

# Developing a global definition of cities and rural areas?

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## Introduction

- 2016 Work on global definition launched at Habitat III conference by European Union, OECD and World Bank
- Side-event at UN Statistical Commission as part of UNGGIM
- Expert workshop in Brussels organised by UN-Habitat
- 2017-18 FAO, ILO and UN-Habitat join the coalition
- 2018 Dedicated side-event at UN Statistical Commission
- 2019 UN Expert meeting and dedicated side event
- Presented for information at UN Statistical Commission
- 2020 UN Statistical Commission for discussion and approval ?
- 2021 Implementation post census ?

# These Urban SDG indicators are very sensitive to the city boundaries

- 11.2.1 Proportion of population that has convenient access to public transport
- 11.3.1 Ratio of land consumption rate to population growth rate
- 11.6.2 Annual mean levels of fine particulate matter (e.g. PM2.5 and PM10) in cities
- 11.7.1 Average share of the built-up area of cities that is open space for public use for all





# These SDG indicators are sensitive to what settlements are called rural

- 3.c.1 Health worker density and distribution
- 4.1.1 Children in school & proficiency
- 4.6.1 Adult literacy and numeracy
- 6.1.1 Access to safe drinking water
- 7.1.1 Access to electricity
- 8.10.1 Use of banking services
- 9.c.1 Coverage by mobile network
- 9.1.1 % of rural population with access to an all weather road



# National definitions vary and are often not statistical

- 75 countries use population size or density, but thresholds and spatial units vary
- 47 use a combination of population and other indicators

- 10 use other indicators than population
- 100 countries use administrative designations, not a statistical definition that can be replicated in other countries

## DEGREE OF URBANISATION LEVEL 1

#### **Two definitions with a common element: Cities**



## Three types of grid cells

Urban centres	<i>Contiguous cells with density</i> <i>above</i> <b>1,500</b> <i>residents per km</i> <sup>2</sup> <i>or at least</i> <b>50%</b> <i>built-up and at least</i> <b>50,000</b> <i>people</i> <i>in the centre</i>
<b>Urban Clusters</b>	<i>Contiguous cells with a density above 300 residents per km<sup>2</sup> and at least 5,000 people in the cluster</i>
Rural grid cells	Cells with a density below <b>300</b> residents per km <sup>2</sup> and other cells outside urban clusters and centres

#### Cork, Ireland Land use Map

Continuous urban fabric Discontinuous dense urban fabric Discontinuous medium density urban fabric Discontinuous low density urban fabric Discontinuous very low density urban fabric Isolated structures Industrial, commercial, public, military and private units Fast transit roads and associated land Other roads and associated land Railways and associated land Port areas Airports Mineral extraction and dump sites Construction sites Land without current use Green urban areas Sports and leisure facilities Arable land (annual crops) Pastures Forests Wetlands Water bodies

# Cork, Ireland: Urban centre, urban clusters and rural grid cells



### **Three types of local units**

Urban area	Cities + towns and suburbs
Cities	> 50% population in urban centres
Towns and suburbs	> 50% population in urban clusters and not classified as city
Rural area	> 50% population in rural grid cells



> Iropean Immission



## DEGREE OF URBANISATION LEVEL 2: TOWNS AND VILLAGES

# Degree of urbanisation: Level 1 & 2



#### The level 2 of degree of urbanisation ...

Suburbs are contiguous with or within 2km of a city and/or a dense town

#### ... captures the full settlement hierarchy



#### **EU-OECD Functional Urban Area definition used** three concepts

- **Urban centre**: Contiguous grid cells with at least 1,500 inhabitants per km<sup>2</sup> and at least 50,000 inhabitants in the centre
- **City**: one or more municipalities with at least 50% of their population in an **urban centre**
- **Commuting zone**: Contiguous municipalities with at least 15% of their employed population working in the **city**
- **Functional Urban Area** = City + Commuting zone



#### **EU-OECD City definition: Graz, Austria**





European Commission

#### **City + Commuting zone = Functional urban area**



# Conclusions

- A stronger policy demand
- A new statistical instrument
- New data sources
- Two new definitions

SDGs, AFINUA, GSARS... The population grid Remote sensing and geospatial data Degree of urbanisation and FUA

- A unique coalition of six international organisations ...
- ... that aims to create the first globally recommended definition of cities and rural areas to facilitate international comparisons (and not to replace national definitions!)















#### **More information**

- <u>https://ec.europa.eu/eurostat/cros/content/global-city-and-</u> <u>settlement-definition\_en</u>
- <u>http://ghsl.jrc.ec.europa.eu/degurba.php</u>
- Free global population grid 1975-2015
- <u>http://ghsl.jrc.ec.europa.eu/datasets.php</u>
- Nice visualisation of global data:<u>http://luminocity3d.org/WorldPopDen/</u>
- Visualisation of the European data: <u>http://ec.europa.eu/regional\_policy/mapapps/urban/degurba.html</u>

