

## DI5: Depository database of tools of public value capture

### WG2: Terminology, tools of public value capture

Review the existing definitions and approaches => identification of research gaps and needs => definition of a common terminology

#### [1] Concepts (terms) of PVC

Concept/term	Context	Definition	Reference to source (in reference list)
Land (real property) value	Market value (supply and demand)	"...the estimated amount for which a property should exchange on the date of valuation between a willing buyer and a willing seller in an arm's-length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently and without compulsion"	The International Valuation Standards, 2001
	The value in exchange	Market price determined by the market	Eckert, 1990
	Taxation (assessed) value	The value estimated through mass valuation; Cadastral value determined according to common methodology, which in general prescribes the cadastral value base (base values and correction coefficients based on market data analysis)	Jürgenson et al. 2017
	Value in use	Value relates to the property's current use; often measured in the rent that the property can produce; the assessments of value are much dependent on the owner or investors individual preferences	Eckert, 1990; Kalbro 2007a, Christensen, 2011
Public values	Public administration	Public administration defines public services and moulds the environment for creation of public value. Public value is shared by all actors in society. It is the outcome of all resource allocation	EC, 2016

		decisions taken by all stakeholders in society as a whole.	
	Public administration	The public value is the fraction of the value increase that the public sector manages to extract from landowners to benefit of the public.	Nordahl (in survey, COST)
Value change (two-directional values effect)	Policy instruments, land-use regulations and public works cause property values	“Betterment and compensation” or “betterment and worsement”, or “windfalls and wipeouts”, or “givings and takings”. Compensation rights in relation to policy responses to the downward effect, causing reductions in values.	Havel, 2016 (Alterman, 2010, 2012)
		“Givings” – government actions that increase the value of private property	Barnhizer, 2003
Value change (increase)	Scope	Increasing of real property values have profound social, economic, and distributive-justice implications	Alterman, 2012
	‘unearned increment’	an increase in the value of property through no work or expenditure by the property owner	Alterman, 2012
	Betterment	Development-right based betterment and infrastructure-based betterment	Alterman, 2012
	Urban development	Property value changes during urban development process, ‘value steps’	Dunkerlay, 1987; Christensen, 2011
	Influencing factors	Factors influence evolvement of property value in the urban development process: (1) planning, (2) location, (3) old use, (4) preparation of land, (5) construction of building, (6) political process, (7) time, (8) risk.	Christensen, 2011
	Land development as a part of land	The bundle of methods to change land use including land rights	Mattsson and Mansberger, 2017

	governance system		
	Land development measures	Qualitative changes in land use intensity, involvement of various stakeholders, and facing noteworthy challenges and problem issues during its implementation	Jürgenson et al. 2017
	The roots of increasing values	Categorization into 5 main categories: (1) the original productivity of the land, the value of current land use, (2) changes in land-use regulations, extension of property rights, (3) public investments in infrastructure and social services, (4) private investments that increase land value, (5) population growth and economic development.	Hong and Brubaker, 2010
Value capturing	General purpose	Value capture to cover any type of policy or legal instrument whose purpose is to tap any form of 'unearned increment', regardless of the cause of the value rise.	Havel, 2016 (Alterman, 2012)
	Public finance	Value capture focuses on realizing as public revenue, i.e. through taxes, fees, or in-kind services, some portion of the increase in land value that stems from these latter changes.	Ingram and Hong, 2012
	Public finance	Value capture refers to the recovery by the public of the land value increments. It is to mobilize for the benefit of the community at large some or all of the land value increments (unearned income or ' <i>plusvalias</i> ') generated by actions other than the landowner's direct investments, such as public investments in the infrastructure or administrative changes in land use norms and regulations. Although all such increments are essentially	Smolka, 2013

		unearned income, value capture policies focus primarily on the increment generated by public investments and administrative actions, such as granting permissions for the development of specific land uses and densities.	
	Instruments and public action	Value capturing is a collective term for instruments that make it possible to capture the increase in value of land and property directly or indirectly. The increase in value is caused by public action. The captured value can be used for the activities that are causing the increase in value.	Offermans and Van de Velde, 2004
		Value capturing is 'a group of instruments that enable the increased value of land and property as a result of public investments in transport infrastructure to be captured directly or indirectly, so that it can be used for financing the activities that are responsible for the increased values.	Van der Krabben & Needham, 2008
	Costs-benefits in urban development	Value capturing can contribute to the realization of a balance between costs and benefits in urban development. Value capturing aims to get beneficiaries to make a contribution to the measures, from which they profit. This means that future benefits from a project are captured to cover the current costs.	Slegtenhorst 2013 (Huisman, 2006)
	Methods	Value capturing is a method to influence the cash-flow of projects. By involving future revenues in the cash-flow, current shortages can be covered. Furthermore, value capturing as a set of methods and measures targets creation of value for different parties.	Slegtenhorst 2013 (Agentschap)
		Direct and indirect value capturing	Alterman, 2012

	Models for analysis	Direct models for the value capture of developed land (fees and taxes, the “real estate consortium” or “conjoint urbanisation”, negotiated development – developer and municipality, flexible building rights, urban development or redevelopment measures, interim acquisition, contract models). Indirect models – value capture of developed land by taxes on the whole real estate (the basis of taxation, tax rates, continuous progression, extraordinary tax for unbuilt plots)	Hendricks et.al., 2017
	Categorization of instruments	Macro, direct and indirect value capture instruments. (1) <i>macro</i> embedded in broader land policies, motivated by some broader rationale and ideology, e.g. nationalization of all land, substitution of private property by long-term public leaseholds, public land banking, land readjustment. (2) <i>Direct</i> seek to capture all or some of the value rise in real property under the explicit rationale that the value increase belongs to the community and should therefore be given back. Direct value capture may be divided into: (2.1) <i>capture of the ‘unearned increment’</i> : where the value rise is not linked to a specific government decision but rather to general economic development; (2.2) <i>capture of betterment</i> : where the value rise is directly caused by a specific government decision related to physical development. The betterment may be further subdivided into: (2.2.1) <i>betterment arising from public infrastructure works</i> : the value rise is due to positive externalities from a government decision to approve or execute public infrastructure, e.g. parks, services; (2.2.2) <i>betterment arising from land-use regulation</i> : the value rise is	Havel, 2016 (Alterman, 2012)

		due to a land-use planning or development-control decision. (3) <i>Indirect</i> value capture instruments have the motivating rationale of internalization (mitigation) of the costs of the development impacts, to cover the costs of the public infrastructure and facilities directly or indirectly needed to support the newly developed areas.	
Land value capture (LVC)	Fiscal instruments	Land value capture refers to fiscal instruments through which public authorities can capture increases in properties values that are unrelated to actions of land owners.	Oppio et.al. 2018 (OECD, 2017)
	Public action, public projects	Land value capture is a policy approach that enables communities to recover and reinvest land value increases that result from public investment and other government actions. Also known as “value sharing,” it’s rooted in the notion that public action should generate public benefit.  The potential advantage of land value capture is that the revenue from, for example, a tax can be used to fund public projects that may subsequently increase the net return (rent) to the landowners.	Medda & Modelewska, 2011
Public value capture (PVC)	Public finance, public goods and services	A method or a strategy to capture value increase to use it for specific purposes, e.g. for improvement of public infrastructure through local development.	Hendricks et.al., 2017 (de Wolff, 2007)
	Methods	The term <i>public value capturing</i> comprises a wide range of methods that public authorities can use to capture part of the land value increment from landowners.	Valtonen et.al. 2018
	Transfer of costs	Public value capturing is when public bodies transfer the costs of public infrastructure and affordable housing	Muñoz Gielen, 2012

		(the costs of land and construction) to developers while capturing the benefits of development, i.e. the increase in economic value that accrues from re-zoning the site.	
	Discussion regarding concepts LVC and PVC	<p>LVC refers not to the capture of value created by the efforts of the landowner himself because there is no discussion that this value belongs to him. LVC refers thus first to the capture of the land value created by efforts of public bodies. It could be discussed whether LVC should also refer to the capture of the land value created not by public bodies but by other private parties than the owner. Does LVC refers to the capture of land value increase, excluding thus the capture of the increase in value of buildings? Another discussion regards whether LVC can be considered a tax or not.</p> <p>PVC includes all instruments that capture all possible increases of the value of land and properties, whether they are considered taxes or not. PVC includes thus LVC and more.</p>	Muñoz Gielen and van der Krabben, 2018

**[2] Are the concepts of public value capture (PVC) or land value capture (LVC) recognised and their definitions provided in participating countries?**

Country	If YES, brief description/definition	If YES, source identifying a context, e.g. a legal act
Germany	Municipalities shall collect charges for the recoupment of otherwise unrecoverable public expenditure on local public infrastructure in accordance with the GFBC. In consequence the land owners have to provide the land for the technical infrastructure and have to pay for the construction. The amount of land/money depends on the regulation of the legally binding land use plan. On the other hand, local governments have	German Federal Building Code, sections 11 and 127 ff. (GFBC)

	the option to increase the PVC by urban contracts.	
Latvia Estonia Lithuania	A concept (term) of value capture (PVC or LVC) and definition of it is not recognised in any formal source, however, the tools for capturing increase of land value due to development processes by public authorities can be identified.	
Sweden	No formal term/concept found in any formal source but it is topical to political and an academic debate, however tools introduced/stipulated straight into legal acts and its amendments	
Italy	Value capture, somebody define it as “Urban Simony”	I.e. Article 16 of Presidential Decree 380/2001: payment of 50% by private to municipal budget
Poland	No PVC because of two main reasons: (1) there is no ad valorem (tax based on the value of land), (2) the tax system is not fully decentralized. However, it is theoretically possible to adopt some tools, which exist.	
Albania	No formal term/concept found in any formal source.	
Israel	Betterment Levies – the ability of government authorities to capture the value of land and harness it to supply public goods and services.	In Israeli context owners and developers are charged with betterment levies/fees when approving new statutory plans and/or when issuing a building permit based on the Israeli Planning and Building Act (1965).
Bosnia and Herzegovina	No formal term/concept found in any formal source	
Belgium	Land Value Capture in case of rezoning to buildable land Planning Decree (1999) for the Flanders region and new Codex in Walonia (2016). Public Value Capture in case of development in some municipalities, PVC is part of the fiscal autonomy of the municipalities, local regulations applying to building permits.	
Ireland	Agreements at the time of its introduction was partly that it was a mechanism which allowed the <b>betterment value</b> from a grant of planning permission for residential development to be captured for the benefit of the community as a whole and in so doing, to further increase the	The Part V Housing Supply Provisions in the Planning and Development Act 2000

	provision of social housing. The mechanism recognizes that land values can increase for a number of reasons, including the grant of planning permission.	
Slovakia	The issue of PVC is an unknown term. It is completely new topic and is not mentioned in any literature, agenda or other source.	
Croatia	No formal term/concept found in any formal source	
United Kingdom	No formal definition developed, but developers have to contribute according to ...The value of Planning Obligations (S106) and Community Infrastructure Levies (CIL). $PVC (\%) = S106 \text{ contributions} / \text{price paid for land} + S106 \text{ contributions}$	
Malta	No formal term/concept found in any formal source	
Greece	No formal term/concept found in any formal source, as PVC is defined in Alterman (2012). However, the tools employed in PVC include real estate taxes, PPPs and the "social coefficient".	
Luxembourg	No formal term/concept found in any formal source	
Czech Republic	PVC is enabled by law, but not used by municipalities. Many actors in land use planning think that these instruments are non-operational due to administrative procedures connected with them.	
Portugal	No formal term/concept found in any formal source	
Bulgaria	A concept (term) of value capture (PVC or LVC) and definition of it is not recognised in any formal source, however, the tools for capturing increase of land value due to development processes by public authorities can be identified.	
Ukraine	A concept (term) of value capture (PVC or LVC) and definition of it is not recognised in any formal source, however, some tools can be considered as tools of PVC, i.e. " <b>share participation</b> " – the investor, who intends to build a land plot, is obliged to take part in the creation and development of engineering, transport and social infrastructure of the municipality.	It is established by law "On regulation on urban planning activity" and called "share participation". ... Ukrainian law "On regulation on urban planning activity"
Finland	No formal term/concept but there are many tools to stipulate similar type of subtopics.	
Romania	The public value of property is not legally regulated in Romania. The local and central public authorities have the liberty to establish the public value of taxation.	
The Netherlands	No formal term/concept found in any formal source	

Spain	No formal term/concept found in any formal source. However, article 47 of Spanish Constitution declares that ‘The community shall have a share in the benefits accruing from the town-planning policies of public bodies.’	
Norway	<p>There is no formal concept of Land Value Capture in the Planning and building law of 2009, but there is a clear logic of cost sharing:</p> <ol style="list-style-type: none"> <li>1) The law require local authorities to ensure that infrastructure is provided before building application can be issued (§ 18-1 18-12).</li> <li>2) The law allows local authorities to issue conditional planning permit. The pathway is to include in a juridical binding regulation plan a conditions that require the developer to come to an agreement about <i>how</i> the required infrastructure and public amenities shall be financed, and the task distribution between developer and local authority in the actual building, before the regulation plan is valid and building permit can be issued (§ 12-10).</li> <li>3) The law also regulates the use of such agreements (§ 17-1 17-7) what they may regulate and may not regulate.</li> </ol> <p>Furthermore:</p> <p>In the 2008 revision of the law, a paragraph was added to handle development of large lots with many landowners. The revision allowed the local authorities to require that the landowners must agree on distribution on land value increase <i>between themselves</i> and that they must apply the procedures of Land Consolidation Act to reach such agreements (§ 12-7 point 13 in the Planning and Building Act, and § 3 -30 in Land Consolidation Act).</p> <p>In real life, there is no cases where urban land value increase is distributed between owners within an area of development by the help of law cases. The land readjustment law has little specification of how to estimate land value in</p>	<p>Ramsjord, E.H. and A. E. Røsnes. 2013. "Land Assembly by the Aid of Land Readjustment. Norwegian Experiences in Urban Transformations." In <i>Land Management: Potential, Problems and Stumbling Blocks</i>, edited by E. Hepperle, R. Dixon-Gough, V. Maliene, R. Mansberger, J.Paulsson and A. Pödör, 85-106. Zürich: vdf Hochschulverlag an der ETH.</p> <p>Sevatdal, H. 2008. "Land Administration in Norway." In <i>Norwegian land tools relevant to Africa: Workshop Outcome Report 3-4 May 2007</i>, Oslo, Norway, edited by H. Onsrud and E. Busch, 49-75. Oslo: Norwegian Mapping and Cadastre Authority.</p> <p>E.I. Falleth and Nordahl, B.I (2011) Planning system and practises in Norway, and Nordahl, B.I and E.i. Falleth (2011): Governing the market through cooperation. Actions and actors in urban development policy, both in</p>

	cities, the law is tailored to agriculture and administration of natural resources.	Tira M et al. (eds) <i>Land Management for Urban Dynamics</i> . Maggiore Editore Italy in Norway In Tira M et al. (eds) <i>Land Management for Urban Dynamics</i> . Maggiore Editore Italy
Switzerland	Compensation of planning related advantages for balancing the planning system financially (legitimized by justice). "Cantonal legislation shall regulate appropriate compensation procedures for major advantages and disadvantages resulting from planning under this Act. [...] Planning advantages shall be compensated for at a rate of at least 20 per cent." (Art. 5 para. 1 & 1bis)	Art. 5 <a href="#">Federal Act on Spatial Planning</a> Viallon 2017
Slovenia	Yes. From 1966 the concept named: "contribution to the use of urban land". The basic purpose of this levy was to <b>capture the increased value and benefits of the real estate</b> it offers to the owner or user and is <b>the result of public investment</b> rather than investment of a specific owner or user.	Law on contribution to the use of urban land, 1966, Assembly of Socialistic Republic of Slovenia.
France	Yes: The concept is largely accepted by public administration and researcher, although it refers quasi exclusively to Henry George. It has been recognised in order to experiment some tools but finally the tools were not implemented	George, Henry. <i>Progrès et pauvreté</i> . Bruxelles/Paris ; Ligue pour la réforme foncière, 1925 Law 12 July 2010 called « Grenelle 2 » (art. 21) which has been taken out CETE Ouest (2013) <i>La récupération de la valorisation foncière et immobilière induite par les nouvelles infrastructures de transport en site propre – Étude bibliographique pour la DREAL des Pays de la Loire</i> Lacoste G. (2009) <i>Valorisation foncière et financement des infrastructures de transport</i> Note rapide N°

		477 - juin 2009 <a href="http://www.iau-idf.fr">www.iau-idf.fr</a>
Austria	No definition in public law; PVC is only used in planning contracts (civil law) by the city of Vienna	Established in 2012 by an amendment of the Income Tax Law (§§ 30); 30% of value increase as a tax in case of selling real estates
Turkey	No formal term or concept exist in formal sources, however, some tools/process can be defined as PVC.	
Hungary	There is no formal recognition of the term n any legal document. Only a kind of recommendation is existing created by the Hungarian National Bank. It contains certain value modification factors, but is only bidding for investors.	

### [3] Tools of PVC in participating countries

Country	Group/clustering by type	Tool	Application
Germany	Charges and fees	Recoupment charge for local infrastructure	Infrastructure development. Municipalities shall collect charges for recoupment of otherwise unrecoverable public expenditure on local public infrastructure (German Federal Building Code, section 127 pp.)
	Development procedure	Land reallocation	Land use readjustment and development
		Urban development measure	Urban development
		Urban contracts: Interim acquisition	Urban development
		Urban contracts: "Contract models"	Urban development. Municipalities have the option to increase the PVC by urban contracts
	Taxes	Real estate tax	Property taxation
		Real estate transfer tax	Property transactions
Baltic countries: Latvia Estonia Lithuania	Charges and fees	Planning fees and development fees are not introduced, but a lot of costs have to be covered by developer during the development process	
	Development procedure	Development agreement:	Implementation of a detailed plan may require a land for public use and cover some infrastructure costs

		implementation of a detailed plan	
		Development agreement: charge (fee) for local infrastructure	Implementation of public projects may require to cover some infrastructure costs
	Taxes	Capital gain tax (if it can be recognised as a tool of PVC at all)	Collects central government, but it is assumed that some part of central governmental budget should gain local improvements, e.g. roads, bridges, social infrastructure.
		Real property tax in Latvia. Land tax in Estonia and Lithuania	Captured by a municipality. There are intentions to recognize this tax as for infrastructure, but frequently, the amount of land tax is not essential from total budget of a municipality.
Sweden	Charges and fees	Recoupment charge for local infrastructure	Infrastructure development
	Development procedure	Development agreement: charge (fee) for internal infrastructure and since 2015 also for parts of external infrastructure	Refinancing of internal infrastructure and parts of external infrastructure costs due to urban development projects
	Development procedure	Land allocation: land transfer to developer	In the case of municipal land ownership, land allocation connects a developer and a municipality in an interdependency-based collaboration intended to jointly create an implementable development right, followed by a land transfer.
	Taxes	Capital gain tax (if it can be recognised as a tool of PVC at all)	Collects central government.
		Annual property tax	Collect by municipalities. Agricultural and forest lands are not taxed.
Italy	Charges and fees	Planning fee/ Urbanisation co-pay fee	Necessary to carry on the urban and building transformation of the territory, with the aim to relieve the community of the expenses related

			to the development of economic activities.
	Development procedure	Operational agreements: for reuse and regeneration of the urbanized territory and implementation of new urbanizations	Have the value and effects of implementation urban plans. The urban convention defines the functional obligations to satisfy the public interest assumed by the private sector.
		Negotiated development (many forms)	Mixed mechanism for urban development, to provide urban infrastructure
		Flexible building right	Urban development
		Urban development measure	Urban development
	Taxes	Tax Levy/Real estate tax	Adjustment of cadastral income. <i>Imposta Comunale sugli Immobili</i> is a municipal tax introduced since 1992, until 2008 provided the municipalities with the largest amount of income.
		“Purpose tax”	Since 2007 to finance part of the expenses to develop public assets. public works should be started no later than 2 years after the approval of the work lay-out. The tax has a duration of ten years.
Poland	Charges and fees	Planning gain	Infrastructure development and property division
	Development procedure	Public & Private Partnership (PPP)	The most suitable application is the PPP. In order to introduce the land value mechanism into the PPP arrangement, it is necessary to understand the profitability of the application.
	Taxes	Adjacency levy	A type of betterment tax.
Albania	Charges and fees	Impact fee/Infrastructure Impact Tax for construction and infrastructure projects	Calculated and proposed by central government agencies, collected by local government and paid by an investor. The tax base is the investment value or the sale price per sq.m.

	Development procedure	Intensity of Construction on condition	Implemented by the local planning authorities, through relevant programs, in accordance with the definitions of the general local plans.
		Transfer of the Development Right	Implemented through a program drawn up by the local planning authority, in accordance with the overall local plan and by agreement between the local authority and the landowners involved in the program.
		Compulsory Land Development	The local planning authority: -reallocate the right, - imposes a tax on non-development - expropriates on cases which violates public interest.
		Development suspension	Planning Authority applies suspension in proportion to the circumstances that dictate it, only when it turns out that other instruments in force would not provide a suitable solution.
		The right of transfer and of preference	*The Council of Ministers has the right to apply the transfer after the notice of the local government unit. * The right of preference is applied by the planning authority for the realization of the public interest, for real estate, private property or parts thereof, according to the areas designated for this purpose in planning document in force.
	Taxes	Real Estate Tax	Annual property tax, collected by municipalities. Residential construction: 0.05% of market value; Commercial construction: 0.15% of market value.
		Real Estate Transfer Tax	Tax applied to the transferrer: 2% of the market value /m <sup>2</sup> before registration.
Israel	Charges and fees	Impact fees/Specific infrastructure fees	Fees are charged according to municipal legislation. Owners pay a variety of fees to cover costs of

			fixing linear infrastructure such as roads, water pipes, sewage.
	Development procedure (planning)	Land Readjustment	Plots are readjusted; While this happens, land for public services is provided by private landowners to facilitate the provision of hard\soft public infrastructure.
	Taxes	Betterment Levy	Used to enable the ongoing activities of local planning commissions
Bosnia and Herzegovina	Charges and fees	Planning fees and development fees are not introduced	
	Development procedure	No tools under development procedure recognised	
	Taxes	Real estate tax	The increase of property value has been captured only through the tax. An estimate of the market value of real estate is done using the model of mass estimation of the market value of the real estate (Computer assisted mass appraisal - CAMA). Income from real estate tax belongs to the municipalities and cities.
Belgium, Flanders region	Charges and fees	Planning fees and development fees depending on regulations of local authorities (per square meters). Majority of municipalities do not have charges or fees.	
	Development procedure	Capture of value, in case of granted building rights	In kind: legal obligation of non-financial charge by obligatory realisation of all roads, sewage and other utilities needed for the development, on local level, but it differs from municipality to municipality  AND/OR  In some municipalities and cities: a taxation of the building permit is a legal possibility of a fix financial charge per m <sup>2</sup> developed floor (from instance used in the larger cities of Antwerp and Brussels)
	Taxes	Capture of <b>added</b> value, in case of	Taxation from 1 to 30% on the estimated value on regional level, applicable to the region. Draft

		rezoning to building area	decree to increase the tax brackets from 1 to 50% taxation of the estimated added value
		Capture of <b>new total value</b> , in case of renovation and extension of a building by more than 15%	Reevaluation of the annual property tax. Taxation of the estimated annual rental income (value reference of the year 1975! No updating since then), on regional level
		Capital gain tax: capture of <b>added value</b> , in case of resale within a period of 5 or 8 years	Taxation of 16,5% on the difference of purchase and sales price of a building; 33% taxation in case of building areas and sale within a period of 5 years, on regional level
Belgium, Wallonia region	Charges and fees	Specific infrastructure fees	Depending on the municipal regulations, owners may pay fees to cover public costs related to the creation and the maintenance of the road system (“taxes d’urbanisation” and “taxes de remboursement”).
	Development procedure (permit)	Indirect value capture instrument	If the construction has an impact on the collectivity, in kind obligations can be imposed to developers by municipalities, while delivering a permit (“charge d’urbanisme”).
	Taxes	Value capture in case of rezoning	One time taxation (1 to 30%) on the estimated additional value of a land resulting from a rezoning (“taxe sur les bénéfices résultant de la planification”).
		Value capture on buildings	Annual taxation on the estimated (not indexed since 1975) potential annual rental income of buildings (“précompte immobilier”).
Ireland	Charges and fees	Planning fees and development fees	Development charges are negotiable.
	Development procedure	It is subject to the negotiations between developers and local authorities. An interesting and unique aspect of this process is the Third Party appeal rule, i.e. a third party can appeal and challenge the decision.	
	Taxes	Land Rezoning Tax	Introduced by National Asset Management Agency Act 2009 whereby tax is charged at a rate of

			80% in respect of a disposal of development land where both a rezoning and a disposal took place on or after 30 October 2009. It mirrors some of the objectives of Part V such as the <b>capture of betterment value</b> and has the potential to capture a far larger share of the betterment value of the land than Part V.
Slovakia	Charges and fees	Local Development Fee	Can be established by a municipality in its territory, a separate part thereof or a separate cadastral area, by a generally binding regulation. Subject to Development Fee are land buildings in the territory of the municipality, for which a valid building permit has been issued to permit the construction (hereinafter only the "Building Permit"). The Development Fee rate ranks from EUR 10 to EUR 35 per each m <sup>2</sup> or a part thereof, of the floor area of the above-ground part of the building.
	Development procedure	Development (developer) agreement: Infrastructure betterment / Increment investments	Operate on the basis of negotiations between the municipality and developers. Contributions are most often done in the form of building a new infrastructure in proximity of the project.
	Taxes	Real estate tax	The tax system has been decentralised since 2005. The municipalities may increase or decrease these rates in accordance with local conditions. Municipalities decide on individual property tax rates based on the size of the real estate. Apart from being a source of revenue for municipalities, localities can also utilise property taxes to affect their future development either in terms

			of population growth or investments into businesses.
Croatia	Charges and fees	Infrastructure impact fee	An effort to shift a portion of the financing burden from established occupants of a community to parties associated with newly developing property.
	Development procedure	No tools under development procedure recognised	
	Taxes	No real estate/property tax or land value tax	
		Local rate (utility charges)	City or municipal taxes one-time fee/tax
		Annually recurring tax	Tax on holiday houses, tax on the use of public land. These taxes are not influenced by changes in land values, tax rates are determined by a decision of the representative body of the local government unit.
Real estate transfer tax	Taxed capital gain		
United Kingdom: England and Wales	Charges and fees	Community Infrastructure Levy	A local charge that local authorities can choose to charge on new developments in their area to fund infrastructure.
	Development procedure	Planning Obligation: legal agreement on development	Agreement between an applicant (developer) seeking planning permission and the local planning authority, which is used to mitigate the impact of new home on the local community and infrastructure. Must be directly relevant to the proposed development.
	Taxes	No taxation related to real estate/property	
Malta	Charges and fees	Development Planning Fee	As part of Development Application Process
	Development procedure	Infrastructure Service Contribution	
		Planning Obligations	
Taxes	Property Transfer Tax	Upon transfer of an immovable property, the person transferring the property is subject either to a property transfer tax (PTT) or "income tax on capital gains". PTT is	

			calculated at the rate of 12% of the transfer value of the property. Various exemptions apply.
Greece	Charges and fees	Real Estate Fee – TAP (municipal duty)	Collected at the municipal level, could also be considered as municipal tax 0.025-0.035% of the “objective” value of the real estate property
	Development procedure	Public-Private Partnerships (PPP)	Negotiated between developer and government on a case-by-case basis
		“Social coefficient”	Increased construction coefficient in places where there is an increase of the urban zone in “Zones of Social Coefficient”. The increased construction coefficient is divided between the developer and the public, as decreed on a case by case basis (each case being a new urban zone plan).
	Taxes	Uniform Real Estate Property Tax – ENFIA	Annual payment ranging between 0.0037-11.25 euros per square meter, depending on “objective” value of real estate property
		Real estate transfer tax	Tax of 3.09% (on the higher between market and “objective” value of real estate property, applied to constructions before 2006. Real estate VAT of 24% (on the higher between market and “objective” value of real estate property, applied to constructions after 2006.
		Special Real Estate tax	Tax of 15% of the “objective” value of the property imposed in cases of inadequate disclosure of the ultimate owner of the property (usually with the use of shell/offshore entities).
Luxembourg	Charges and fees	Planning fees and development fees are not introduced	
	Development procedure	<b>Social Renting</b>	Owners of the Under used private urban land plots will be offered to rent out their land to Agence

		based on a voluntary rental agreement on private land	immobilière social (AIS) which will place portable dwelling.
		<b>Affordable ownership</b> based on temporary ownership of either a house or apartment on municipal land	Residents will be able to have temporary ownership of a house or apartment from this organization. The temporary owners will be able to sell back their property only to Société Nationale des Habitations à Bon Marché (SNHBM). The initial price is 30% to 40% lower than the market price because the value of the land is not included and remains in ownership of a municipality.
	Taxes	No taxation related to real estate/property	
Czech Republic	Charges and fees	Planning fees and development fees are not introduced.	
	Development procedure	“Planning contract”	In the phase of the creation of urban plan or its changes, specifying financial contribution of developers on public infrastructure establishment or change (including green areas, schools).
		“Planning/development contract”	In the phase when a developer asks for the consent with his project and urban plan allows development there if the project requires modifications to the existing or the construction of a new transport or technical infrastructure.
		“Agreement on parcellation”	In the phase of the creation of urban plan or its changes if more equitable division of development benefits among landowners is required.
		“Civil-law contract” (in Prague 7 City District	In the phase when a developer asks for the consent with his project and urban plan allows development there. Civil-law contracts of cities and developers not supported by building law, but uses systematic approach of PVC including official methodology.
Taxes	No taxation related to real estate/property		

Portugal	Charges and fees	Special contribution to the municipalities of Lisbon, Porto and Loures and to the entity EXPO98 due the property valorization emerging from some public infrastructures (e.g. road and rail systems, science and technology parks). The special contribution levied is charged once on each building. Tax Base: The difference between the value of the building after and before the construction of the infrastructure, corrected by application of the coefficients of devaluation.		
	Development procedure	No tools under development procedure recognised		
	Taxes	Municipal Tax on Real Estate	Based on the tax value of buildings. Taxable property value is determined by valuation, annually and based on the type of building.	
		Additional to the Municipal Tax on Real Estate	Only applicable for those with real estate values upper 600 000 EUR. Real estate value is calculated/assessed.	
		Municipal Tax on Real Estate Transmission	A tax levied on onerous transmissions of real estate (buildings).	
		Tax on the gains obtained with the real estate sales (Capital Gain Tax)	Tax charged whenever the sale of house generates gains. The taxable amount corresponds to half of the capital gains. The gains with real estate sales are calculated by making the difference between the value of the sale of a property and the value of the acquisition of it, if considering deduction.	
Bulgaria	Charges and fees	Planning fees / Development fees are not formally enacted. Costs incur to the developer during the process stages (for preparing initial documentation, provision of schemas, etc.)		
	Development procedure	Development agreement: as a tool for implementation of development project design	According to Spatial Development Act, an implementation may involve a clause / agreement for particular improvements of local public infrastructure.	
	Taxes	Real Estate Tax	The methodology for assessment of particular components related to PVC has a <b>substantial potential to be properly upgraded!</b> Local taxes are charged by the municipalities, according to the Local Taxes and	

			Fees Act. The MC determines the tax rate within a range of 0.1 to 4.5 per mille of the “tax assessment” value of the property (50% reduction is allowed when the property is a main residence of the owner). Tax valuation/assessment of the immovable properties (buildings and land) is determined by municipality experts applying standards according to Act.
		Real Estate Transfer Tax	A local tax that is due upon the acquisition of real estate object. The tax rate ranges from 0.1 per cent to 3 per cent on the amount which is higher: (i) tax assessment value; (ii) contracted purchase price. In addition to real estate transfer tax, the transfer deal will trigger notary fees and registration fees.
Ukraine	Charges and fees	Development fee	Investor or owner can order and pay by themselves detailed plan for separate land plot for own money for land development, if a detailed plan was not carried out before.
	Development procedure	“Share participation”: funding of a developer to the local municipality based on mutual agreement. The agreement defines: the amount of payment and terms (one payment or shares according to the established schedule).	The amount of share participation in the development of the infrastructure of a municipality established by the local self-government body cannot exceed the maximum determined in Law. It is determined taking into account the total estimated cost of construction of an object, determined in accordance with construction norms, state standards and rules.
		Lease agreement on public (municipal or state) land with possible creation of buildings	Payment for leased land collected by municipalities cannot exceed 12 percent of the normative monetary value, which is assessed value and the payment to public budget depends on it – if the value

			increases, the payment increases properly.
	Taxes	Annual real property (without land) tax established by Tax Code	Collected by municipalities, do not taxed apartments to 60 square meters and do not taxed houses to 120 square meters. The amount is defined by municipalities and the rate of tax is established in Tax Code.
		Land tax	Collected by municipalities. Agricultural and forest lands, public roads, cemeteries, land for diplomatic missions, land for religious buildings are not taxed. The amount depends on normative monetary value. The rate of tax is established in Tax Code and depends on purpose land use
		Income and capital gains	Collected by central government.
Finland (Covers not all cases and situations)	Charges and fees	Responsibility to give street area free to municipality	In detail plan areas; maximized if in an urban readjustment area.
		Infrastructure charge	in detail plan areas, max. 60% of value increase.
		Development fee	In development area according to land use and building act.
		Land use agreement fee	in law no limits for fees, in practice it seems that for non-professionals the 60% limit of value increase as with infrastructure charge.
		Responsibility to build all infrastructure needed (+ planning agreement charges)	In private detail plan areas in shore and holiday areas
		Cut of value increase in areas of first detail plan	In expropriation, max. for 7 years.
		Charge based on benefits from a state infrastructure	In expropriation proceedings.
		Fee/charge to connect public water and wastewater lines, and	Connection charge normally obligatory and covers also building

		district heating pipeline, and local waste collection pipeline; and annual fee	costs of the infra, annual fee use and renovation/renewal costs.
		Responsibility to build roads and pipelines by landowners themselves	In rural areas.
		Compensation of value decrease (negative PVC)	In expropriation proceedings.
		User fees (road toll) and special taxes (gasoline)	User fees not in use but special taxes like gasoline exist.
	Development procedure	Land allocation: land transfer to developer	In the case of municipal land ownership a land allocation connects a developer and a municipality in an interdependency-based collaboration intended to jointly create an implementable development right, followed by a land transfer.
		Land allocation: land sale to developer	In sales contract may be agreed e.g. on price level of apartments and if that is exceeded additional fee based on contract paid to the municipality.
		Risk (cost and profit) division	In land use and development contracts, in alliances and development companies may be agreed.
	Taxes (not earmarked; if value or income based means that both positive and negative value/income changes affect)	Property transfer tax	Sales tax collected by central government.
		Capital gain tax	Collected by central government.
		Inheritance and gift tax	Collected by central government.
		Property tax	Annual value based to municipality.
		Income/company tax	If the income of business changes the annual tax changes too, but also if the public financial situation betters or weakens the tax rates (of all kind of taxes) may be changed;

			government and municipality (+church).
Romania	Charges and fees	Planning fees / Development fees are not formally regulated	There are some costs supported by the developers during the process (for preparing initial documentation, final documentation and provision of protocols).
	Development procedure	Development agreement: as a tool for implementation of development project urbanization design	According to Spatial Development Plan – this is a general and mandatory plan for the urbanization of a city. Implementation may involve a clause/agreement for particular improvements of local public infrastructure.
	Taxes	Property and land tax	Collected by regional governments and municipalities.
The Netherlands	Charges and fees	No	At least not for the purpose of value capturing. Active land policy is used.
	Development procedure	No	
	Taxes	No	
Spain	Charges and fees	Development fee	Collected by municipalities
	Development procedure	Land readjustment	Prescribed in large public infrastructure, on-site public infrastructure, inclusionary zoning of affordable houses and public share in betterment
		Complementary commitments	Negotiated with municipalities
	Taxes	Capital gain tax on land or real property.	Collected by regional governments
		Property transfer tax	
		Property tax	Collected by regional governments and municipalities
	Land value tax	Collected by municipalities	
Norway	Charges and fees	Up-front cost recovery contribution	Cost distribution must be agreed before regulation can be adapted, if the local authority require this.
	Development procedure	Regulation plan to reach an agreement	Private developers assemble lands and forward a regulation plan (juridical binding detailed zoning plan) for handling by the public planning administration and the city council. Thus, the planning

			administration can amend and change the proposal, and the city council is entitled to approve, dismiss and approve with changes.
	Taxes	Property transfer tax	Collected by central government. Applies to all transactions of land and property.
		Property tax	Collected by municipalities: Voluntary tax, levels are regulated by central government. Out of 422 municipalities 371 has property tax, but only 260 municipalities have property tax on dwellings and summerhouses.
		Capital gain tax	Collected by central government. Applies to income from property (rentals etc.).
Switzerland	Charges and fees	Compensation: Compensating unearned advantages to cross-finance undeserved disadvantages (expropriation, rezoning, etc.)	<p>Major advantages resulting from planning are mandatorily to be compensated (by at least 20%). Cantons are in charge of setting up implementation law until 2019. Serious consequence in case of non-compliance. Most cantons take 20-30%; Minority takes more. 60% has been authorized by Federal Court. Revenue to be used for expropriating compensations, rezoning and other planning-related measures. Established in 1979, reinforced in 2012/2014. Approved by Swiss electorate by 64% votes in favour.</p> <p>Issue in practice: insufficient land valuation system</p> <p>Special characteristic: planning related added value starts from farmland price (category of expected development land does not exist. Speculation on farmland strongly limited.</p>

			Art. 5 <a href="#">Federal Act on Spatial Planning</a> and equivalents in the 26 cantonal planning laws
	Development procedure	No tools under development procedure recognised	
	Taxes	No taxation related to real estate/property	
Slovenia	Charges and fees	<p>In Slovenia there is a legal obligation to capture the Public Value in private-sector RE projects and uses; two main instruments are used:</p> <p>a) <b>Public utility fee</b>, implemented regularly from 1959</p> <p>b) <b>Charge for use of building land</b> (urban land tax); <b>capturing increased value</b>; implemented regularly from 1966</p> <p>Both financial RE obligations are due elsewhere, not only in the city/urban land.</p> <p>Method of measuring increased value is “administrative pointing system”, methodologically different at each municipality, not related to market value.</p> <p>In preparation is new system of real estate ad valorem tax (based on already established</p>	<p>Add a) <b>Public utility fee</b> (based on several parameters calculative costs for the utilities / urban infrastructure - secondary and tertiary, but not primary); captured only once; the contribution of investors to the cost of current fitting out buildable land; financing the extended reproduction of utility networks, facilities and devices. <b>Previous public investments</b> in municipal infrastructure were a specific financial category »<b>increased value as a result of public investment</b>» and were not part of investors' contribution to the cost of current fitting out buildable land.</p> <p>Add b1) <b>Charge for use of building land</b> (urban land tax) connected to the <b>benefits which improved land</b> (by urban infrastructure) <b>provided to the owner</b> or the user of that land; captured yearly. In Slovenia the increased value from benefits of real estate, which is <b>provided by public investments</b> (not the investments of the owners or users), for the owner or user are captured. Captured value represents from 3% (small communities) to 13% (large communities) of total municipality incomes.</p> <p>Add b2) Local governments have freedom (financial ability and</p>

		state mass valuation system) which will replace b) presumably in 2020.	autonomy) in shaping public value capture, providing their own financial sources for systematic financing of their original activities (including urban infrastructure) based on their constitutional position and also defined by supportive legislation.)
	Development procedure	Municipality financial flow: → investment → <b>increased value</b> → convenience (benefits) → <b>capturing</b> convenience (benefits) → new investment.	From 1998 captured increased value not used only for investment in urban infrastructure but for financing general municipality activities.  From 2003 charging for use of building land also at unbuilt but buildable land; active land policy; incentive for increasing supply of buildable land and stabilizing market prices.
	Taxes	<b>Value added tax</b> (VAT) for new-built objects and unbuilt building land; Real Property Transaction Tax (2 % of the purchase price) for not new objects; <b>Personal Income tax</b> from the sale of real estate is considered as capital gain if it was held as a private asset for less than 20 years (tax rate depends upon the years of ownership of real estate before disposal)	...
France	Charges and fees	Development tax	Municipalities can levy the tax from the promoters with a rate which can vary from 1% to 5% the tax aims at financing all kind of public capital spending

	Development procedure	Planning contribution in case of ZAC and PUP (special convention between developer and Local Authorities)	In case of a large project they are implemented to finance part of public equipments
	Taxes	Increased development tax	municipalities can increase the tax rate on an identity perimeter when public equipment appear too costly, the rate aims at covering the exact cost of public equipment, up to relationship and proportionality o
		Increased bases for unbuilt lands declared buildable by local regulation	Land owner have to pay a surplus property tax when he owns an unbuilt land which has been declared buildable on the local master plan
Austria	Charges and fees	Provision fees	General provision fees for supply with public infrastructure; in some states already for yet undeveloped but zoned land possible
	Development procedure	Planning/urban contracts	Framework for planning contracts is regulated by independent state legislation; reinvestments in public infrastructure according to increasing values are only possible in Vienna so far
	Taxes	Real estate transfer tax	Property transactions of real estates, that experienced a value increase (esp. by zoning) need to be taxed (Income Tax Law)
Turkey	Charges and fees	Recoupment charge for local infrastructure	Municipalities collects a recoupment charge for local infrastructure fee for street paving, drainage, and other improvements. These charges are taken after instalment of the roads, pavements, etc., and cannot be more than 2% of the tax value of the property.
	Development procedure	Land Readjustment	In land readjustment, land deduction from each landowner is taken in consideration of the value increase arising from the project to provide land for primary and elementary

			<p>schools, roads, squares, parks, car parking spaces, children playgrounds, green areas, religious places, and police stations within the project boundary. Land deduction is calculated by the ratio of infrastructure areas to total project area and could be at max 40% of the total LR area. If more land is needed, the difference is expropriated from landowners, and the costs are covered by the LR authority. The law regarding the LR in Turkey is the Building Law (No. 3194, dated 1985). Also the “Regulations on Land Readjustment (dated 1985)”, details the principles of LR implementation. In Turkish LR, it is assumed that land deduction is taken in consideration of the value increase however the “real” value increase is not calculated and all calculations are based on parcels area.</p>
		<p>Voluntary plan implementation (non-negotiable developer obligations)</p>	<p>The voluntary method is a process for the implementation of urban plans. When a landowner or a developer apply for building permission for a parcels, the municipalities ask them to cede the areas that intersects the infrastructure areas in the development plans. Otherwise they should wait for a land readjustment project. No compensation is given to the landowner for the parts that are ceded. In general when landowner’s contribution is above the 40% of his/her parcel, then they do not choose the voluntary method. They prefer to wait for a LR project in which the maximum land deduction is 40%. The law regarding the voluntary method is the Article 15</p>

			and 16 of the Building Law (No: 3194, dated 1985).
		Negotiable Developer Obligations	Negotiable developer obligations are based on protocols made directly in collaboration by municipalities and developers and have no legal framework. In this mechanism, the developer is informally asked for contribution in return for approving the project. This contribution could be land for social and technical infrastructure, on-site or off-site infrastructure areas, etc. Negotiable developer obligations could be used in different urban development situation such as single parcel development, large urban renewal projects or PPP projects.
		Other Tools (As LVC is not defined by law, some other tools/processes could be defined as value capturing such as plan notes, expropriation etc.)	Plan notes: The municipalities could negotiate with the property owners and provide additional social and technical infrastructure, by using the notes of the spatial plans. Expropriation: In partial expropriation, the increase/decrease in the value of the remaining parcel is deducted/added from/to the expropriation payment.
	Taxes	Real estate tax	Paid annually on the tax values of land and buildings at rates ranging from 0.1 to 0.3 %.
		Income Tax	Paid for the income from immovable property and rights (rental income).
		Inheritance and transfer tax	Tax paid when the owner changes.
		Capital gain tax	Gains arising from the sale of a real estate within five years after acquisition are subjects to capital gains tax. Capital gain tax is regulated by the Income Tax Law (No: 193, dated 1960).

Hungary	Charges and fees	Planning fees and development fees are not introduced, but a lot of costs have to be covered by developer during the development process	
	Development procedure	Planning/urban contracts	Urban Planning and Development Law (1996. XXI.) Act LXXVIII of 1997 on the formation and protection of the built environment Act CXXXIX. of 2018 on urban planning of priority areas in Hungary
	Taxes (may be a tool of PVC)	Personal income tax	If the owner sells the property at a higher price within 5 years of the purchase, 15% of the difference should be paid
		Municipal Tax on real estate	This tax is basically different in each municipality, annual value based
	Property fee	It should be paid upon property purchase. In the case when another property was purchased before that only 4% of the difference should be paid	

#### [4] Terminology of PVC

Term	Definition	Notes
Public value capture	Land value increase captured by public authority	Interim definition after discussions in WG2 meeting in Haifa  VC can be also negative! Whole matter associates to the question how public costs are financed. There are significant differences among countries in their systems and ideologies.