

Urban planning and governance of a smart city

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Smart city – definitions

Smart cities

combine various technologies to reduce negative impacts on the environment and **offer citizens a better quality of life**

not simply technical solutions → **organisational change**

- in the administration of the city
- in society itself

making a smart / intelligent city → **multidisciplinary solution** that links

- city management
- innovative suppliers
- creators of national and EU strategies
- academia
- civil society.

EU digital agenda


Smart city

one of the concepts in the application of the principles of **sustainable development in the organization of the city**

- based on the use of modern technologies in order to **improve the quality of life and effective governance**
- the widest application lies in the field of energy and transport, which can be more effectively addressed by **deploying appropriate information and communication technologies (ICT)**
- can be also applied to e.g. water management, waste management, e-government or crisis management.

Smart City Concept Methodology, Ministry for Regional Development of the Czech Republic

Smart city – grey, green and „blue“ infrastructure

	technology ICT		governance PLANNING
GREY INFRASTRUCTURE		GREEN INFRASTRUCTURE → ecosystem services	HUMAN („BLUE“) INFRASTRUCTURE
<ul style="list-style-type: none"> • transportation telematics • car sharing • smart public transport 	<i>smart mobility</i>	<ul style="list-style-type: none"> • greening transportation system • walking and biking 	<ul style="list-style-type: none"> • city of short distances
<ul style="list-style-type: none"> • internet of things • pay-as-you-use • on-line health monitoring 	<i>smart services</i>	<ul style="list-style-type: none"> • optimized plant watering 	<ul style="list-style-type: none"> • city of easy access
<ul style="list-style-type: none"> • renewable resources • combined production of electricity • smart grids • micro-networks • smart lighting • smart monitoring 	<i>smart energetics</i>	<ul style="list-style-type: none"> • natural cooling by greenery 	<ul style="list-style-type: none"> • compact cities • robust / resilient infrastructure of cities

Smart sharing cities

- *as a choice / way of life*

delivery of goods

- logistic centres outside cities → delivery corridors
→ delivery hubs → individual supplies to homes
- brownfield shopping centres
- drone (UAV) ports at homes?

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shared means of transportation

- effective combination of shared bikes / cars & public transport
- B+R at transit stops, adjacent bike corridors

shared working places

- many jobs not attached to particular place / office
- homeworking plus meeting places

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- *as solution of problems*

- *as necessity*

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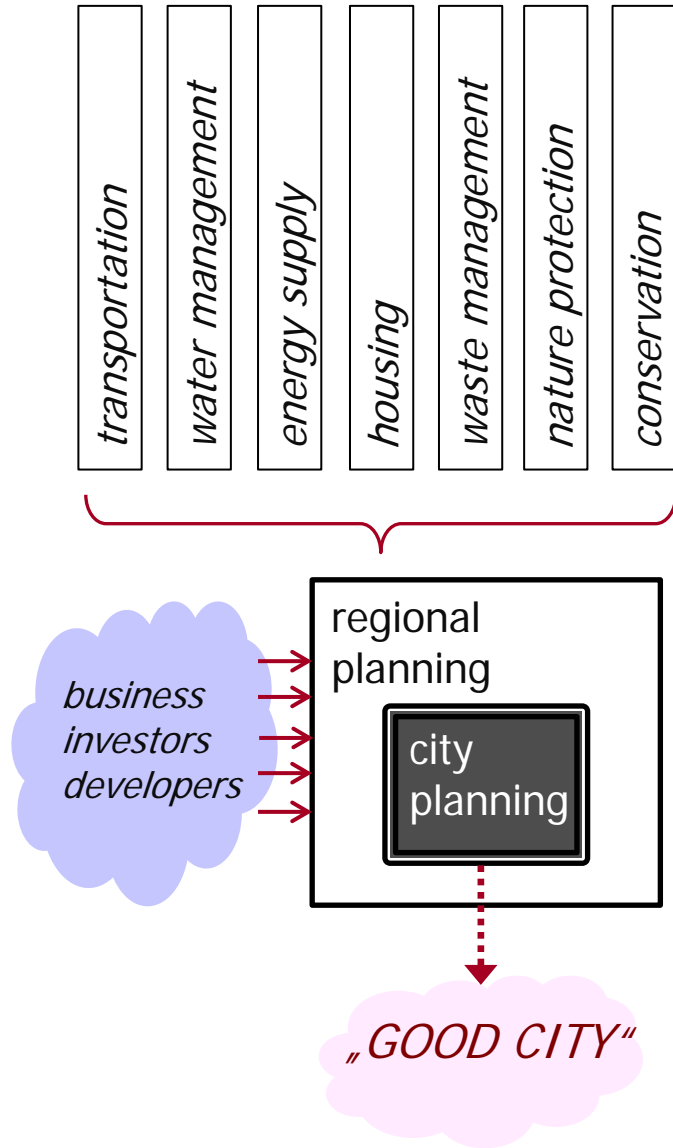
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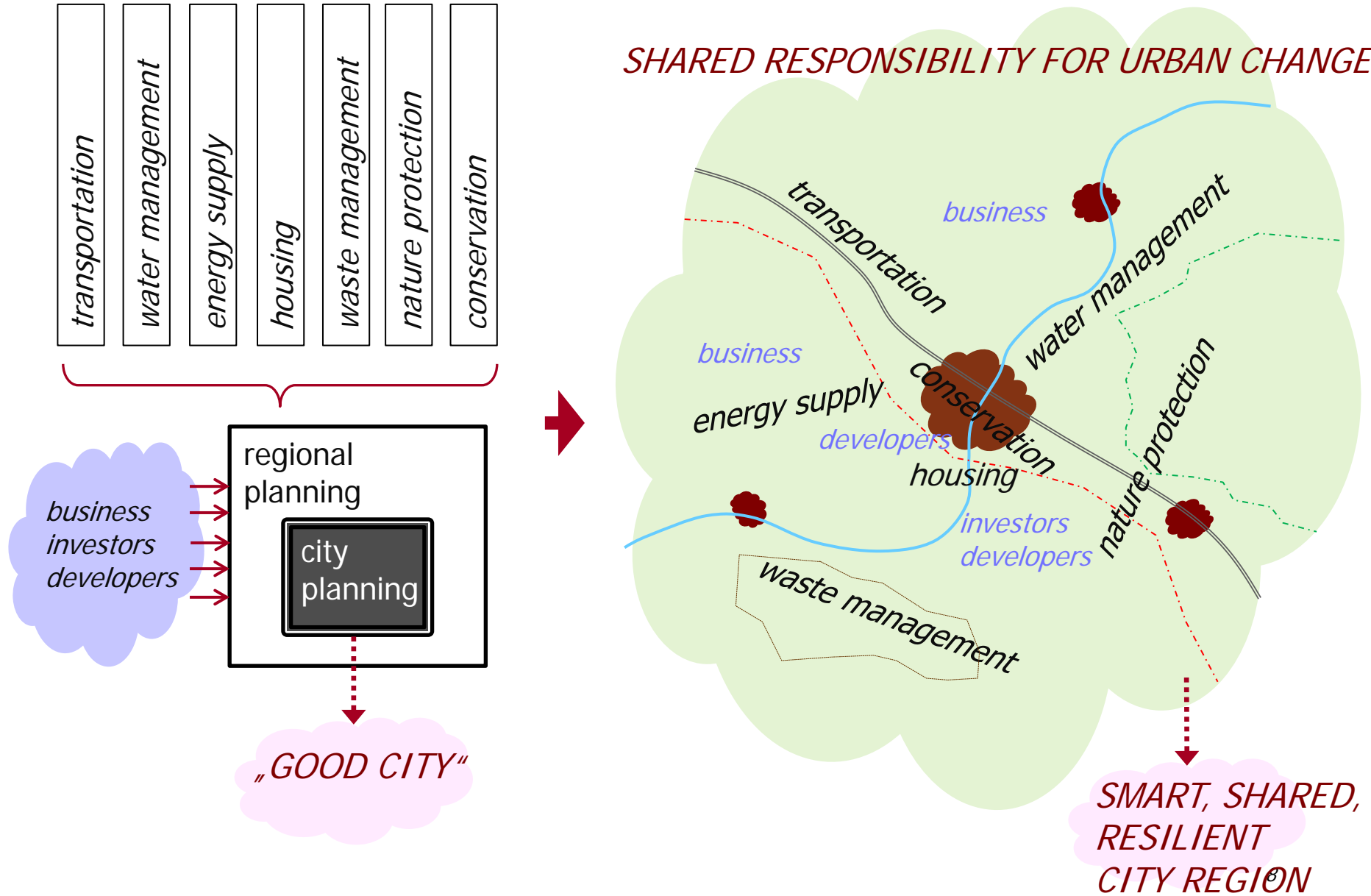
shared living spaces

- affordable response to the challenge of exploding housing prices

Implications for planning



Smart / sharing cities = shared spatial planning



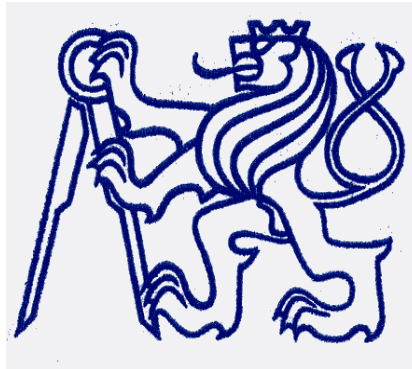
→ Change of planning paradigm

shared governance:	departmental government	→	spatially responsible governance
shared jurisdictions:	urban / regional planning by jurisdictions	→	multilevel spatial planning by functional areas
shared planning:	planning by planners and administrators	→	spatial management by all stakeholders

preconditions

- *shared data*
- *shared responsibility*

thank you



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