



## **TRAINING EVENT at the World Urban Forum 11**

### ***Envisaging urban futures with JRC Open Data and Tools***

**Tuesday, 28 June 2022 | 9:00-12:00 | Multifunction Hall Room 14**

Organized by the European Commission - Joint Research Centre  
Units B.3 Territorial Development and Unit E.1 Disaster Risk Management

#### **Summary**

The objective is to train participants to use the open and free data and tools developed by the European Commission - Joint Research Centre (JRC) to support policy makers, city leaders, practitioners, researchers, and local communities. Participants will learn about data and tools to understand urbanization trends and patterns at local, regional and global scales, as well as progress towards the monitoring and achievement of the Sustainable Development Goals (SDGs).

The attendees will learn how to use JRC data to visualise and analyse urbanisation and phenomena relevant for urban areas across the entire globe over time, and to build data profiles of cities using existing indicators. More specifically the training will focus on:

- the Global Human Settlement layer 2.0 data release 2022;
- the Copernicus Emergency Management Service component on exposure mapping;
- the Urban Data Platform, that encompasses data about more than 70 indicators for European and global cities, including future projections.
- Indicators and data useful to measure progress towards the achievement of the SDGs
  - o the data include indicators on demography, economics, environmental and social issues, transport, energy and climate at urban and regional scale.

#### **Description of the training**

The participants will learn what open data and tools are available for monitoring urbanisation trends and compare urban areas both over time and across space. The training will cover the rationale, structure, and applications of the data produced by the JRC, including background on production methods, several examples on data uses and future developments. Participants will have the possibility to experience the demonstration of data uses and visualisation, and to replicate these visualisations and simple data analysis on their laptop or mobile device.

The training kicks-off with an introduction, to set out the policy domain and JRC activities to support evidence-based policymaking for cities.

The first part of the training is dedicated to the Global Human Settlement Layer (1h). The session offers a practical demonstration of the GHSL Data Package 2022 (that will be released at the WUF11) in carrying out human settlements and urbanisation analysis, and in serving crisis management applications. Participants will be provided with the fundamentals to access GHSL data mapping built-up surfaces, population, and a settlement classification from the JRC Open Data Catalogue

The second part of the training focuses on the Urban Data Platform + (1h). During this session, the UDP+ will be illustrated covering the background of the indicators production, the available functionalities, and examples of possible applications. In addition, the attendees will be informed about the framework of indicators created by the JRC to support local authorities in monitoring their progress toward the SDGs, and trained to navigate the corresponding data sources. The trainers will guide participants through the construction of a data city profile using the UDP+ data on demography, economics, transport, energy, as well as specific indicators to measure progress towards the SDGs.

Each session will include Q&A and discussion with the participants. At the end of the training event, participants will receive a certificate of attendance.



## Programme of the training 9.00-12.00

- 15' Welcome and introduction  
JRC datasets and tools help shaping urban futures: introduction
  
- 20' The Global Human Settlement Layer
- 20' Practical exercise on how to analyse human settlements with the GHSL
- 10' Access and documentation of GHSL data
- 10' Q&A and discussion
  
- 20' The Urban Data Platform +
- 15' The indicators for measuring SDGs
- 15' Practical exercise on how to build a city profile using the UDP+ and the specific case of the SDGs
- 10' Q&A and discussion
  
- 15' Conclusions and delivery of the certificates

## Useful link and documents

- Global Human Settlement Layer (GHSL) <https://ghsl.jrc.ec.europa.eu>
- Copernicus Emergency Management Service <https://emergency.copernicus.eu/>
- Urban Data Platform <http://urban.jrc.ec.europa.eu>
- Knowledge Centre for Territorial Policies <https://ec.europa.eu/jrc/en/territorial-policies>
- European Commission, Joint Research Centre, *Atlas of the Human Planet 2020* – Open geoinformation for research, policy, and action, EUR 30516, European Commission, Luxembourg, 2020, ISBN 978-92-76-27388-2, doi:10.2760/16432, JRC122364
- Vandecasteele I., Baranzelli C., Siragusa A., Aurambout J.P. (Eds.), *The Future of Cities – Opportunities, challenges and the way forward*, EUR 29752 EN, Publications Office, Luxembourg, 2019, ISBN 978-92-76-03847-4, doi:10.2760/375209, JRC116711.
- Siragusa, A., Stamos, I., Bertozzi, C. and Proietti, P., European Handbook for SDG Voluntary Local Reviews - 2022 Edition, Publications Office of the European Union, Luxembourg, 2022, JRC129381. <https://publications.jrc.ec.europa.eu/repository/handle/JRC129381>
- Schiavina M., Melchiorri M., Pesaresi M., Politis P., Freire S., Maffenini L., Florio P., Ehrlich D., Goch K., Tommasi P., Kemper T., GHSL Data Package 2022, Publications Office of the European Union, Luxembourg, 2022, ISBN 978-92-76-53071-8, doi:10.2760/19817, JRC 129516

## Background

The two products presented at the training are developed under the frameworks of the European Commission Joint Research Centre Global Human Settlement Layer (GHSL) project and the Knowledge Centre for Territorial Policies (KCTP). The **Global Human Settlement Layer (GHSL)** is a framework of georeferenced layers and tools that supply baseline information on human settlements and population with global coverage. It is produced elaborating historical satellite images and data from open sources. The GHSL is the core dataset supporting the Degree of Urbanisation, and the new component of the Copernicus Exposure Mapping Service. The **Knowledge Centre for Territorial Policies (KCTP)** is a joint European Commission initiative on better knowledge management for sound EU policy making. To strengthen the Commission's overall support to territorial development, the KCTP aims to be the point of reference for Commission services and Member States on territorial and regional related issues. It supports analytical and networking activities accompanied by a repository of relevant research and new initiatives to deepen knowledge and understanding.

## Contact points

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