

The background of the slide is an aerial photograph of a city street grid. A semi-transparent dark grey rectangle is overlaid on the center of the image, containing the title and conference information in white text. On the right side of the image, a white wireframe grid is superimposed over the buildings, representing a cadastral or geospatial data overlay.

Results of the Questionnaire on SDGs in Relation to Cadastral Systems

Joint PCC and EuroGeographics Conference
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Daniel Steudler, Chair CLRKEN

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Sustainable Development Goals

- **2030 Agenda for Sustainable Development**, adopted by all UN Member States in 2015 (as a follow up on MDGs)
- to be achieved by 2030
- urgent call for action by all countries – developed and developing – in a global partnership
- 17 goals → 169 targets (followed up by events, publications, actions)
- **our challenge is to become active in events and actions**



Aim of this Questionnaire

- to showcase that a functioning cadastre is one of the essential prerequisites for achieving the SDGs, which do apply to all – developing and developed – UN Member States
- conference organizers believe that a reliable and efficient cadastre can contribute significantly to the SDGs
- hope to encourage also European developed countries to work towards improving and enabling their cadastral systems for the SDGs

Structure of Questionnaire

1. Perception of SDGs relevance by cadastral organizations
2. Strengths and Weaknesses of Cadastral Systems to contribute to SDGs
3. Strengths and Weaknesses of Land Registration Systems to contribute to SDGs
4. Documentation of Restrictions (under private and public law)
5. Role of Land Readjustment Procedures to support SDGs (in urban and rural areas)

Summary Report published as PDF on conference websites with collection of all answers

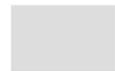


Participation

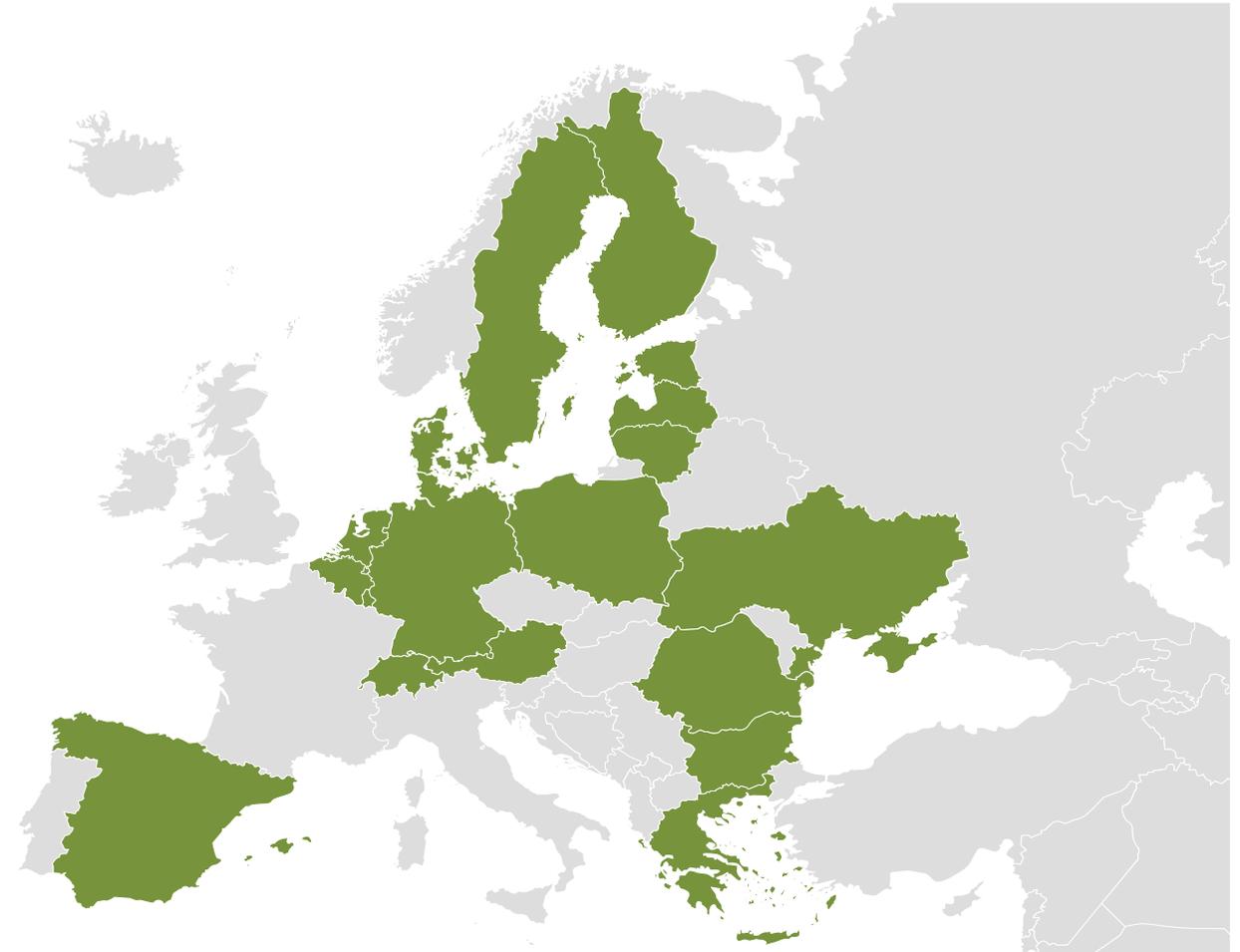
- 24 responses from 19 countries + 4 German Bundesländer + 1 Association



replied



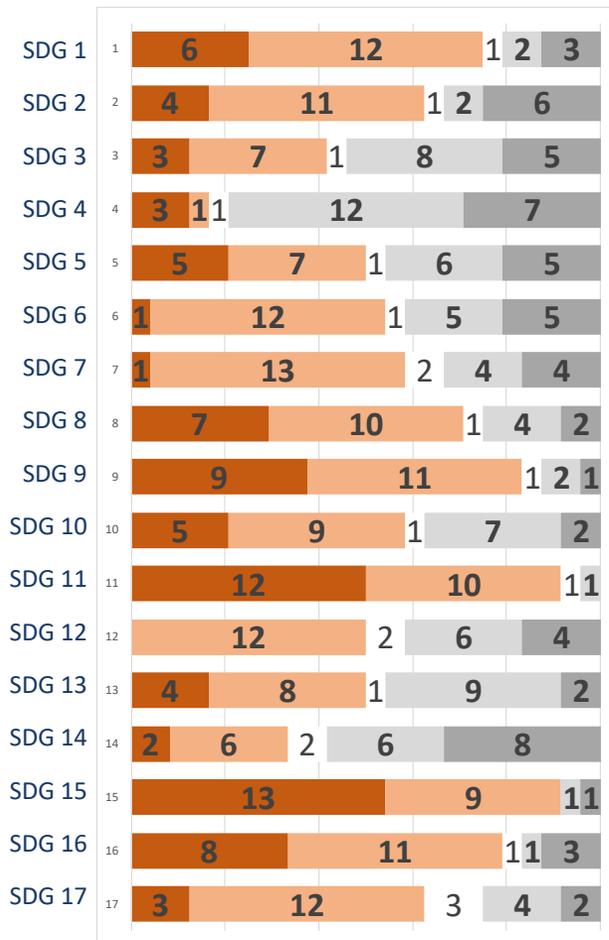
no feedback or out of scope



ELRA

Malta

1. Perceived Relevance of SDGs



relevant | rather r. | don't know | rather not r. | not at all r.

Top 5 relevant SDGs perceived by cadastral organizations

15) Life on Land: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss → 22x relevant or rather rel.

11) Sustainable Cities and Communities: Make cities and human settlements inclusive, safe, resilient and sustainable → 22x

9) Industry, Innovation and Infrastructure: Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation → 20x

16) Peace, Justice and Strong Institutions: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels → 19x

1) No Poverty: End poverty in all its forms everywhere → 18x



SDG 15 – Life on Land

12 Targets of SDG 15

- by 2020, ensure conservation, restoration and sustainable use of ecosystems
- by 2020, promote implementation of sustainable management of forests
- by 2030, combat desertification, restore degraded land and soil
- by 2030, ensure conservation of mountain ecosystems
- Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed
- Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products
- By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species
- By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts
- Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems
- Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide adequate incentives to developing countries to advance such management, including for conservation and reforestation
- Enhance global support for efforts to combat poaching and trafficking of protected species, including by increasing the capacity of local communities to pursue sustainable livelihood opportunities



SDG 11 – Sustainable Cities and Communities



10 Targets of SDG 11

- **By 2030, ensure access to adequate, safe and affordable housing**
 - By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons
 - By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries
 - Strengthen efforts to protect and safeguard the world's cultural and natural heritage
- **By 2030, enhance capacity for human settlement planning and management**
 - By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management
- **Support positive links by strengthening national and regional development planning**
 - By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency,
- **By 2020, increase policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels**

2.1 Strengths of Cadastral Systems

Where do you see the strengths of your cadastral system to contribute to the SDGs?

- legal basis, guaranteed by the state, reliable → 7x mentioned
- equal, transparent, digital, full coverage, preventing disputes → 6x
- data access, availability of public data sets, open data → 6x
- backbone and part of national spatial data infrastructure → 5x
- support for land valuation, taxation, land market, and thus economic growth → 4x
- providing resilience in land ownership, thus contributing to food security, health, well-being, poverty reduction, lessening land abandonment
- supporting SDG 15: Life on Land and SDG 16: Peace, Justice and Strong Institutions, and especially SDG 1.4.2: "Proportion of total adult population with secure tenure rights to land"

2.2 Room for Improvements

Where do you see room for improvement in your cadastral system to better support the SDGs?

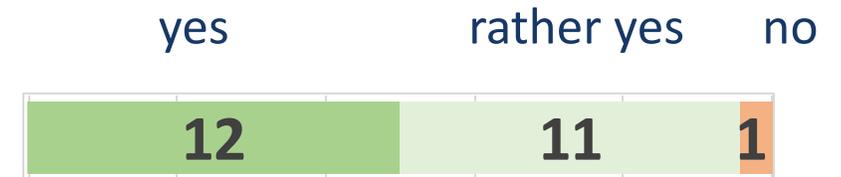
- data interoperability to combine data with other institutions, better services, NSDI → 9x
- improve quality and accuracy of cadastral maps → 5x
- standardization of national cadastral systems → 2x
- better data for land taxing
- Marine Cadastre
- 3D to better support SDG 11: Sustainable Cities and Communities
- full coverage of territory
- broader information ecosystem that underpins activities in domains such as climate change, nature conservation, energy transition
- education in SDI and access to spatial information

3.1 Strengths of Land Registration Systems

Where do you see the strengths of your land registration system to contribute to the SDGs?

- secure, well established, transparent, efficient, accepted → 4x
- integrated land registration and cadastral system → 3x
- guarantees landownership, guarantee by state
- one-stop-shop for legal and spatial information, user-driven system
- documentation of forest rights in support of measures to fight climate change and its impact

In your opinion, is the land registration system in your country well positioned to contribute to the SDGs?



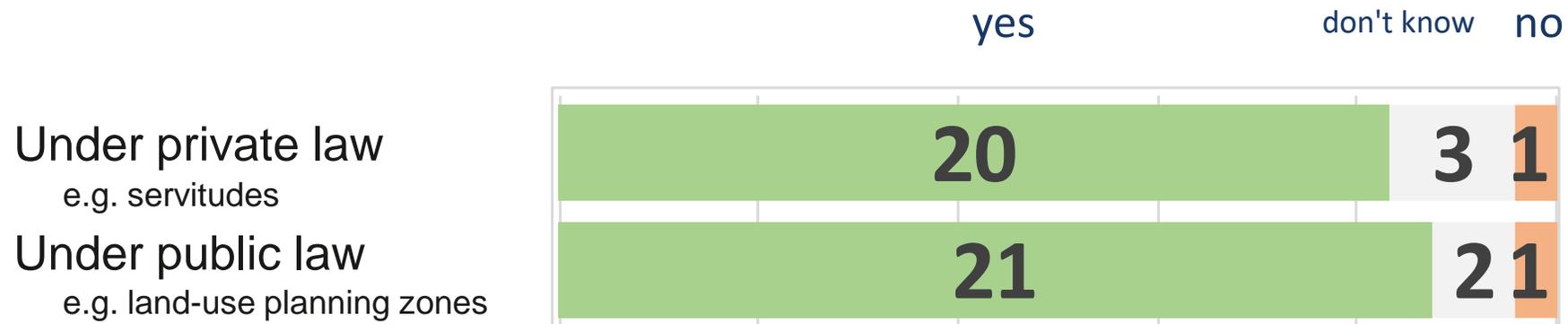
3.2 Room for Improvement

Where do you see room for improvement in your land registration system to better support the SDGs?

- upgrade of IT infrastructure → 5x
- simpler rules, improve user-friendliness and efficiency, innovation → 4x
- interoperability → 4x
- improve data access, digital format, mobile access → 3x
- improve open data policy → 3x
- integration with cadastre
- integration with land taxation and land valuation
- introduction of a marine cadastre
- make land registration mandatory
- less expensive
- include buildings and 3D real property objects
- international cooperation
- In a European perspective, in many countries not all property units are secured by a title or known in the Land Registry. There is still too much opportunity for squatting and loss of property by unauthorized appropriation. There is still room for a better legal protection of all real rights in many countries.

4. Support of SDGs with Documentation of Restrictions

Do you think that restrictions could play a role in supporting the achievement of the SDGs?



5.1a) Legally Based Procedures in Urban Areas

Are there any legally based land readjustment procedures in place focusing on urban areas?



- clear legal procedures in most of the cities based on law
- regional policies don't allow the creation of new urbanised areas after 2030
- land readjustment procedures focusing on urban areas are placed in Spatial Development Act
- urban development programs and defining redevelopment area, land reallocation plan
- land readjustment under urban planning law.
- procedures are provided in the Land Cadastre Act and in the Land Consolidation Act
- urban land replotting is legally defined; however, the procedures have never been used, because municipalities can use other means to achieve the same result
- legally based procedures allow to adapt the shape of the parcels to the intended use within the urban perimeter (land consolidation)
- execution is based on transparent procedures where all rights, restrictions and responsibilities are taken into account
- all over Europe, different land readjustment procedures take place. Not in the least accompanying large infrastructure projects.

5.1b) Legally Based Procedures in Rural Areas

Are there any legally based land readjustment procedures in place focusing on rural areas?



- restructuring procedures (replotting, etc.) with improvement of infrastructure etc.
- no more urbanisation spreading after 2030 (by regional laws)
- land readjustment procedures are defined by the law on the ownership and use of agricultural land and in the law on restoration of forest ownership
- well defined procedures including potential compensations
- legally based procedures to resolve conflicts of use of agricultural and forestry land
- land consolidation programs
- procedures are provided in the Land Cadastre Act and in Land Consolidation Act
- the adopted legal acts provide mechanisms for land readjustment in rural territories and for the formation of land parcels by respecting several aspects
- legally based procedure to adapt the configuration of the parcels inside a defined perimeter in order to ensure an economic, ecologic and sustainable use of the land (land consolidation)

5.2 Relevance of Land Readjustment Procedures

How can land readjustment procedures be relevant to achieving the SDGs?

- SDG 2 Zero Hunger
- SDG 6 Clean Water and Sanitation: water protection measures can be implemented
- SDG 8 Decent Work, Economic Growth: conflicts of use between economy and environment can be resolved
- SDG 7
- SDG 9 Industry, Innovation and Infrastructure: Sustainable construction and modernization of housing infrastructure
- SDG 11 Sustainable Cities and Communities: Securing affordable housing, Strengthening sustainable settlement planning
- SDG 12 Responsible Consumption and Production: promoting sustainable agriculture → 2x
- SDG 13 Climate Action: climate protection measures can be implemented → 3x
- SDG 15 Life on Land, protection of nature → 3x
- land readjustment procedures support actions for achieving the SDGs, in particular those related to economic growth
- there are no land readjustment procedures that could be relevant to achieving the SDGs

Conclusions

- we – as a technical geodata community – are not used to and not well prepared to respond to such global and strategic issues
- some even feel that SDGs are not in our scope of activity
- but we probably need to come up with appropriate and helpful approaches, we cannot close our eyes and think that the issue goes away quietly
- we need to become more aware of what we actually are providing and how that fits into the global context
- we need to explain it to the world and act accordingly

