

Launch of the Image & Corine Cover 2000
17 November 2004

Eurostat's agricultural surveys in the valorisation and use of I&CLC 2000

Lauris Nørlund
Director Estat/E



Use of I&CLC2000

- LUCAS (Land Use/Land Cover Area Frame Sampling)
- Feasibility studies
 - Disaggregation of the Farm Structure Survey
 - Mapping Population density
- GISCO : CLC as reference dataset
 - Background map (Gazetteer)
 - Reference Layer
 - INSPIRE


LUCAS

- Stratification with Image 2000
- Improve LUCAS results with post-stratification based on CLC
- LUCAS as a tool for verification/validation of CLC 2000 and further surveys...
- LUCAS as a “visual meta data” utility to support dissemination of CLC

Stratification

Interpretation

350



Description of points

PointId -> Cod. Interp Elevation

Dep.Com. Orthophoto

X -Coord. Y -Coord.

Legenda

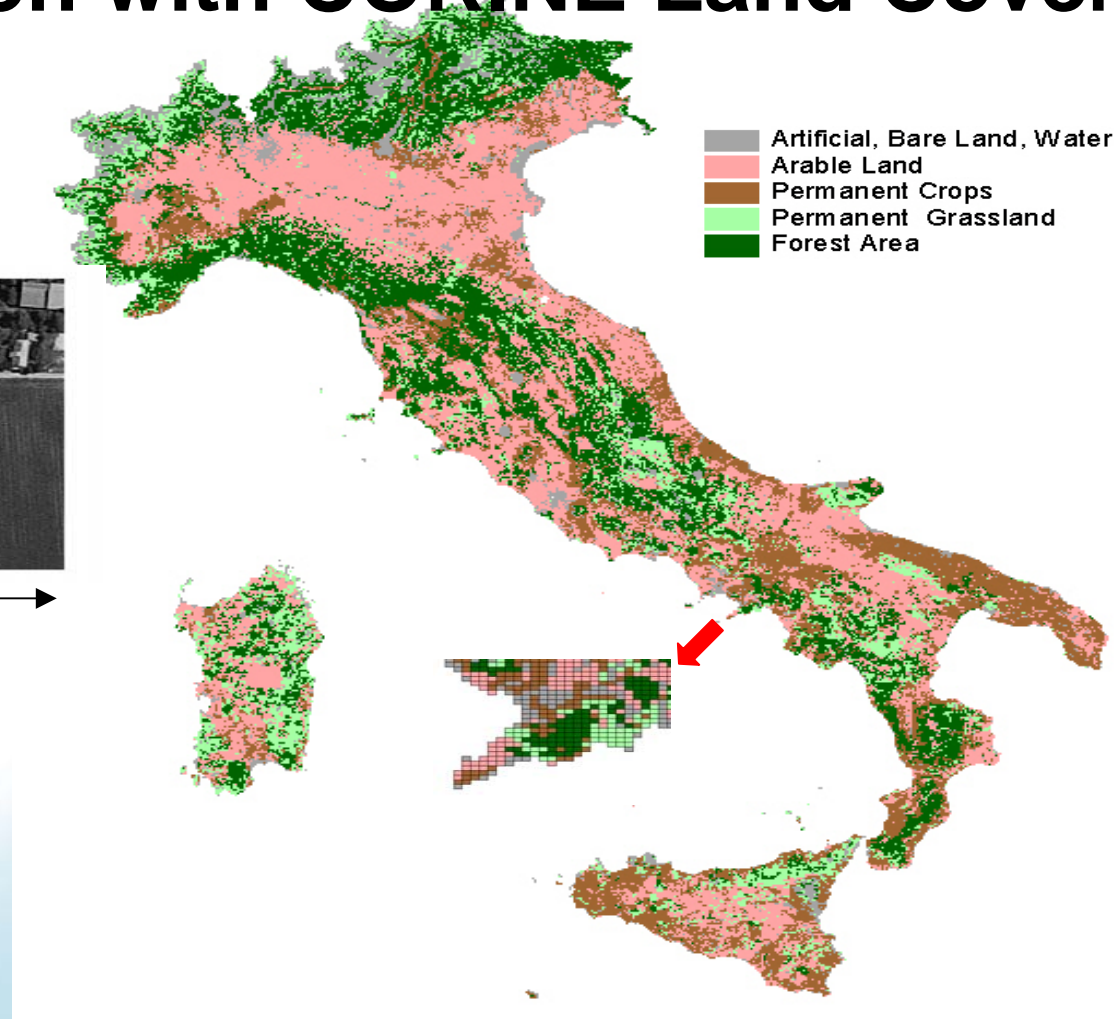
- Arable land
- Permanent Crops
- Permanent Grassland
- Wooded areas, shrubland
- Low or rare vegetation, wetlands, water
- Artificial land
- Doubt

Scale

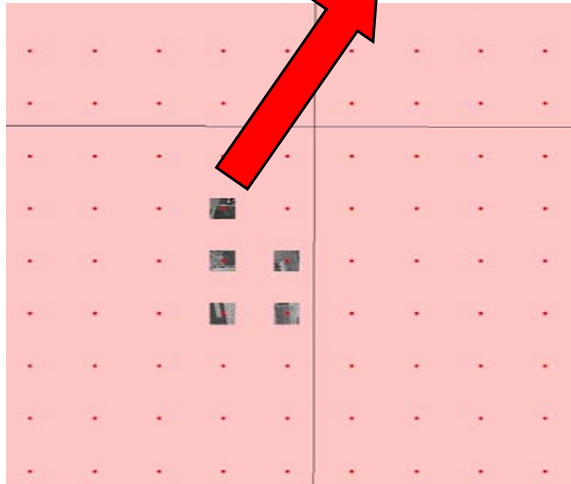
Tools

Post stratification with CORINE Land Cover

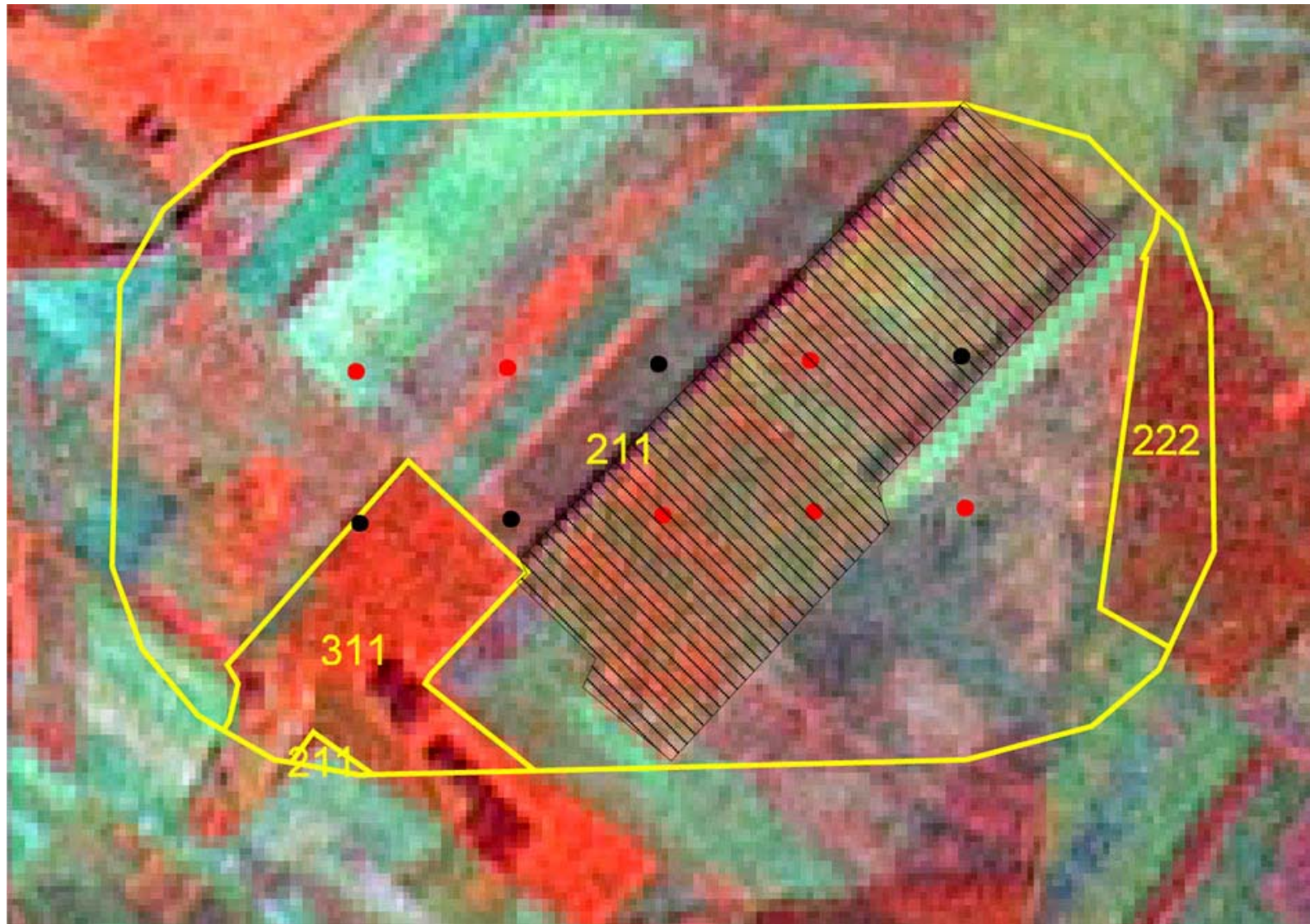
ICARE Study



200 metres



Validation/Verification of CLC2000



Visual metadata

The screenshot displays the ArcView GIS 3.2 interface. The main map shows a land use classification of Hungary with a yellow polygon highlighting a specific area. The 'Identify Results' window is open, showing the following data:

Field	Value
Hu18km	1
Lc1_text	Shrubland with sparse tree cover
Lc2_text	
Lu1_text	agriculture
Lu2_text	
Kod2000	243
Lc_ok	1
Lu_ok	1
Ssu_ok	1

Four directional photo windows are visible on the right side of the interface:

- North:** Shows a landscape with a grassy field and a line of trees in the distance.
- South:** Shows a grassy field with a line of trees in the distance.
- East:** Shows a grassy field with a line of trees in the distance.
- West:** Shows a grassy field with a line of trees in the distance.

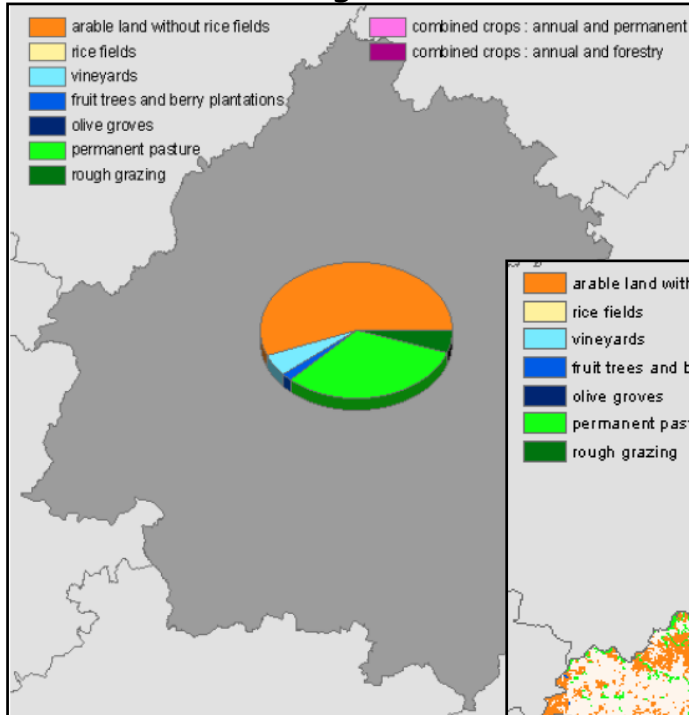
The taskbar at the bottom shows the Start button and several open applications, including ArcView, and the system clock displays 18:35.

LUCAS 2006 Improvements

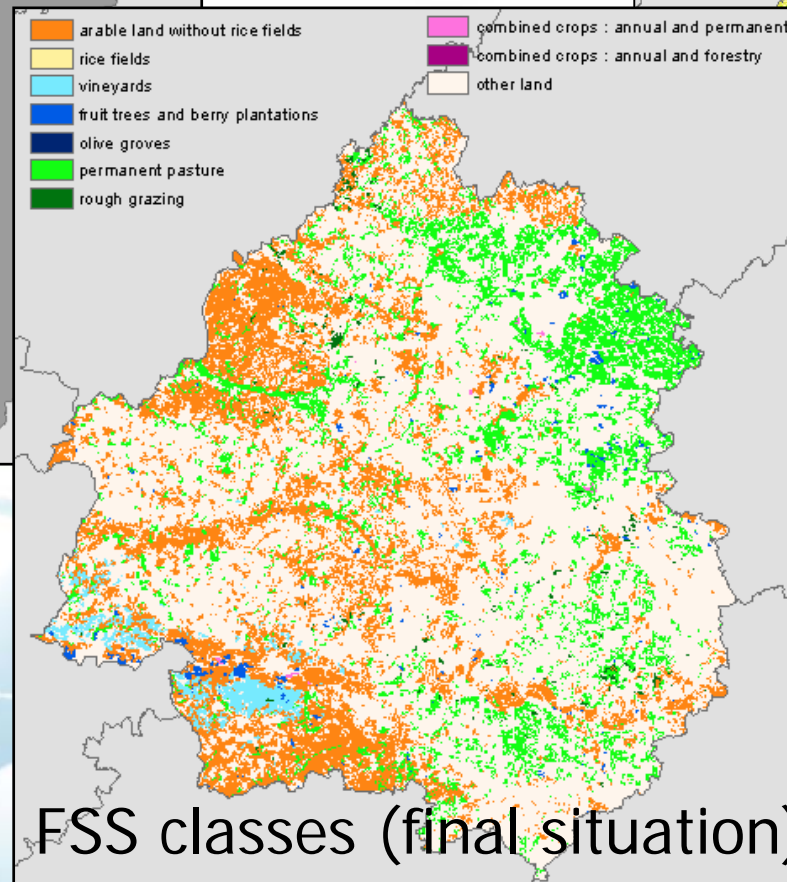
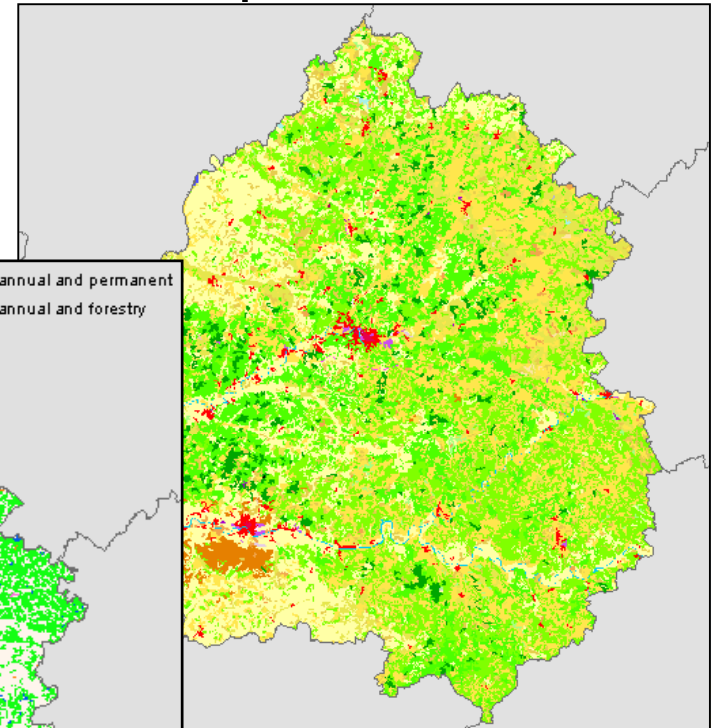
- A better tool for CORINE update and validation ?
 - 2 Km grid
 - One sampling level
 - Revised nomenclature
 - Better focus on Land Cover/Land use
 - Photos of all the points (~250.000 on EU25)

Disaggregation of the Farm Structure Survey (FSS)

Statistics by FSS district



CLC map of FSS district

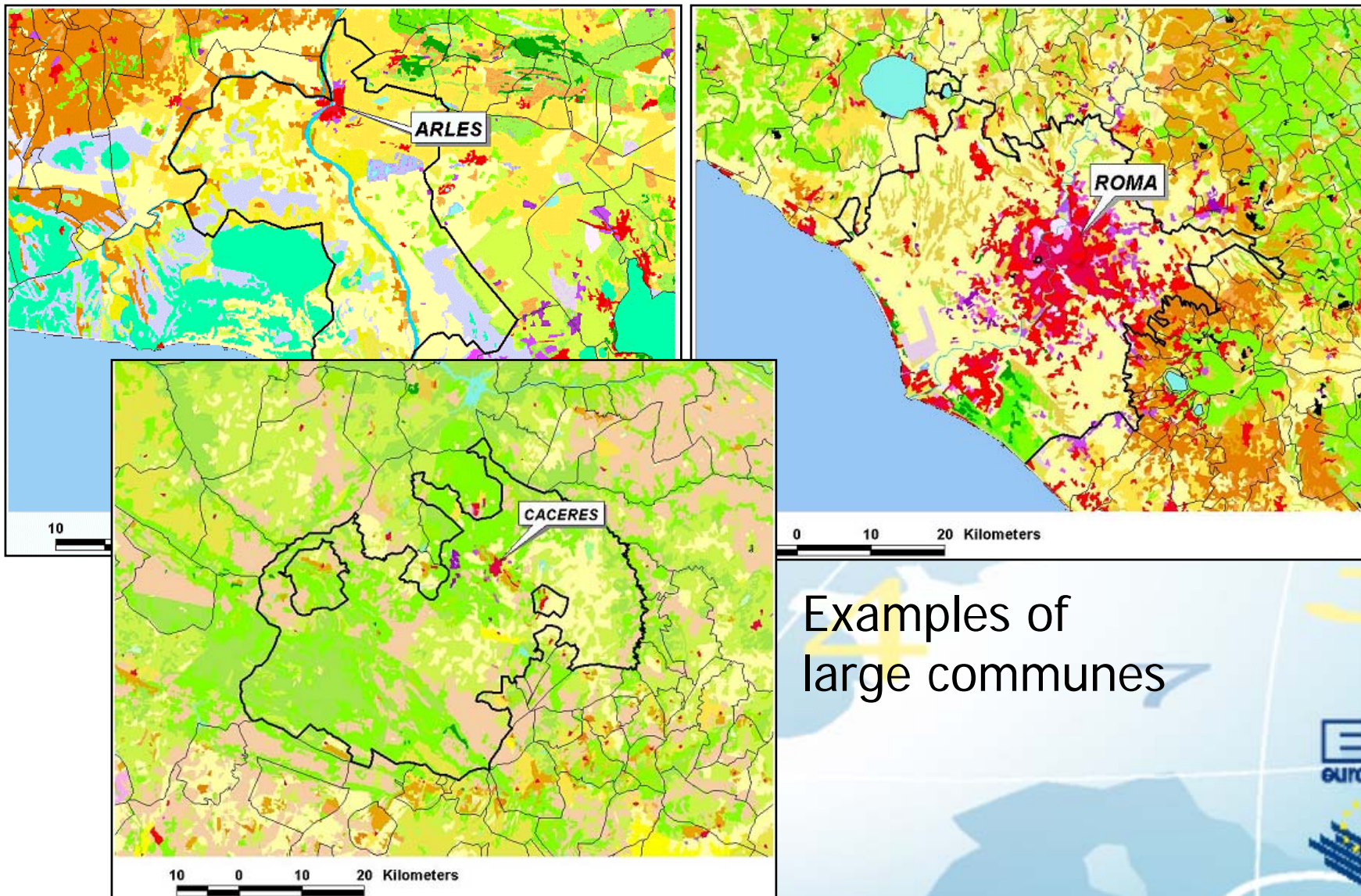


FSS classes (final situation)

5

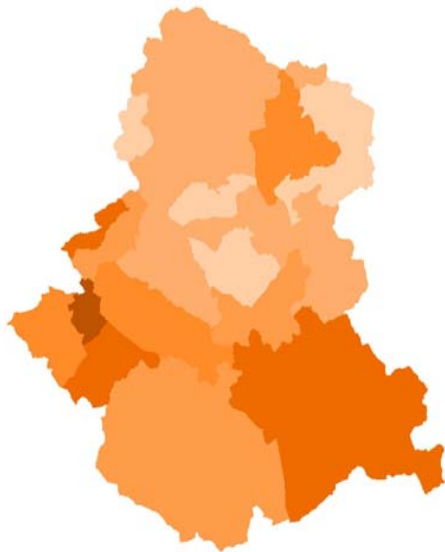
7

Mapping population density

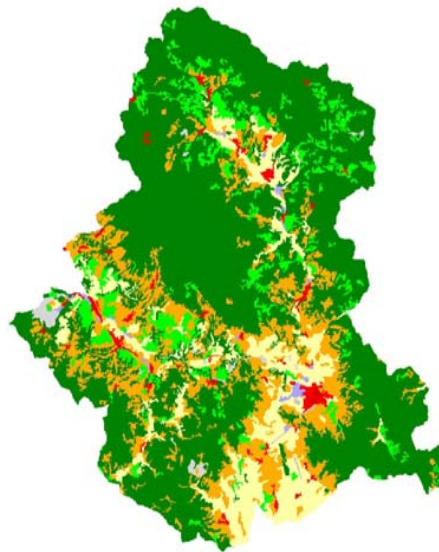


Examples of large communes

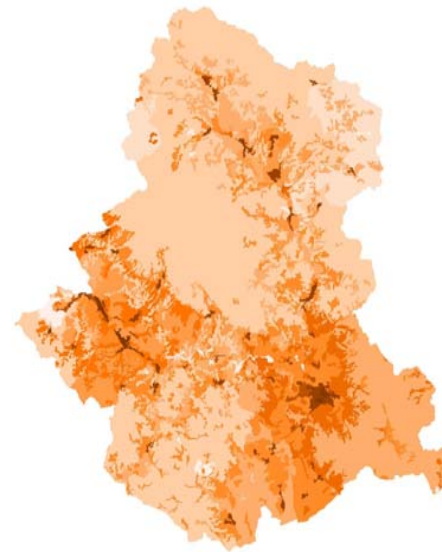
Results in a test site: Arezzo (Italy)



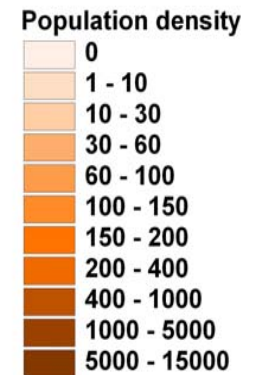
Average
population
density by
commune



CORINE Land
Cover



Population
density
attributed after
disaggregation



Geographic Reference Database of the Commission (GISCO)

- ◆ Established as permanent module at Eurostat in 1992
- ◆ Manage the GISCO reference database including
 - ◆ Content,
 - ◆ Structure and Architecture,
 - ◆ Application,
 - ◆ Quality control and assurance,
 - ◆ Data dissemination
- ◆ INSPIRE

GISCO Reference Database Themes

- Administrative data
- Hydrography
- Altimetry
- Infrastructure
- Support
- Community Support
- Environment
- Industrial data
- Infra regional statistics
- Land Resources
- Nature Resources
- World Data

CLC as general purpose map

IMPORTANT : [Disclaimer](#), [Confidentiality Notice](#) and [rules on Privacy Protection](#)

Geographic Names Database

[what's new](#) | [search](#) | [contact](#) | [help](#)

[» Intracomm](#) > [DGs & Services](#) > [Eurostat](#) > [Gazetteer](#) > [København](#)

Feature Information for København

Longitude	Latitude	Type	Designations	Height	Located in	Region
12° 35'E	55° 40'N	Populated Place	Capital Of A Political Entity	-	DENMARK	Staden Kobenhavn

Name	Name Type	Extends into	Language
København	Native	-	Danish
Kjobenhavn	Variant or alternate	-	-
Copenhagen	Conventional	-	-

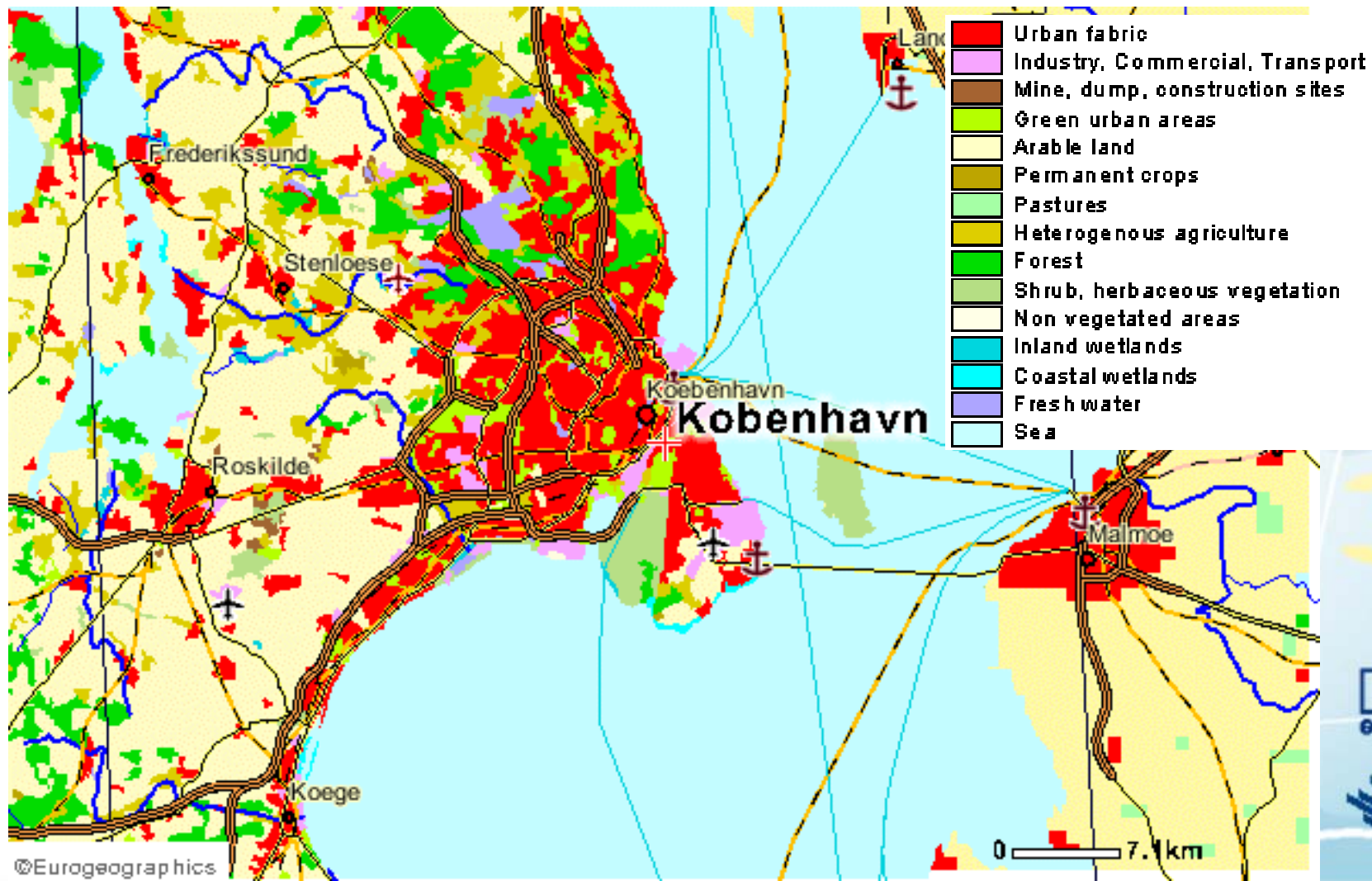
NUTS Version 8 located within a search radius of 1' around the point

Region Type	Code	Level	Name
NUTS	DK	0	DANMARK
NUTS	DK0		not existent
NUTS	DK00		not existent
NUTS	DK001	3	København og Frederiksberg kommuner



CLC as general purpose map

■ Geographic Names

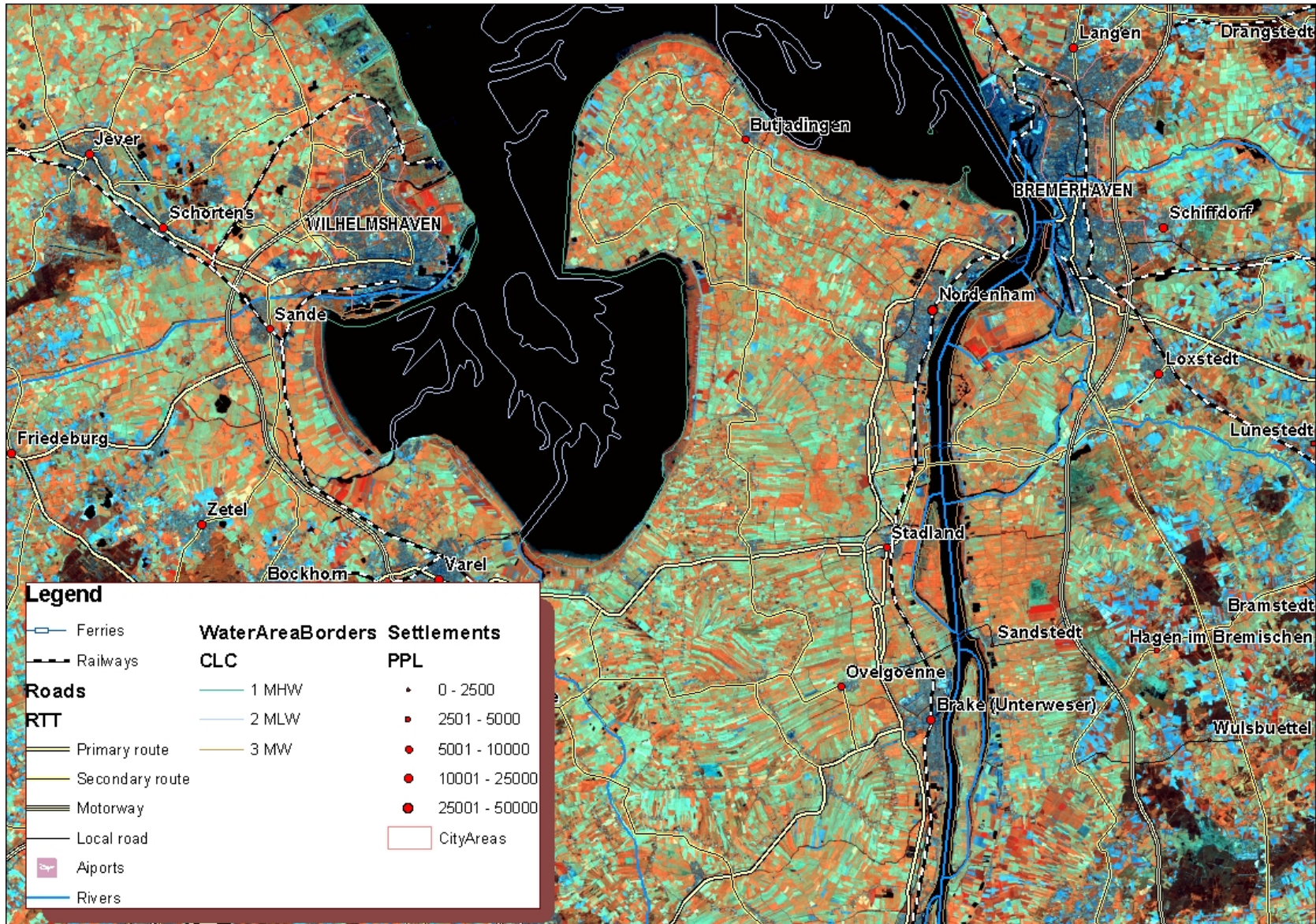


3

EA
eurostat



IMAGE2000 as Geo-Reference



Conclusions

- The generalisation/ Land Cover threshold (25ha limit) may eliminate polygons of interest of a smaller size
- Geometric inaccuracy of CORINE Land Cover (mainly CLC90) has made it difficult to use
- CLC nomenclature vs. LUCAS or FSS nomenclatures

Conclusions

- CLC can help to locate more precisely population density and other statistical data linked to FSS
- If CLC information is added to statistical data, data, disaggregating can improve the quality of quality of data
- CLC : a basic general purpose information layer
2000 : a reference layer for evaluating new
ng new datasets / background layer for LUCAS

Thank You for your attention

Lauris.norlund@cec.eu.int