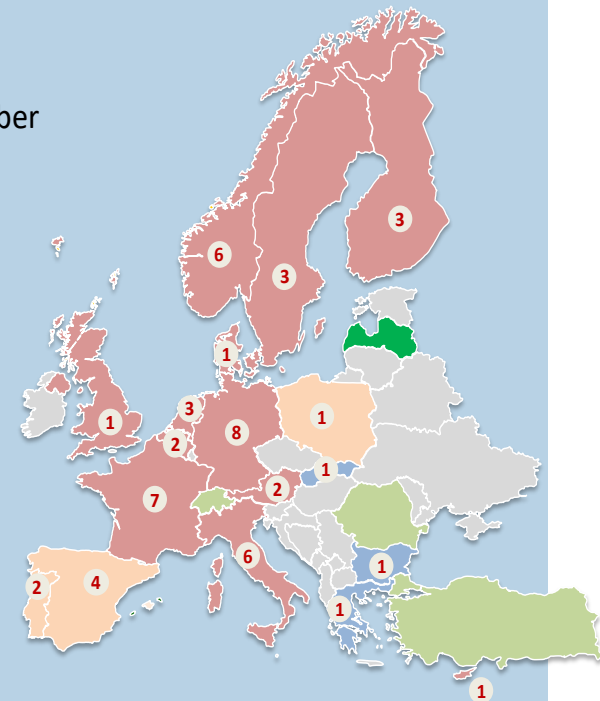
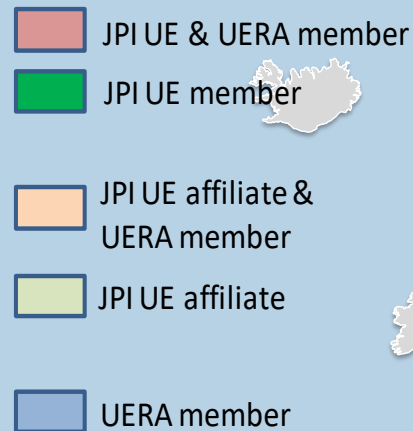


UERA

- 53 Research organizations active
- 18 European countries

UERA is closely linked to JPI
URBAN EUROPE



Discussion – survey results and first interviews (June/July 2020)



- Survey among UERA members, 9 respondents
- Topics such as definition of smart cities, need for standardization, importance of research and controversies



- Additional 2 interviews with members of standardisation committees on the need and possibility of standardisation for a urban transformation.



Integrated Smart City Perspectives

Definitions of Smart Cities:

- A city whose **infrastructure, technology, services and green solutions** are at the **service of citizens** and contribute to enhance **human well-being**
- smart city includes all aspects of smartness - considering **social, environmental, and economic** aspects with some **focus on energy**, on **participation on digital services**, on **public transportation**, on **integrated data platforms**
- it is a concept for a **strategic approach** with a **long-term perspective** towards **intergrated urban development**; aims at **efficient urban planning/administration** with the help of **real time data, sensors and interconnected devices**; ideally takes **behavioural, social, economic and cultural** aspects into account.
- **Connectivity infrastructure and innovative use of information**
- A city embraces **digital technologies** to **solve urban problems** and **improve the quality of urban life**
- Smart cities is a concept that presents **technological solutions to multiple urban crises** - and it does so within the **current dominant economic logic**.
- a city that **responds** well to the **needs of its citizens**
- A city which makes **use of innovative technologies** and of urban infrastructures to **improve urban quality of life, urban environmental quality and efficiency of city services**, delivering a **range of economic, environmental and social benefits** to **many stakeholders**.
- Smart is wider than **digitalisation of services or infrastructures**, it **enables sustainable development and new processes for inclusion and participation**.

S Integrated Smart City Perspectives

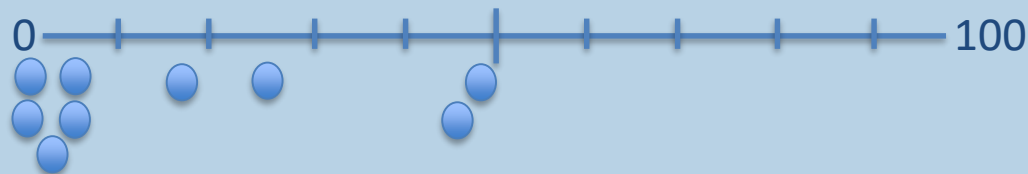
Smart city is a	Components	Comprising	Objective	Context
city	infrastructure	Connectivity information	Improve/enhance human well-being, quality of urban life, urban quality of life urban environmental quality	Long-term perspective to integrated urban development
concept	technology innovative technologies technological solution	Sensors interconnected devices integrated data platforms	efficient urban planning/administration efficiency of city services	dominant economic logic
strategic approach	services responds	public transportation energy Digital services	solve urban problems multiple urban crises	
	green solutions	social, environmental, and economic aspects	technological solutions to multiple urban crises	
	interconnected devices	behavioural, social, economic and cultural aspects	a long-term perspective	
	digitalisation of services or infrastructures	real time data innovative use of information	at the service of citizens Respond to needs of citizens	
			Deliver economic, environmental and social benefits to many stakeholders	
			sustainable development	

S

Controversies

Smart cities
are a concept
to achieve
sustainable
development

Smart cities are a
concept that
replaces
sustainability



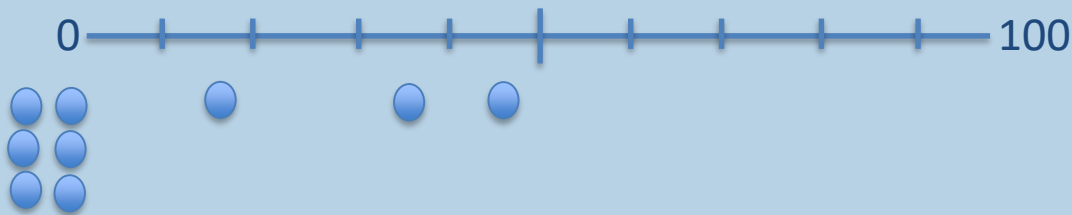
Average	15.1
Sample Variance	419.6
Sample Standard Deviation	20.5

S

Controversies

Smart city is more
than data and
digitalization

Smart city is all
about data and
digitalization



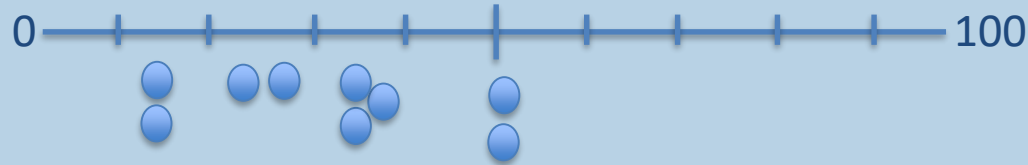
Average	10.2
Sample Variance	332.2
Sample Standard Deviation	18.2

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Controversies

The data driven approach to urban planning will support sustainable development of cities and communities

The data driven approach to urban planning is only beneficial to a few IT companies



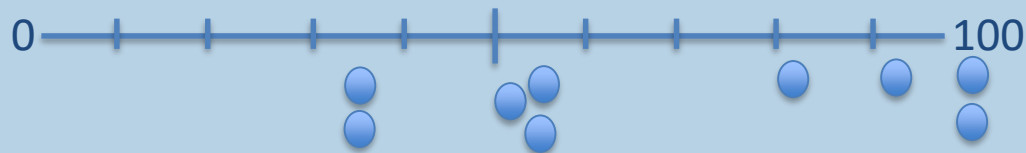
Average	31.8
Sample Variance	191.7
Sample Standard Deviation	13.8

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Controversies

Smart city is just
a (replaceable)
label for city
marketing

Smart city is a
holistic concept for
sustainable urban
planning and
transformation of
society



Average	68.1
Sample Variance	634.9
Sample Standard Deviation	25.2

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The relative relevance of topics for Smart City

Digitalization of city services	1,7
Inclusion	1,4
Integrated infrastructure planning	1,8
Social environmental justice	1,4
Circular Economy	1,0
Holistic urban planning	1,4
Data-driven approach to urban planning	1,4

Good governance	1,2
Nature-based solutions	1,2
Security	1,3
Surveillance	1,0
Decarbonisation of the society	1,3
Alternative economic concepts	0,9

S

National Smart City Strategy

Different national Smart City Strategies/Roadmaps/ Charta exist in the EU member countries. The 9 respondents knew theirs mostly **rather well**. And found them in majority **rather relevant**.

Nevertheless missing point or weaknesses were identified such as

- an **umbrella** strategy or a **holistic planning of smart city strategies**
- smart city is **an enabler**, not the end product.
- unadressed questions on enabling **to achieve sustainability or economic growth**
- too much focus on **digitalization** negating other means such as “smart” material
- lack of clear definitions;
- lack of **governance**



International Smart City Frameworks

On the other hand international frameworks dealing with smart city were rarely known and named as

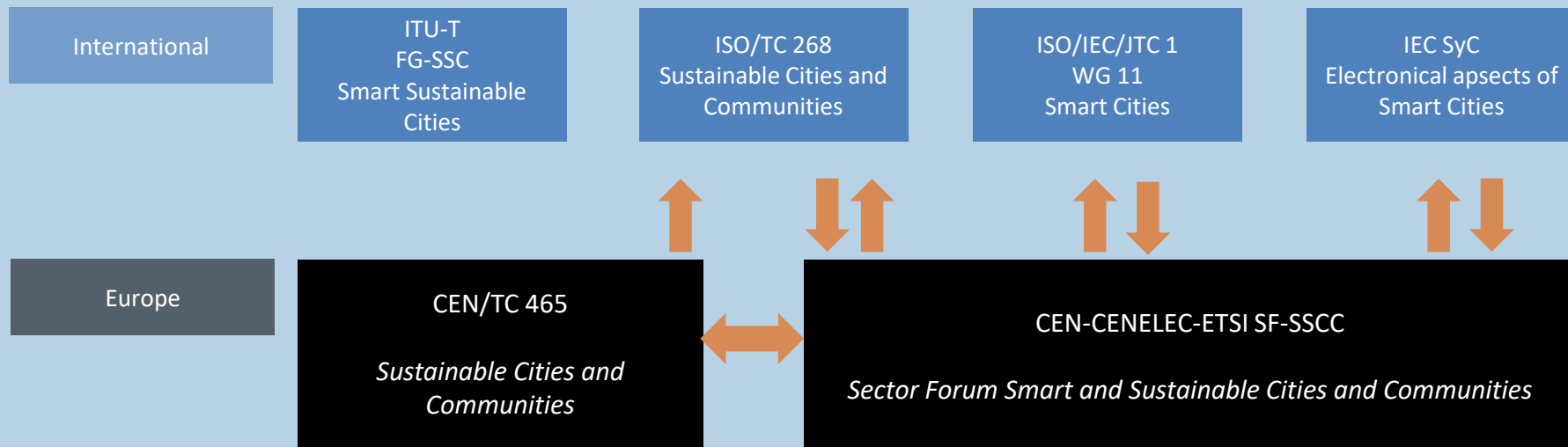
➤ *SET Plan, EERA JPIS Smart City, G20 Global Smart City Alliance on Technology Governance*

or the topic rather included in umbrella strategies such as

➤ *UN Urban Agenda or EU Urban Agenda or **international standards***

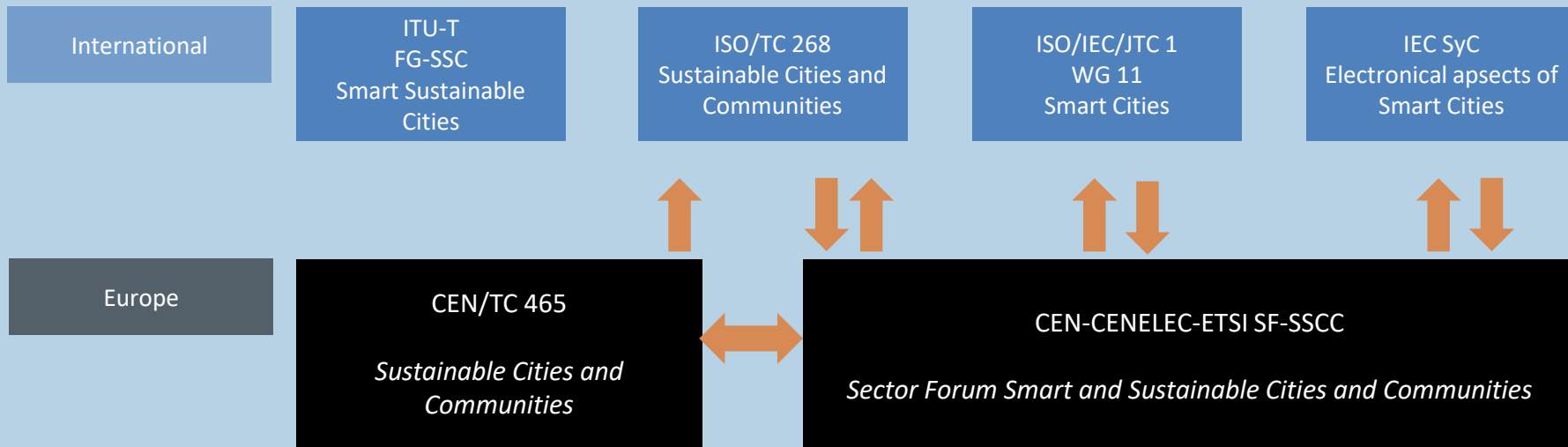
Regarding the necessity of a international agreed policy framework on smart cities the respondents varied in their view and highlighted the local **differences in the EU and among the different continents**. But could help to create **synergies, learning and support decarbonisation**. One respondent underlined the need for a common digitalization strategy.

Standardisation – landscape international and European





Standardisation – landscape international and European



Diverse landscape yet only 4 respondents have been in contact with international standards and 2 respondents named mainly the indicator standards in ISO/TC 268. One respondent underlined the use of national standards on smart city.

S

Standardisation – relevant for Smart Cities?

Different opinions in regard to the necessity give an picture of very relevant to rather not relevant.

- Cities are **different and have diverse challenges and solutions**
- its not a matter of smart cities its a matter of **quality standards** which is of interest for costumers and - lets say - economic alignment which is of interest for companies
- If we are discussing **connectivity and infrastructure**, standardization is a necessary part.
- It's difficult to have **standardisation across countries**. But it helps with **inclusion**.
- Standardisation will not be able to capture the **complexity of the urban contexts** globally. Standards may be possible at **smaller scales**.
- in order to agree on certain standards regarding **security and privacy**
- **To provide common metrics for measuring/evaluating/tracking process in increasing smartness across different urban sectors**
- **Standards can be an placeholder when regulations** are not fast enough (sustainable development). **(Technology) interfaces should be interchangeable** to allow for the best solutions. As well **exchange brings different planning cultures** words wide **together**.



Standardisation - value

Interviewees from one international city network and one major German city

- They see both the value for standards:
 - Understanding them as a chance rather than a threat
 - Supporting the overall the sustainable transformation of cities and communities.
 - That standards can act a place holders when national or international frameworks are missing.
 - Because they can be adapted to the context of cities and communities
- They have different concepts:
 - one seeing sustainable development as the overarching principle while
 - the other seeing digital, sustainable and resilient on one level with shifting priorities depending on the context.

Further interviews to come in 2020.

Discussion

- Can standardization support the transformation of our cities?



Interviewee 1: Yes, it might even exhilarate the process on an international basis, providing a blueprint which can be adapted.



Survey respondent: Standardization is neglecting the contextual setting

- What term is most appropriate to describe a “smart city”?
- In your opinion, how relevant is standardisation particularly for Smart Cities?

Thank you for your interest

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