The LandSense Engagement Platform: Connecting citizens with earth observation data for Land Use and Land Cover Monitoring

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Motivation

Realize the combined potential of citizen science and earth observation to improve the way we see, map and understand the world

Improve the quality of earth observation-based Land Use & Land Cover (LULC) maps/products

Demonstrate the value of satellite data to citizens while promoting environmental stewardship

Participatory Process

Overcome the conventional top-down approach used in EO-based mapping

Involve citizens and interested experts to crowdsource the required information using a more participatory approach

Engage people in various tasks (i.e. ground-based observations and on-line interactive mapping) through a citizen-powered observatory

18 Partner Institutions
9 Countries

Duration:
September, 2016 - August, 2020

Website:
www.landsense.eu

Coordinator:
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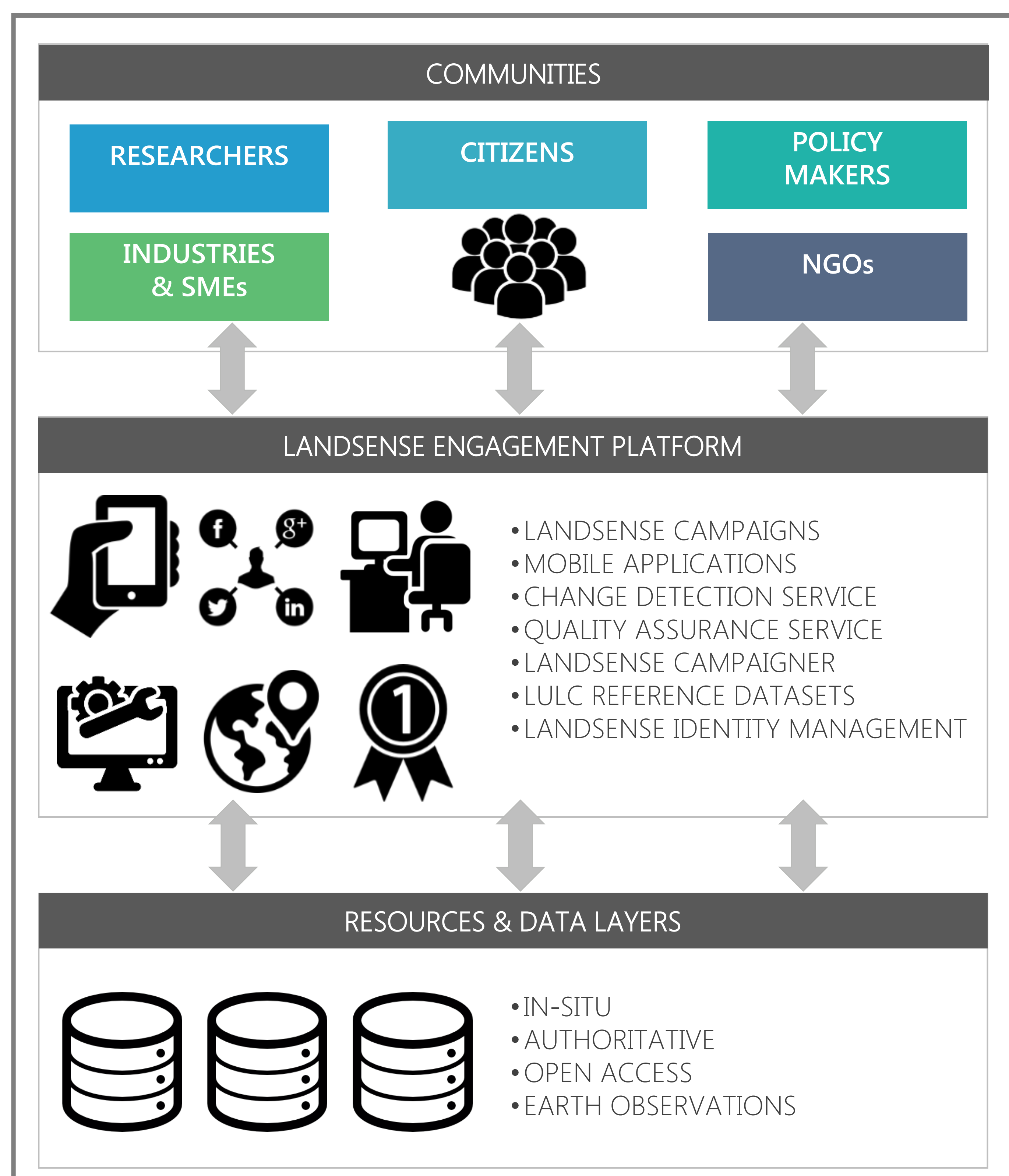International Institute for Applied Systems Analysis

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LandSense Engagement Platform

A service platform where citizens can participate in various LULC-related data collection campaigns and relevant stakeholders can register new applications to exploit existing LandSense services
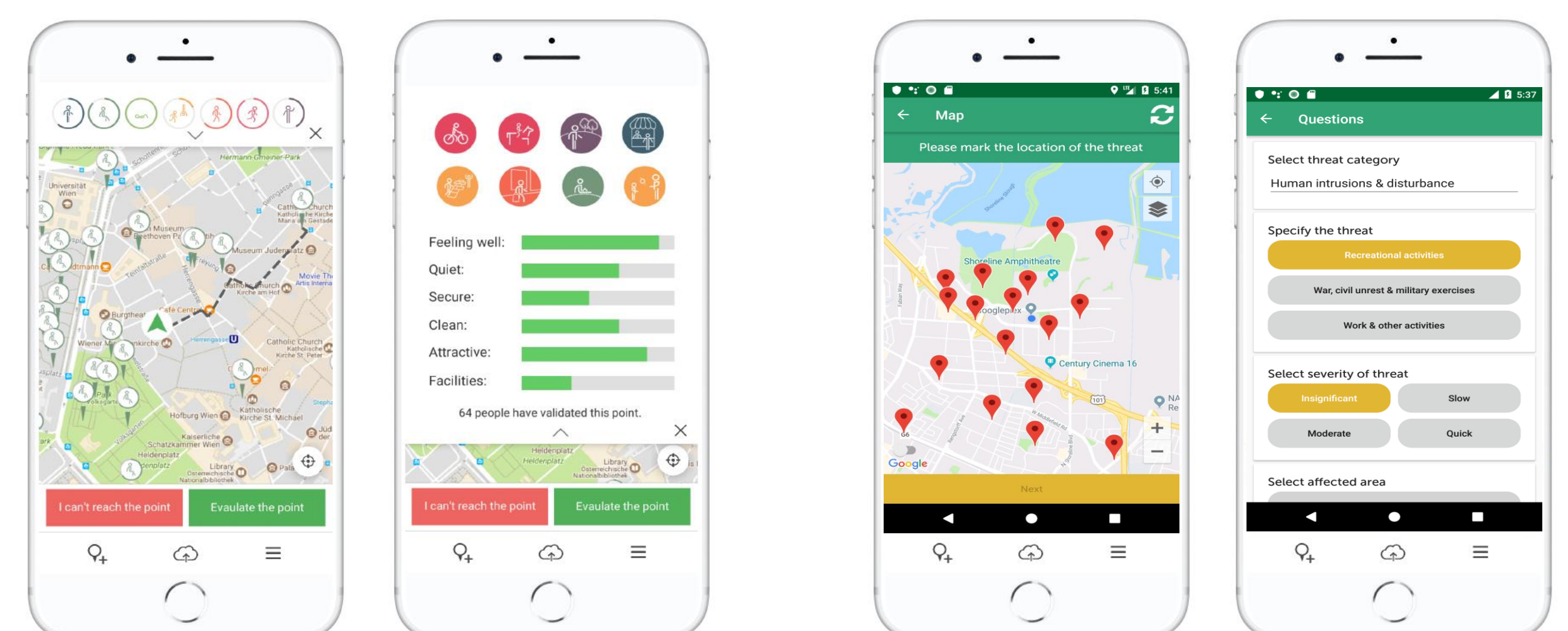
The platform employs a federated approach to support many different login providers (e.g. Google, Facebook, eduGAIN organizations) to promote the awareness, outreach, uptake and ultimately the science of citizen science

Citizens can participate in ongoing LandSense pilots (e.g. green space & biodiversity monitoring) using their own devices (e.g. mobile phones and tablets), through interactive mapping, as well as launch their own campaigns
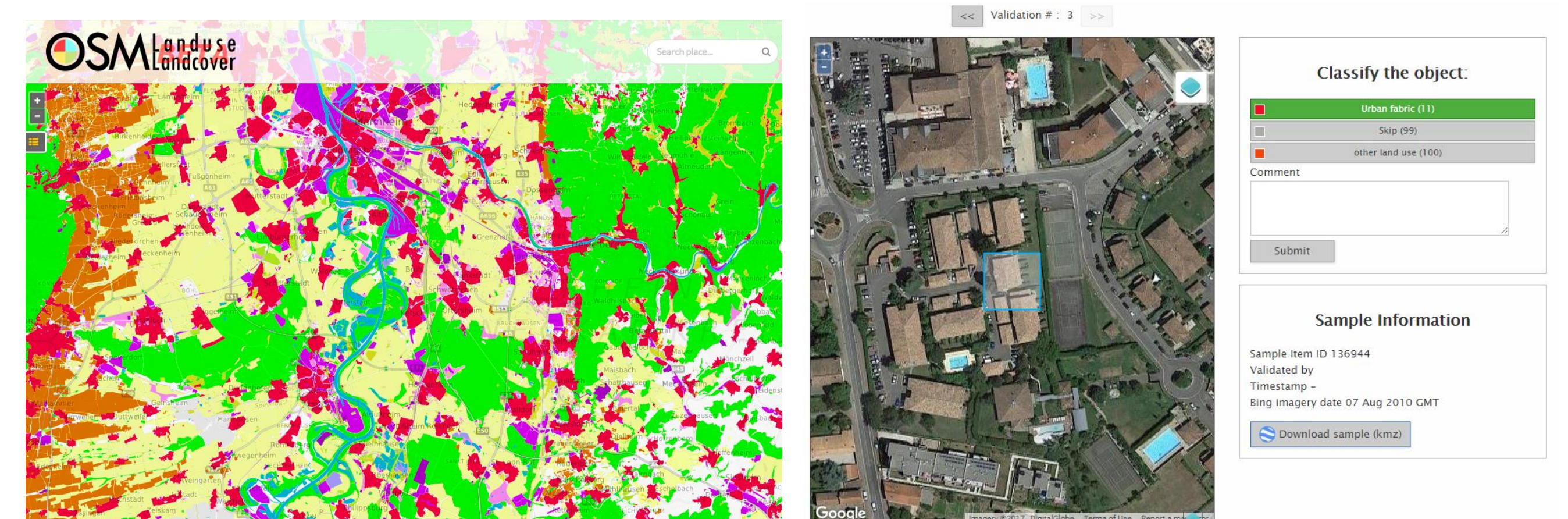

COMMUNITIES

RESEARCHERS | CITIZENS | POLICY MAKERS
INDUSTRIES & SMEs | | NGOs

LANDSENSE ENGAGEMENT PLATFORM

- LANDSENSE CAMPAIGNS
- MOBILE APPLICATIONS
- CHANGE DETECTION SERVICE
- QUALITY ASSURANCE SERVICE
- LANDSENSE CAMPAIGNER
- LULC REFERENCE DATASETS
- LANDSENSE IDENTITY MANAGEMENT

RESOURCES & DATA LAYERS

- IN-SITU
- AUTHORITATIVE
- OPEN ACCESS
- EARTH OBSERVATIONS

How to Get Involved?

1. Ground-based observations

City Oases — Urban green space monitoring in Vienna

Natura Alert — Biodiversity threat monitoring in Spain & Indonesia

City of Vienna | University of Natural Resources and Life Sciences, Vienna | TU WIEN Technische Universität Wien | SEO BirdLife | Burung Indonesia
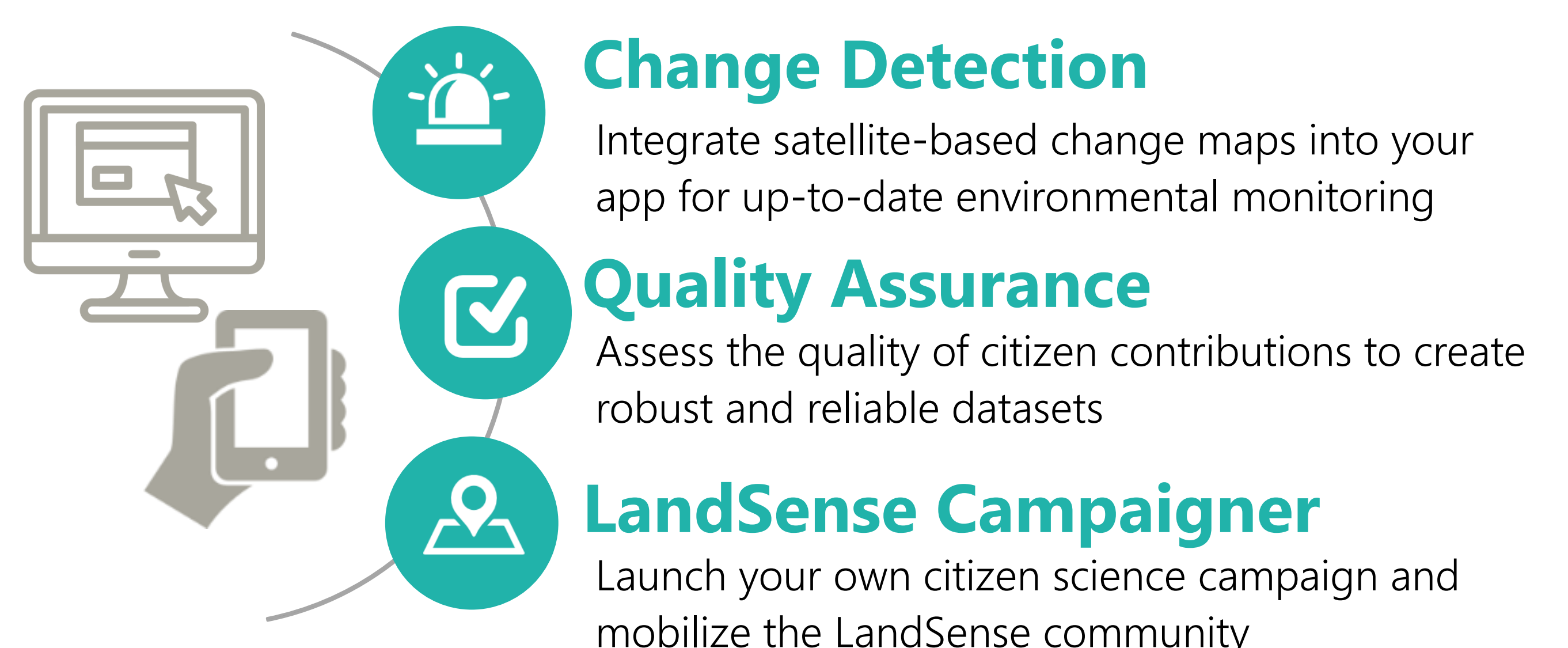
2. Online interactive mapping

Use the power of crowdsourcing to validate LULC maps via mapathons

3. Register your app and use our services

Change Detection
Integrate satellite-based change maps into your app for up-to-date environmental monitoring

Quality Assurance
Assess the quality of citizen contributions to create robust and reliable datasets

LandSense Campaigner
Launch your own citizen science campaign and mobilize the LandSense community

IIASA | BirdLife INTERNATIONAL | SINERGISE | The University of Nottingham | INOSENS | GeoVille | umweltbundesamt | IGN Institut National de l'Information Géographique et Forestière | EUROPEAN CITIZEN SCIENCE ASSOCIATION

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