas and the degree of urbanisation (see Chapter 2 for more information) are closely linked, insofar as the common concept of the city is used within both classifications and is defined in an identical manner: LAUs where a majority of the population lives in an urban centre of at least 50 000 inhabitants. While cities share a common definition, the degree of urbanisation also identifies towns and suburbs (or intermediate density areas) and rural areas (or thinly-populated areas). These 2 categories partially overlap with the commuting zones: towns and suburbs occur both inside commuting zones (more likely if they are suburbs) and outside (more likely if they are towns); while rural areas primarily fall outside commuting zones, some have a strong relationship with a nearby city and are therefore also classified as commuting zones.

There is also an indirect link between functional urban areas and a regional typology, insofar as the former are used as a building block to construct the typology for metropolitan regions (see Chapter 6 ), which are defined as 1 or

more NUTS level 3 regions with at least 50% of their regional population living inside a functional urban area with at least 250 000 inhabitants.

Note that 1 region (at NUTS level 3) can contain more than 1 city and/or more than 1 functional urban area: for example, the Czech region of Ústecký kraj has 3 of each (Chomutov-Jirkov, Most and Ústí nad Labem), while the same is true for the Spanish region of A Coruña (A Coruña, Ferrol and Santiago de Compostela). Each functional urban area with more than 250 000 inhabitants needs to be captured by a metropolitan region composed of 1 (or more) NUTS level 3 region(s).

## Results

For all EU countries, Iceland, Norway, Switzerland and Türkiye, a list of cities and their functional urban areas is available here .

## Changes to the typology over time

**Historical developments**

The collection of statistics for cities started in the 1990s. Data on European cities with more than 100 000 inhabitants were collected through the Urban Audit and the Large City Audit projects. Their ultimate goal was to contribute towards improvements in the quality of urban life by: supporting the exchange of information/experiences between EU cities; helping to identify best practices; facilitating benchmarking across the EU; providing information on the dynamics within the cities and between cities and their surrounding areas. Within the Urban Audit, cities were previously referred to as 'core cities', greater cities were previously referred to as 'kernels', while functional urban areas were previously referred to as 'larger urban zones'.

In 2011, the European Commission and the OECD developed a harmonised definition of a city and its commuting zone , which led to extension of the city list, resulting in better coverage and geographical comparability.

**Changes over time that impact on the classification**

The functional urban areas classification should be updated to reflect changes to the underlying sources of information that are used in the compilation of these statistics. As such, the classification may be updated to reflect changes to LAUs and other administrative boundaries; changes to population distributions for 1 km² grid cells; or changes to the underlying data that were used to identify commuting shares. The frequency of such updates therefore varies according to the source of information.

Changes to functional urban areas resulting from a revision of population distributions for 1 km² grid cells or underlying information for commuting shares are relatively scarce, with their main source being population and housing censuses which are generally conducted every 10 years. The latest major update of the population grid took place for the 2021 reference year. However, with an increasing number of countries expected to switch to a register-based census in the future, it might be possible to have more frequently updated information on commuting flows/zones.

For the EU as a whole, the boundaries of cities and functional urban areas are updated once a year based on changes in the LAU list. New codes are assigned by Eurostat after notification to the national statistical authorities. The resulting list of cities and functional urban areas is then used as the basis for the city statistics data collection.

## Further information

**Glossary entries**

City

Commuter zone

Functional urban area

**Detailed methodology**

Methodological manual on city statistics , Eurostat (2017)

*The EU-OECD definition of a city, commuting zone and a functional urban area* , European Commission and the OECD

**Dedicated section**

Cities

**Correspondence for local administrative units**

Correspondence table for LAUs and cities

**Publications**

Urban Europe – Statistics on cities, towns and suburbs , Eurostat (2016)

Report on the Quality of Life in European Cities, 2023 , European Commission, Directorate-General for Regional and Urban Policy (2023)

Quality of life in European cities , Eurobarometer (2016)

## Published indicators

**Visualisation tools**

Eurostat publishes data on cities through Regions and cities illustrated .

**Database**

The city statistics database provides data relating to most aspects concerning the quality of life in the cities of EU countries, Iceland, Norway, Switzerland and Türkiye. The datasets encompass statistical information on individual cities and on functional urban areas. The data collection exercise is undertaken jointly by national statistical authorities, the Directorate-General for Regional and Urban Policy and Eurostat.

Eurostat's website provides information on 233 variables/indicators for around 1 000 different cities. Note that as these statistics are provided solely for cities and for functional urban areas, it is necessary to derive information for commuting zones by subtracting the data for cities from that for functional urban areas (in those cases where the variable/indicator concerned is additive).

Data on cities and functional urban areas are available for the following statistical domains: demography, living conditions, education, culture and tourism, the labour market, economy and finance, transport and the environment. Data availability differs across statistical domains from year to year, in part reflecting the fact that these statistics are provided on a voluntary basis (in other words, there is no EU legislation covering the collection of these statistics). These statistics are available here .

There is also a separate data collection exercise that concerns a perception survey for the quality of life in European cities; the most recent survey took place in 2023 and covered 83 cities across the EU countries, Iceland, Norway, Switzerland, Montenegro, North Macedonia, Albania, Serbia, Türkiye and the United Kingdom. This survey is organised by the Directorate-General for Regional and Urban Policy. For more information, see the European Commission's website .

Data from the perception survey cover the satisfaction of individuals living in cities in terms of: their overall

experience of living in the city; their satisfaction with their city's infrastructure, facilities and environment; their views concerning various aspects of life in their city (employment opportunities; the housing situation; the presence and integration of foreigners; safety and trust; or city administrative services); their satisfaction with their personal situation; as well as the 3 most important issues that they feel need to be addressed in their city.

## Examples

Statistics for cities, commuting zones and functional urban areas – Urban Europe – Demographic developments in cities

Statistics for cities, commuting zones and functional urban areas – Urban Europe – Economic activity in capital cities and metropolitan regions

Statistics for cities, commuting zones and functional urban areas – Urban Europe – Quality of life in cities

## Explore further

### Database

- City statistics (urb)

### Thematic section

- Regions and cities , see
  - cities – information on data

### Publications

- Urban Europe – Statistics on cities, towns and suburbs : Eurostat (2016)

### Methodology

- Methodological manual on city statistics , Eurostat (2017)
- Correspondence table for LAUs and cities

### External links

- Report on the Quality of Life in European Cities, 2023 , European Commission, Directorate-General for Regional and Urban Policy (2023)
- Quality of life in European cities (2023)

### Visualisation

- Regions and cities illustrated