



Smart Cadastre – Shaping the future

In preparation for the «PCC Conference jointly organized with CLRKEN of EuroGeographics» on 3-4 Nov. 2020



Questionnaire on «Sustainable Development Goals» (SDGs)

The Sustainable Development Goals (SDGs) are a collection of 17 global goals designed to be a "blueprint to achieve a better and more sustainable future for all". The SDGs have been agreed on in 2015 by the United Nations General Assembly and are intended to be achieved by the year 2030 as being part of UN Resolution A/Res/70/1, the "2030 Agenda".¹

The PCC Conference in Nov. 2020 aims to focus on a sustainable future for societies and how the cadastral systems can provide support. In preparation for the conference, a questionnaire has been prepared and sent to all member countries of PCC and EuroGeographics. Its aim is 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.

The conference organizers believe that a reliable and efficient cadastre can contribute significantly to the SDGs. They hope to also encourage European developed countries to work towards improving and enabling their cadastral systems for the SDGs.

This report is a summary of the 24 replies that have been received from 19 countries, 4 German Laender, and 1 association.

¹ <https://sdgs.un.org/goals>



Participating Countries

Country Code	Country Organization	Name Email-address
AT	Austria BEV - Federal Office For Metrology and Surveying	Julius Ernst julius.ernst@bev.gv.at
BE	Belgium FPS Finance	Cedric Jacmain cedric.jacmain@minfin.fed.be
BG	Bulgaria Geodesy, Cartography and Cadastre Agency	Ludmila Ivanova Ivanova.L@cadastre.bg
CH	Switzerland Federal Office of Topography swisstopo	Daniel Steudler Daniel.Steudler@swisstopo.ch
DE	Germany AdV AK LK	Björn Degel b.degel@lvgl.saarland.de
DE-BW	Germany – Baden-Württemberg Min. für Ländlichen Raum und Verbraucherschutz	Gerhard Grams gerhard.grams@mlr.bwl.de
DE-NW	Germany – Nordrhein-Westfalen Ministry of the Interior of North Rhine-Westphalia	Stephan Heitmann stephan.heitmann@im.nrw.de
DE-SH	Germany – Schleswig-Holstein Landesamt für Vermessung und Geoinformation	Axel Behrend axel.behrend@lvermgeo.landsh.de
DE-ST	Germany – Sachsen-Anhalt Landesamt für Vermessung und Geoinformation	Andreas Schöndube Andreas.Schoendube@sachsen-anhalt.de
DK	Denmark Danish Geodata Agency	Annette Sonne andoh@gst.dk
EE	Estonia Estonian Land Board	Tõnu Kägo <Tonu.Kago@maaamet.ee>, Priit Kuus <priit.kuus@maaamet.ee>
ES	Spain spanish cadastre	Amalia Velasco amalia.velasco@catastro.minhafp.es
FI	Finland National Land Survey	Pekka Halme pekka.halme@nls.fi
GR	Greece Hellenic Cadastre	Dimitris Rokos - Maria Kasapi drokos@ktimatologio.gr
LV	Latvia The State Land Service	Daina Udre Daina.Udre@vzd.gov.lv
LT	Lithuania State Enterprise Centre of Registers	Bronislovas Mikuta Bronislovas.Mikuta@registrucentras.lt
LU	Luxemburg Administration du Cadastre et de la Topographie	Bernard Reisch bernard.reisch@act.etat.lu
MT	Malta Land Registration Agency	Claude Sapiano claudio.sapiano@gov.mt
NL	The Netherlands Cadastre, Land Registry and Mapping Agency	Martin Salzmänn martin.salzmänn@kadaster.nl
PL	Poland Head Office of Geodesy and Cartography	Ewa Surma ewa.surma@gugik.gov.pl
RO	Romania National Agency for Cadastre and Land Registration	Adriana Poggi adriana.poggi@ancpi.ro
SE	Sweden Lantmäteriet	Magdalena Andersson magdalena.andersson@lm.se
UA	Ukraine State Service of Ukraine for Geodesy, Cartography and Cadastre (StateGeoCadastre)	Ganna Tkachenko annatkachenko275@gmail.com
ELRA	European Land Registry Association	Jan Moerkerke, jan.moerkerke@elra.eu



1. In how far do you – as a representative of your cadastral organization – consider the Real Estate Cadastre relevant to achieving the SDGs 1-17:

To achieve the SDG, the Real Estate Cadastre is ...	very relevant	somewhat relevant	don't know	not at all relevant	rather not relevant
1) <u>No Poverty</u> : End poverty in all its forms everywhere	6	12		12	3
2) <u>Zero Hunger</u> : End hunger, achieve food security and improved nutrition and promote sustainable agriculture	4	11		12	6
3) <u>Good Health and Well-being</u> : Ensure healthy lives and promote well-being for all at all ages	3	7	1	8	5
4) <u>Quality Education</u> : Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	3	11	12		7
5) <u>Gender Equality</u> : Achieve gender equality and empower all women and girls	5	7	1	6	5
6) <u>Clean Water and Sanitation</u> : Ensure availability and sustainable management of water and sanitation for all	1	12	1	5	5
7) <u>Affordable and Clean Energy</u> : Ensure access to affordable, reliable, sustainable and modern energy for all	1	13	2	4	4
8) <u>Decent Work and Economic Growth</u> : Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	7	10		1	4
9) <u>Industry, Innovation and Infrastructure</u> : Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation	9	11		1	2
10) <u>Reducing Inequality</u> : Reduce inequality within and among countries	5	9	1	7	2
11) <u>Sustainable Cities and Communities</u> : Make cities and human settlements inclusive, safe, resilient and sustainable	12	10			11
12) <u>Responsible Consumption and Production</u> : Ensure sustainable consumption and production patterns	12		2	6	4
13) <u>Climate Action</u> : Take urgent action to combat climate change and its impacts	4	8	1	9	2
14) <u>Life with Water</u> : Conserve and sustainably use the oceans, seas and marine resources for sustainable development	2	6	2	6	8
15) <u>Life on Land</u> : Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	13	9			11
16) <u>Peace, Justice and Strong Institutions</u> : Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	8	11		11	3
17) <u>Partnerships for the Goals</u> : Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development	3	12		3	4



2. Cadastre against the background of the SDGs

	Q 2.1) In respect to contributing to the 17 SDGs, where do you see the strengths of your country's cadastre?	Q 2.2) Where do you see room for improvement for your national cadastre contributing to the 17 SDGs?
AT	well running system as an important pillar of the public infrastructure based on clear defined legal procedures; guaranteed by the state	bring in innovative tools for easier access to data and information with mobile equipment; improve interoperability of data to expand integration of cadastre in other information systems based on the principal of distributed data
BE	Availability of public data sets: <ul style="list-style-type: none"> patrimonial documentation that able citizens to access to justice; environmental data (natural reserves, drained lands) Fiscality where citizens are taxed regarding to their properties values => equality goal Our sustainable engagement as public service to lead by example (waste sorting, paperless policy, mobility by public transportation and cycling, gender equality, ...).	improvement of the equality using more accurate values in real estate fiscality
BG	Bulgarian cadastre supplies information in real time for different real estate properties - parcels, buildings and objects in buildings.	Future integration of national cadastre with national tax system and real estate evaluation.
CH	<ul style="list-style-type: none"> reliable and complete documentation of landownership rights well accepted, secure and trustworthy system 	<ul style="list-style-type: none"> opening up the cadastral data for more public use (open data allows for more innovation)
DE	If a landownership right is registered in the land registry, the owner is presumed to be entitled to the right. This leads to a highly reliable and legal secure part of the property protection system. Every landowner in Germany can rely on the cadastre. He can land on his property; no one can take it away from him. Further, the cadastre is one of the backbones of the German geospatial data infrastructure. It is the basis for many questions with spatial reference.	-/-
DE-BW	<ul style="list-style-type: none"> legal Basis (legality) connection with land register and its public trust (interrelation) official base function for other sectors like economy, administration and justice (requirement) complete back tracking of data (transparency) sustainable data management (completeness) 	improvement might be seen in model conformity, exchange modality and interaction possibilities with other systems, like digital landscape models / digital terrain models, elements, resolution and dimension of registered objects without losing information, correctness and unambiguosness of property data.
DE-NW	<ul style="list-style-type: none"> Full coverage of the state's area. Complete concerning boundaries; nearly complete concerning buildings. Detailed information about parcel's actual use (updated in a three-year cycle). Cadastral offices are integrated into local government level. 	Cadastre in North Rhine-Westphalia is already a multi-purpose cadastre that contributes to the SDGs where possible.
DE-SH	As a public register, the real estate cadastre provides basic geodata and is the official register of the properties for proof of ownership in the land register. The location of the property is presented and described in the form of parcels. If necessary, the boundaries of the parcels can be shown locally with legal effect. In addition, the real estate cadastre provides evidence of the results of the official land appraisal. It also performs a basic function for other areas. It is intended to meet the requirements of legal traffic, administration and the economy and, in particular, to take appropriate account of the needs of regional planning, urban	The decisive factors are usability and accessibility. In order to increase these, the completeness, timeliness, accuracy and standardisation of the data need to be improved and the data model and format need to be more closely adapted to user requirements. In addition, the mutual exchange of data with the land register has to be further optimised.



	Q 2.1) In respect to contributing to the 17 SDGs, where do you see the strengths of your country's cadastre?	Q 2.2) Where do you see room for improvement for your national cadastre contributing to the 17 SDGs?
	land-use planning, land readjustment, the determination of property values as well as of environmental and nature conservation.	
DE-ST	Das Liegenschaftskataster ist das einzige umfassende Bodeninformationssystem. Es ist amtliches Verzeichnis der Grundstücke, übt Basisfunktion für alle anderen Bereiche (Rechtsverkehrs, Verwaltung Wirtschaft) aus und ist – neben den Topographischen Landeskartenwerken - alleinige Grundlage für raumbezogenen Informationssysteme.	Das Kataster wird in den deutschen Bundesländern nach dem jeweiligen Landesrecht geführt. Freiwillig haben sich die Länder auf einen gemeinsamen Datenbestand geeinigt (Grunddatenbestand). Die deutschlandweite Konsistenz des Grunddaten-bestandes ist zu wahren und weiter zu erhöhen.
DK	Reliable and generally respected	Marine Cadastre and improvement of the cadastral maps
EE	Open data, 100% digital data, country fully covered, clear legal framework, reliable cadastre and land register, fast cadastral operations. SDGs 15. Life on Land and 16. Peace, Justice and Strong Institutions.	Quality of cadastral data (accuracy of cadastral boundaries), more services for public. SDGs 14. Life with Water and 9. Industry, Innovation and Infrastructure
ES	Our cadastre is open to everybody and offers many services that can be the base for many indicators	Agree with other institutions the combination of data
FI	It is equal, transparent, digital and covers the whole territory	There is always room for improvement when times change. At the moment the boundary data accuracy could be improved in some areas and cases.
GR	With respect to GOAL 1: NO POVERTY "Economic growth must be inclusive to provide sustainable jobs and promote equality." the Cadastre in Greece provides equal opportunities to funding through mortgaging real property. With respect to GOAL 8: "DECENT WORK AND ECONOMIC GROWTH", access to funds through real property mortgaging provides the means for economic growth for the society.	It does not seem that there is much room for improvement as there is much relevance to most of the goals. The only exception is in GOAL 11: SUSTAINABLE CITIES AND COMMUNITIES, in which the Greek cadastre could contributed more if it supported 3-D.
LT	The strength of real property cadastre in Lithuania is that it is integrated with the Real Property Register, is comprehensive and multipurpose. The cadastre includes not only land parcels but also constructions, engineering utilities, spatial data, which are integrated with textual data. Open, digital, comprehensive Real Property Cadastre and Register contributes to the implementation of the goals of the government, business and society. The cadastre covers the entire territory of Lithuania.	In Lithuania, the cadastre system is integrated with the Real Property Register; the collected data is comprehensive and multipurpose, which can be used for the implementation of many SDGs. The cadastre system can be improved to provide cross-border services. Therefore, certain EU or other funding programmes should be established for the improvement and standardisation of national cadastre systems.
LU	Combined geographic and semantic database, high geometric accuracy, up to date, open in respect with GDPR, sustainable continuity (deeds back to 1820)	Public roads and watercourses are still not assigned as cadastral parcels, no differentiation for public areas (private or public property of the state / communes), GDPR restrictions can be bypassed in combination with Big Data, GDPR restrictions don't allow non-public research institutes to work on property related datasets
LV	The State Land Service of Latvia considers the 100% data coverage of the territory of Latvia as the strength of the National Real Estate Cadastre. The Cadastre also contains textual and spatial data of buildings and engineering structures, including deployment plans of premises.	The State Land Service of Latvia is currently working on modernization of the Cadastre; therefore, we think that it would promote the institutional scope by linking the information systems.
MT	It is a reliable system.	ALL of the country should be a registration area.
NL	To a large extent, we have established a secure and accepted land registration system, which prevents disputes within society and offers full transparency on property and spatial rights. SDG's as preventing poverty, gender equality and strong (and accepted) institutions are (in our domain) embedded in our society.	Societal demands require a larger interaction between physical, environmental, social, economic and legal domains. A cadastre and land registry thereby become part of a larger information ecosystem that underpins activities in domains such as climate adaptation, nature conservation, energy transition. Providing access to spatial and judicial information and keeping



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	Internationally we share our lessons learned and solutions worldwide.	this information up to date becomes pivotal. Our challenge is to provide and maintain this wealth of information in real-time to all stakeholders.
PL	Thanks to easy, access in our country to cadastre, the society can obtain the necessary information in the field of location and data on land and buildings. Our institution supports the idea of SDGs trough: - Quality Education: www.geoportal.gov.pl portal. It enables universal access to spatial data for citizens and administration, and the development of companies and technologies that use their processing. POWER project. „Raising digital competences of e-administration - educational and training activities for users of spatial information infrastructure”. The training is aimed at public administration employees.	The continuous popularization education in SDI and access to spatial information and capacity building (from the very beginning - elementary school)
RO	In Romania, the Cadastre has three functions: technical, economic and legal, which are clearly defined by Law no. 7 of the cadastre and the land book, with its subsequent amendments and completions. By fulfilling these functions, the cadastre directly contributes to the development of human settlements so that they are open to all, provide security, are resilient and sustainable. Registration of land in the cadastre supports the development of agriculture and contributes to food security, to the health and well-being of the population, reduces poverty, decreases the degree of land abandonment and contributes directly or indirectly to achieving sustainable development goals.	In order to better serve the 17 SDGs, an important role is played by informatization, which will make the services more accessible to the citizens. At the same time, public institutions must focus on the sharing of information and their centralized use by all public authorities, thus supporting the decisions of local, central and government authorities.
SE	Solid legal basis, availability of geodata, good co-operation between authorities. The new Geodata Strategy in Sweden is oriented towards supporting the SDGs.	Developing towards smarter processes for further assisting in decision-making, provide easier access of geodata etc.
UA	The State Land Cadastre is the only state system of information on lands located within the state border of Ukraine, their purpose, restrictions on their use, as well as data on quantitative and qualitative characteristics of lands, their assessment, distribution of lands between owners and users. The information of the State Land Cadastre is official and is considered objective and reliable, unless otherwise proved by a court. The State Land Cadastre is maintained in order to provide information to public authorities and local governments, individuals and legal entities in: regulation of land relations; land management; organization of rational use and protection of lands; land management; land valuation; formation and maintenance of urban cadastre, cadastres of other natural resources; collection of land fees.	Ensuring filling of the State Land Cadastre with information on all objects of the State Land Cadastre (land within the state border of Ukraine, land within the territory of administrative-territorial units, restrictions on land use, land plots) and development of electronic services for providing administrative services in the field of State Land Cadastre management.
ELRA	I represent the European Land Registry association. Proper Land Registration documentation in general serves all SDG's, but especially SDG 1.4.2: "Proportion of total adult population with secure tenure rights to land, with legally recognized documentation and who perceive their rights to land as secure, by sex and by type of tenure"	not applicable



3. Land registry against the background of the SDGs

Q 3.1) In your opinion, is the land registration system in your country well positioned to contribute to the SDGs? → yes / rather yes / no / don't know		Q 3.2) Where do you see room for improvement in your country's land registration system to better support the SDGs?	
<p>12 11 1 yes rather yes no</p>			
AT	yes	---	bring in innovative tools for easier access to data and information with mobile equipment; improve interoperability of data to expand integration of cadastre in other information systems based on the principal of distributed data
BE	yes	---	improve our open data policy
BG	rather yes	---	Future integration of national cadastre with national tax system and real estate evaluation.
CH	rather yes	LR system is well established and works well and securely	- LR system is rather law focussed and traditional with little innovation in view of digital transformation; it could improve by opening up not only its data, but also by finding new and innovative ways of serving the society.
DE	yes	If a landownership right is registered in the land registry, the owner is presumed to be entitled to the right. This leads to a highly reliable and legal secure part of the property protection system. Every landowner in Germany can rely on the cadastre. He can land on his property, no one can take it away from him.	It could be more digital for easier data exchange. But in my opinion that does not really affect the SDG as the land registration itself is highly reliable. It is just the easier use of it.
DE-BW	rather yes	---	see 2.2
DE-NW	rather yes	Land register guarantees real estate property. Technical infrastructure not up to date. No object oriented database.	Introduce an up to date technical infrastructure.
DE-SH	yes	Yes, since as a public register it records the properties, rights equivalent to property rights, the existing ownership structures and the associated encumbrances.	Here, too, the usability and accessibility are decisive, requiring in particular an increase in the degree of automation and better use of the possibilities of digital data exchange.
DE-ST	rather yes	Das Grundbuch muss – wie das Liegenschaftskataster – in einem bundesweit einheitlichen Softwaresystem in voll strukturierter Form gespeichert und bearbeitet werden. Dies wird erst mit der Einführung des Datenbankgrundbuchs erreicht. Dann wird ein automatisierter Datenaustausch zwischen Kataster und Grundbuch möglich sein.	Cf. reply to question 3.1
DK	yes	---	More simple rules
EE	rather yes	---	The marine cadastre does not exist. Further improving electronic services to build the basis of infrastructure for better economic growth.
ES	yes	---	In Spain land registry is not obligatory and I think that should be obligatory. Should also be less expensive
FI	yes	it has state guarantee, it covers the whole country, it is transparent	E.g. in case when ownership is registered on a deceased person, contact info concerning the heirs is not always readily available.
GR	rather yes	---	Improvements that could be proposed would be to include buildings in the cadastre and 3D real property objects.



	Q 3.1) In your opinion, is the land registration system in your country well positioned to contribute to the SDGs? → yes / rather yes / no / don't know	Q 3.2) Where do you see room for improvement in your country's land registration system to better support the SDGs?
LT	rather yes The Real Property Register is integrated with the cadastre system; the collected data is comprehensive and multipurpose. See Point 2.1.	If standardised, cross-border services were to be provided tailored to the needs of SDGs, the Real Property Register system would need to be improved, and this would require human and financial resources.
LU	yes ---	Better accordance between parcel geometry and regulated and managed zones.
LV	don't know The Land Registry is not within the competence of the State Land Service of Latvia.	The Land Registry is not within the competence of the State Land Service of Latvia.
MT	rather yes ---	In the technological sphere.
NL	yes We also support cadastres and land registries worldwide by sharing our experiences. Furthermore, we are the one-stop-shop for judicial and spatial information in the Netherlands concerning land and real estate.	See above
PL	rather yes ---	---
RO	yes In Romania, the registration of lands and related real rights in the integrated system of cadastre and land book is an important component of sustainable development, from an economic point of view as well as from a social perspective. The Romanian state makes special efforts for the registration of lands in the land book, by starting a national program of systematic cadastre (based on GD 294/2015), hereinafter called PNCCF. The cadastral works at national level are free for the citizens and within the program the successions for the lands that are the object of PNCCF are debated and the Heir Certificates are issued. The criteria for prioritizing the inclusion of ATUs in the program are representative to the SDGs: ATUs that are the subject of infrastructure projects at the national level, of local development projects, or where there are informal settlements of disadvantaged communities, in conditions of extreme poverty. Moreover, for the lands registered in the cadastral and land book records there can be carried out afforestation / reforestation campaigns, installation of forest curtains (Law no. 289/2002 on forest protection curtains stipulates that "it will be noted in the land book that the building is subject to the afforestation procedure"). At the same time, the owners who register their lands in the national record system (integrated cadastre and land book system) can access funds for the implementation of green, renewable energy production projects (photovoltaic panels, wind farms) which makes it possible to take urgent measures towards fighting climate change and its impact.	Informatization, sharing of information and their centralized use, specific legislation in the sense of opening information to central or local public authorities. Connecting public institutions through web services in order to support state authorities in the decision-making process.
SE	yes ---	By further participating in the European context, e.g. the work carried out by ELRA and IMOLA.
UA	rather yes ---	In order to increase the level of accessibility, openness and transparency in the provision of administrative services for state registration of land in accordance with the resolution of the Cabinet of Ministers of Ukraine of June 3, 2020 № 455 "Some issues of a pilot project to



	Q 3.1) In your opinion, is the land registration system in your country well positioned to contribute to the SDGs? → yes / rather yes / no / don't know		Q 3.2) Where do you see room for improvement in your country's land registration system to better support the SDGs?
			<p>implement the principle of extraterritoriality in state registration of land", the implementation of a pilot project on state registration of land on the principle of extraterritoriality was started from June 10, 2020 and the term of its implementation was reduced to seven working days.</p> <p>According to the mentioned resolution of the Cabinet of Ministers of Ukraine, the implementation of the pilot project on the introduction of the principle of extraterritoriality in the state registration of land is provided for up to two years.</p> <p>Based on the results of the pilot project, an analysis and study of problematic issues and ways to improve the system of state registration of land will be carried out.</p>
ELRA	yes	I see it from a European perspective	<p>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 unauthorised appropriation. There is still room for a better legal protection of all real rights in many countries.</p>



4. Documentation of Restrictions

	Q 4.1) Do you think that restrictions <u>under private law</u> , in particular servitudes, could play a role in supporting the achievement of the SDGs? → Yes / Don't know / No	Q 4.2) Do you think that restrictions <u>under public law</u> , e.g. land-use planning and zoning, could play a role in supporting the achievement of the SDGs? → Yes / Don't know / No
	<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="background-color: #90EE90; padding: 5px; border: 1px solid black;">20</div> <div style="padding: 5px;">3 1</div> </div> <p style="text-align: center; font-size: small;">yes don't know no</p>	<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="background-color: #90EE90; padding: 5px; border: 1px solid black;">21</div> <div style="background-color: #FFDAB9; padding: 5px; border: 1px solid black;">2 1</div> </div> <p style="text-align: center; font-size: small;">yes don't know no</p>
AT	yes	yes
BE	yes	yes
BG	yes	yes
CH	yes	yes
DE	yes	yes
DE-BW	no	no
DE-NW	yes	yes
DE-SH	yes	yes
DE-ST	don't know	don't know
DK	yes	yes
EE	yes	yes
ES	yes	yes
FI	yes	yes
GR	yes	yes
LT	yes	yes
LU	yes	yes
LV	yes	yes
MT	don't know	don't know
NL	yes	yes
PL	don't know	yes
RO	yes	yes
SE	yes	yes
UA	yes	yes
ELRA	yes	yes



5. Legally based land readjustment procedures can be helpful in order to support some of the SDGs

Q 5.1a)		
In your country, are there any legally based land readjustment procedures in place focusing on urban areas? → Yes / No		
If so, please name them and give a short description.		
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="background-color: #92d050; padding: 10px; border: 1px solid black; text-align: center; width: 40%;">20</div> <div style="background-color: #e69d00; padding: 10px; border: 1px solid black; text-align: center; width: 10%;">4</div> </div>		
	Yes	No
AT	Yes	clear legal procedures in most of the cities based on law
BE	Yes	regional policies forbidding the creation of new urbanised areas after 2030
BG	Yes	All legally based land readjustment procedures focusing on urban areas, are placed in Spatial Development Act
CH	Yes	Land readjustment in urban areas is often done in the context of rebuilding projects, when land-ownership has to be combined or readjusted. Procedures are well defined by the respective cantons.
DE	Yes	Umlegung und Vereinfachte Umlegung nach BauGB are legally based procedures to form building plots.
DE-BW	Yes	urban development programs and defining redevelopment area, land reallocation plan (BauGB)
DE-NW	Yes	"Umlegung": Parcels of private owners are readjusted according to a land use plan. Private owners get parcels suitable for constructing buildings, public owners get areas for example for streets and public places. A result of the "Umlegung" are increased land values. This increase is used to finance the necessary measures.
DE-SH	Yes	Land readjustment under urban planning law. In order to develop or redesign urban areas, developed and undeveloped plots of land can be reallocated in such a way that plots of land are created that are "suitably designed in terms of their location, shape and size for structural use" (§ 45 BauGB/German Building Code). This goal can be achieved by the owners of existing plots of land giving their consent to the layout of their plots being redesigned or giving up their plots, receiving financial compensation for this, or being allocated a plot of land resulting from the reallocation or elsewhere. In this respect, the citizen's guarantee of ownership must take second place to the public interest in the orderly structural use of municipal areas.
DE-ST	Yes	Mit Umlegungsverfahren können Grundstücke so neu geordnet werden, dass nach Lage, Form und Größe für die bauliche oder sonstige Nutzung zweckmäßig gestaltete Grundstücke entstehen. Neben diesen Verfahren kann: <ul style="list-style-type: none"> • Eigentum durch Bodensonderung bei rückständigem Grunderwerb nach dem Verkehrsflächenbereinigungsgesetz geregelt, • Vermögen nach dem Vermögenszuordnungsgesetz zugeordnet, und • die ergänzende und komplexe Bodenneuordnung nach dem Bodensonderungsgesetz durchgeführt werden.
DK	Yes	Planning considering infrastructure and land use.
EE	Yes	Merger, division, change of boundaries, identifying boundaries, identifying restrictions, land consolidation etc. of cadastral units are provided in the Land Cadastre Act and in Land Consolidation Act.
ES	Yes	Yes we have a big project to improve urban areas cartography
FI	Yes	Real Estate Formation Act, Chapter 12: Urban land replotting. Section 113 (322/1999) (1) Urban land replotting may be executed if it can further the formation into real estate of areas assigned for different uses in the town plan or the balancing of the clearly unbalanced division of building right in an area in which the said plan has been ratified for the first time. A further condition for the execution of the replotting is that it is necessary due to imminent construction in the area. Urban land replotting may only be executed if the town plan concerned includes a plan provision according to which urban land replotting may be executed in order to implement the plan. This is a rather theoretical option however. The procedures have never been used, because the municipalities can use other means to achieve the same result.
GR	Yes	The tool is the implementation act or urban renewal, which is the administrative act with which an urban study is implemented on the ground in order to develop a non-urban area to an urban one with land parcels that satisfy zoning and other public restrictions.



Q 5.1a)		
In your country, are there any legally based land readjustment procedures in place focusing on <u>urban</u> areas? → Yes / No		
If so, please name them and give a short description.		
		During this process: (a) parts of land may be deducted from a land parcel to contribute to the creation of public areas and/or a financial contribution is paid; (b) all resulting land parcels have access to roads and can be built.
LT	Yes	Urban planning is implemented in accordance with legal acts. Land readjustment procedures in urban areas are aimed at the sustainable development of the territory, taking into account: <ul style="list-style-type: none"> • needs of society • landscape and biodiversity of the area • geographical location • geological conditions • existing urban, engineering, transport infrastructures • interests and rights of land and other real property possessors, users and the third parties • architectural, environmental, nature protection, heritage protection and public health requirements • state and public security, defence and other needs
LU	Yes	Remembrement urbain, Plan d'aménagement général / Plan d'aménagement particulier: these are legally based procedures allowing to adapt the shape of the parcels to the intended use within the urban perimeter (land consolidation).
LV	No	---
MT	No	---
NL	Yes	In urban areas, our experience in land reallocation is applied in strengthening environmental, physical, social and economic fabric of the built environment. For this role we are invited by property developers, municipalities and owners and other stakeholders. Execution is based on transparent procedures where all rights, restrictions and responsibilities are taken into account. In Dutch, this procedure is called "stedelijke herverkaveling".
PL	Yes	E.g. spatial development plans.
RO	No	---
SE	Yes	E.g. in the municipal planning process.
UA	No	---
ELRA	Yes	All over Europe, different land readjustment procedures take place. Not in the least accompanying large infrastructure projects.

Q 5.1b)		
In your country, are there any legally based land readjustment procedures in place focusing on <u>rural</u> areas? → Yes / No		
If so, please name them and give a short description.		
		<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="background-color: #90EE90; padding: 5px; border: 1px solid black; text-align: center;">20</div> <div style="background-color: #FFDAB9; padding: 5px; border: 1px solid black; text-align: center;">4</div> </div> <div style="display: flex; justify-content: space-around; margin-top: 5px;"> Yes No </div>
AT	Yes	with respect to the changes in agriculture (less farmers but bigger farms, modern ways for production, ...) in many areas restructuring procedures (replotting, etc.) with improvement of infrastructure etc. are in place
BE	Yes	impact on no more urbanisation spreading after 2030 (by regional laws)
BG	Yes	All legally based land readjustment procedures focusing on rural areas are placed in Law on the Ownership and Use of Agricultural Land and in Law on restoration of ownership of forests and land by the Forest Fund.
CH	Yes	Land readjustment and relocation projects are done for getting better-sized land parcels or for re-adjusting the land in preparation for larger infrastructure projects, which take big land areas. The procedures are well defined including potential compensations.
DE	Yes	Verfahren nach dem Flurbereinigungsgesetz. Legally based procedures to resolve conflicts of use of agricultural and forestry land
DE-BW	Yes	Land consolidation programs



	Q 5.1b)	
	In your country, are there any legally based land readjustment procedures in place focusing on <u>rural</u> areas? → Yes / No	
		If so, please name them and give a short description.
DE-NW	Yes	don't know
DE-SH	Yes	Land consolidation is a land readjustment procedure for the holistic and sustainable development of rural areas. Its aim is to improve production and working conditions in agriculture and forestry, to secure the natural basis of life and to maintain and further develop the beauty and recreational value of the landscape and ecological diversity. These goals are implemented in a particularly socially responsible and citizen-oriented manner.
DE-ST	Yes	Flurbereinungsverfahren nach Flurbereinigungsgesetz oder Landwirtschaftsanpassungsgesetz sind das klassische Instrument zur Um- oder Neugestaltung der Eigentumsverhältnisse im ländlichen Raum. Neben diesen Verfahren kann Eigentum durch Bodensonderung bei rückständigem Grunderwerb nach dem Verkehrsflächenbereinigungsgesetz geregelt werden.
DK	Yes	Land management
EE	Yes	Merger, division, change of boundaries, identifying boundaries, identifying restrictions, land consolidation etc. of cadastral units are provided in the Land Cadastre Act and in Land Consolidation Act.
ES	Yes	Yes, but it is not a massive action as in urban areas. It is only when a change occurs.
FI	Yes	Real Estate Formation Act, Chapter 9, Land Consolidation Section 67 (and following sections) (1) Land consolidation may be executed if the ensuing benefits exceed the costs and hindrance incurred and if the land consolidation allows: 1) improvement of property division and furtherance of the use of real estates; 2) considerable improvement in road and drainage conditions of the area; or 3) furtherance of the use of an area acquired for purposes referred to in the Act on the Development Fund of Agriculture and Forestry (657/1966). (333/1999)
GR	Yes	Land consolidation acts in which rural land is redistributed in fewer and bigger lots.
LT	Yes	The adopted legal acts establish mechanisms for land readjustment in rural territories and for the formation of land parcels. All institutions and persons carrying out land readjustment procedures in rural territories follow the laws and rules as well as use the measures permitted by legal acts. When planning rural areas, the following main aspects are taken into account: preservation of villages and residential areas, planning of infrastructure (access roads, land reclamation facilities, etc.), educational, cultural and other institutions necessary to meet the needs of rural population, measures to preserve the landscape, good quality farming lands.
LU	Yes	Remembrement rural: 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)
LV	No	---
MT	No	---
NL	Yes	For over 100 years, we have a legal task in formal and informal land readjustment.
PL	Yes	There are support programs, such as Rural Development Program 2014-2020.
RO	No	---
SE	Yes	E.g. in the municipal planning process (general planning), regional planning or in land consolidation activities.
UA	No	---
ELRA	Yes	there are different European projects

	Q 5.2)	
	Please tell us in how far such land readjustment procedures could be relevant to achieving the SDGs	
AT		especially in developing countries or in many parts of Eastern Countries in Europe restructuring of rural areas would improve the way to improve and modernise agriculture > support fight for poverty ...
BE		protection of nature (goal 15)



	<p>Q 5.2) Please tell us in how far such land readjustment procedures could be relevant to achieving the SDGs</p>
BG	These procedures support sustainable development, because they give the legal frames in land use in general and create a regulated property market. These procedures also help for better and proper use of important resources, from fresh water to fertile land.
CH	Land readjustment can contribute to the SDGs by creating better-sized and more suitable land parcels for agricultural production and clearer landownership situations resulting ultimately in better productivity.
DE	<p>5.1 a) 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 13 Climate Action: climate protection measures can be implemented.</p> <p>5.1b) SDG 2 Zero Hunger, 12 Responsible Consumption and Production: Flurbereinigung promotes sustainable agriculture; 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 13 Climate Action: climate protection measures can be implemented; SDG 15 Life on Land: sustainable measures can be implemented to achieve the goal.</p>
DE-BW	<ul style="list-style-type: none"> • Saving jobs in rural Areas • Improving production and working conditions in agriculture and forestry through soil improvement and other measures • promoting general culture and rural development • preservation of natural foundations of life
DE-NW	Without parcels of appropriate form and size (and property title), there will not be any urban or rural development.
DE-SH	Depending on the framework conditions, it may be possible to facilitate the provision of land for SDGs with land requirements through the above-mentioned land readjustment procedures.
DE-ST	<p>Die Flurbereinigung soll</p> <ul style="list-style-type: none"> • die Produktions- und Arbeitsbedingungen der Land- und Forstwirtschaft verbessern • den ländlichen Raum gestalten • Konflikt im Zusammenhang mit der Landnutzung lösen • eine integrierte ländliche Entwicklung unterstützen • Naturschutz stärker berücksichtigen • auf Nachhaltigkeit ausgerichtetes Bodenmanagement unterstützen. <p>Bei der Verkehrsflächenbereinigung werden die Rechtsverhältnisse an Verkehrsflächen und anderen öffentlich genutzten privaten Grundstücken bereinigt.</p>
DK	Open planning process secure transparency, it will secure efficient use of the land, and it will prevent corruption.
EE	In Estonia, land consolidation aims at creating opportunities for a more practical use and management of land. With the help of readjustment procedures and relevant legislation, land reform has been successfully carried out, land is in civil use, and the real estate market has developed. Thus, land readjustment procedures support actions for achieving the SDGs, in particular those related to economic growth.
ES	To improve the data is always very useful if we are the basis for some indicators
FI	Its main purpose is to improve the productivity of agriculture. The tool can be applied for other purposes as well like in nature conservation areas.
GR	They are very relevant as they improve the urban environment and increase the productivity of the land (and economic growth subsequently).
LT	Land readjustment procedures could be relevant to achieving some of the SDGs if the planned measures described in Point 5.1. (a) and (b) were considered.
LU	On the one hand they can contribute to a better achievement of certain SDG's, on the other hand they require an intense administrative effort
LV	<p>Currently we do not have any land readjustment procedures in place focusing on rural areas but they are planned from January 1, 2023.</p> <p>We consider that the land readjustment procedures would be important in terms of working on SDGs 7, 12, 13 and 15.</p>
MT	They could to a certain extent be relevant, but not indispensable.
NL	In the Netherlands, drivers for land adjustment are ranging from nature conservation to development of business areas and thereby touch many aspects of the SDG's.
PL	Land adjustment is an opportunity for the development of a region in economic and social terms, which promotes equal opportunities.



	<p>Q 5.2) Please tell us in how far such land readjustment procedures could be relevant to achieving the SDGs</p>
RO	<p>We do not have legislation in the field of, however redevelopments can be made, but based on the act of will of all owners. Based on Law no. 255/2010 on expropriation for the cause of public utility necessary to achieve objectives of national, county or local interest, land can be remodelled, but it is important that state intervention is minimal and there is a fair and equitable compensation. In both situations (rural and urban), in the case of the public interest of the state, for example the implementation of infrastructure projects, the law of expropriations applies.</p>
SE	---
UA	There are no any land readjustment procedures in Ukraine that could be relevant to achieving the SDGs.
ELRA	Mainly as a result of inheritances or land distribution programs in post-soviet era in Eastern Europe, a lot of agricultural parcels have become too small for decent farming. It results in an inefficient food production. Land readjustment procedures work remedient; which is of course relevant for the struggle against poverty.