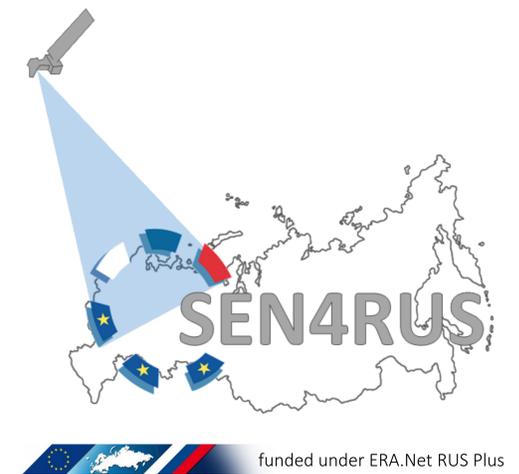


Copernicus Sentinels for Urban Planning in Russia: First results from the SEN4RUS Project

N. Chrysoulakis^a, M. Marconcini^b, A. Sazonova^c, A. Tal^d, S. Dugun^e, E. Parlow^f, V. Charalampopoulou^g, Z. Mitraka^a, T. Esch^b, M. Cavour^e and C. Feigenwinter^f

^aFoundation for Research and Technology Hellas (FORTH), Greece, ^bGerman Aerospace Center (DLR), Germany, ^cGRAD—Inform Ltd., Russia, ^dGARD Ltd., Israel, ^eKuzgun Bilisim Ltd., Turkey, ^fUniversity of Basel, Switzerland, ^gGEOSYSTEMS HELLAS S.A., Greece



Objectives

The SEN4RUS project, was recently funded by **ERA.Net-RUS Plus**. Its main objective is to account for the **specific requirements** of spatial & urban planning in Russia to **develop indicators** that effectively and

efficiently exploit the information content provided by **Sentinels** mass data streams in support of city and regional planning. Sentinel-1, Sentinel-2 and Sentinel-3 data for three Russian cities are used.

A **Web-based Information System (WIS)** will be developed to evaluate the developed indicators and to provide them in a form that allows **direct implementation** into urban planning procedures.

The SEN4RUS Approach

Case Studies

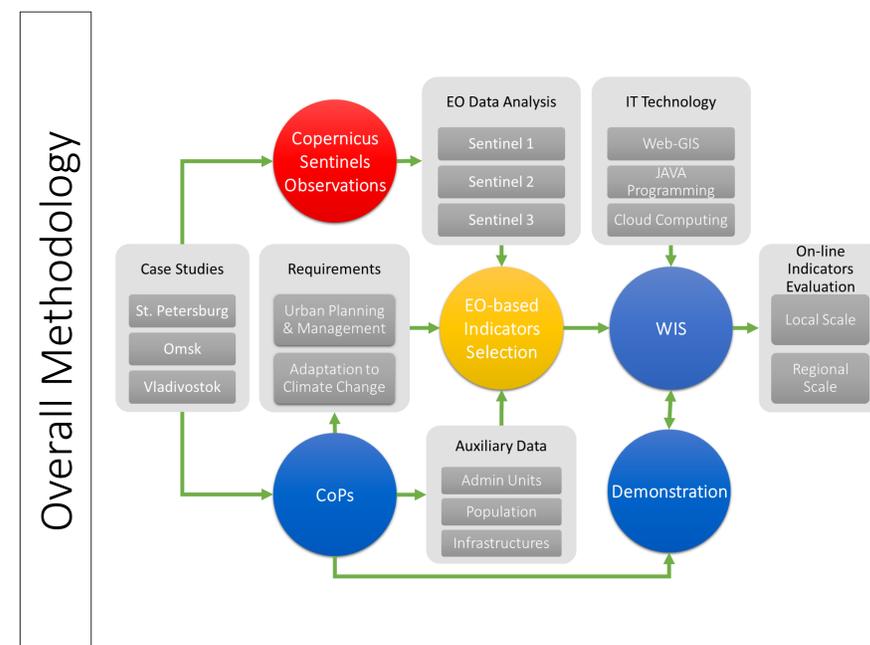
Three Russian cities with different typologies and planning perspectives:

St. Petersburg
Omsk
Vladivostok

CoPs

Communities of Practice

To engage the users in the project, a Community of Practice is employed. **Local stakeholders** and **scientists** in each case study of the SEN4RUS project will **meet on a regular basis** in order to **learn** from each other.



Urban Planning Indicators

The approach developed in GEOURBAN project will be adopted:

Chrysoulakis, N., Feigenwinter, C., Triantakostas, D., Penyevskiy, I., Tal, A., Parlow, E., Fleishman, G., Düzgün, S., Esch, T. and Marconcini, M., 2014. A Conceptual List of Indicators for Urban Planning and Management Based on Earth Observation. *ISPRS International Journal of Geo-Information*, 3, 980 - 1002.

upload download

USER

The Vision

SEN4RUS develops an automated **EO-based method** for estimating urban indicators, enabling their integration into operational services. Therefore, it prepares the ground for innovative exploitation of space data in **scientific activities** (i.e. Earth system modelling) and **future and**

emerging applications (i.e. sustainable urban planning). Its products is expected to support both sustainable planning strategies to **improve the quality of life in cities**, as well as Earth System scientists to provide more robust climate simulations.

A **Web-based Information System (WIS)** will be developed to evaluate the developed indicators and to provide them in a form that allows **direct implementation** into urban planning procedures.

The Consortium

