

Smart Cities: a Brief Introduction

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1. What are we talking about?

The contributions gathered in this dossier are a remarkable input into the analysis of a topic which, while being fashionable enough, is everything but easy to grasp.

Some will even doubt it really exists. For them, “Smart city” could simply be a convenient way of naming the postmodern -or post-postmodern- city. It could be just a label for something towards which all cities would be moving, at different paces.

What is certain is that there’s no such thing as a consensus on what the phrase means exactly: Clara Isabel Velasco Rico (*Smart Cities for All: Usability and Disability Bias*) stresses that especially in her paper¹. Nevertheless, all the contributions seem to concur with one idea: that the essence of “smart cities” must not be reduced to their technical dimension, in other words to their digital orientation: Daniele Marongiu (*The Ideal City: Space and Time (From the Renaissance to Smart Cities)*) and Diana Santiago Iglesias (*From Smart Cities to Smart Communities: a Conceptual Approach*), in particular, insist on that idea.

Personally, I tend to think that, even if it does not exhaust the concept’s meaning, what the “smart cities” are is primarily due to their concrete functioning. It seems to me that their “smartness” first and foremost resides in various developments concerning their infrastructures and the amenities they provide: more sophisticated, more digital, potentially more efficient, more interconnected. Then, it includes two other lines of evolution: one is the overwhelming presence of data, which really are the fuel of smart cities, the other one impacting the governance, potentially more transparent and communicative². I believe the

definition I adhere to is similar to the one Diana Santiago Iglesias (*From Smart Cities to Smart Communities: A Conceptual Approach*) and Lorena Alonso Suarez (*La aplicación de la tecnología blockchain en las ciudades inteligentes: hacia una gestión urbana descentralizada e inteligente*) have in mind.

To some extent, it seems to me that we, lawyers, tend to load the smart cities reality down with an excess of significance, or, rather, to attach to it the sense of an utopia in which cities are more and more devoted to the people’s well-being. On the other way, we also feel that things are a bit more complicated than that.

What is certainly true is that the “smart cities” evolution coincides with a series of contemporary developments in cities functioning, which is constantly made more sophisticated and more capable to solve a range of the issues cities have to cope with. Also certainly correct is the idea, expressed in particular by Tomas Font i Llovet (*La ciudad inteligente como actor global*), that these developments are associated with a contemporary ‘renaissance’ of cities.

That said, as Diana Santiago Iglesias (*From Smart Cities to Smart Communities: A Conceptual Approach*) rightly points out, the evolution towards “smartness” is not restricted to urban contexts: there starts to exist smart non-urban territories.

Indeed, things are not too simple!

2. It exists: and then?

Probably the best idea to have in mind is that the evolution towards “urban smartness” is situated at the crossroad of three historical moves. ‘Renaissance’ of cities, i.e. cities retrieving a strategic position in our public apparatuses after centuries of submission to states is the first one. The second one is the growing presence of the sustainable development concern in urban management

¹ Also: S. Breux and J. Diaz, *La ville intelligente : origine, définitions, forces et limites d'une expression polysémique*, Montréal, Institut national de la recherche scientifique - Centre Urbanisation Culture Société, 2017.

² J.-B. Auby and V. de Gregorio (eds.), *Données urbaines et smart cities*, Boulogne-Billancourt, Berger-Levrault, 2017; J.-B. Auby, *Algorithmes et smart cities : données juridiques*, *Revue Générale du Droit on line*, 2018, issue 29878 ([www.revuegeneraledudroit.eu/?p=](http://www.revuegeneraledudroit.eu/?p=29878)

29878); J.-B. Auby, *Les smart cities*, presented at the conference « La transformation numérique du service public: une nouvelle crise? » (14-15 January 2021), Université Paris Nanterre. See also: A. Taillefait and M. Lanna (eds.), *Smart Cities & Santé*, Paris, Lgdj, 2019.

and governance. And the third one is the invasion of urban life and in particular urban management and governance by digitalization.

These three factors certainly determine the historical surge of a new kind of cities³, which can be called “smart” but could also be designated as “digital”, since this refers to what is probable the main engine in their development.

The subsequent problem is to characterize this new model of cities in legal terms. Hard enough because the concept does not derive from law: smart cities are the result of practice, they are not the product of legal instruments, be they international, national, constitutional, written legislation, case-law... It is true that some restricted pieces exist about them, in particular some European soft law ones, but their contribution is limited. To my knowledge, there is no country yet in which a full-fledged statute on smart cities would have been adopted.

The consequence of this is that the law applicable to existing smart cities development is in general not addressed by pieces of law which would explicitly target it. It has to be treated through a mixture of elements pertaining to what can be called the law of cities, with already existing legal tools in the direction of sustainable development and finally with what has already been stocked in terms of law concerning digital administration⁴.

3. Legal issues in the concrete

The lack of specific legislation concerning smart cities will progressively induce a conundrum because the concrete functioning of the latter is obviously generating a lot of new law issues or at times of transformed version of already identified ones. They appear to be threefold, corresponding to the three main concrete lines of evolution which characterize the smart cities.

Some of them are related to the physical dimension of the latter: infrastructure is one of the areas of their legal and administrative development that the EU Commission has identified, as Isabel Celeste Fonseca (*Smart Cities and Law. E Governance and Rights: Do We Need a Global Digital Transition Strategy*

for the City?) notices.

It is more than probable that planning legal instruments will have to be adapted to the renewed relationship smart cities tend to have with time and space and with management of assets, as Daniele Marongiu (*The ideal city: space and time (from the Renaissance to smart cities)*) explains⁵.

Law will have to adapt more and more to the innovative dimension of smart cities infrastructure and this will certainly require adaptative efforts in the field of public contracts, as Pedro Costa Goncalves (*Smart Cities e contratação pública*) explains⁶.

Central to the law of smart cities will be the law on public data, as admitted by Sofia Simou (*Interventos jurídicos locales en materia de cambio climático y su relación con las Smart Cities*). This dimension of their legal functioning has already shown all its potential in terms of opening up various questions. Among them, strategic will certainly be the ones related to the status of personal data, respect for privacy and search for consent in various situations: this is explained by Léonore Cellier and Solange Ghernaoui (*Le consentement au traitement des données personnelle à l'épreuve de la Smart City*).

In the near future, other essential issues will rise: among them, those associated with the predictably growing use of blockchains, well described by Lorena Alonso Suarez (*La aplicación de la tecnología blockchain en las ciudades inteligentes: hacia una gestión urbana descentralizada e inteligente*).

The law will also have to deal with – and contribute to – various already partially visible evolutions in the governance and the management of smart cities. The ones linked with the inevitable development of some new expertise, addressed by Cristina Lauri (*Expert Knowledge and Smart Cities Administration*), and the ones associated with the development

⁵ See also: F. Garcia Rubio (ed.), *Las nuevas perspectivas de la ordenación urbanística y del paisaje: Smart cities y rehabilitación. Una perspectiva hispano-italiana*, Barcelona-Madrid, Fundación Democracia y Gobierno Local, 2017.

⁶ See also: J.-B. Auby, *Public Contracts and Smart Cities*, in G. Racca and C. Yukins (eds.), *Joint Public Procurement: Lessons Across Borders*, Brussels, Bruylant, coll. Droit Administratif/Administrative Law, 2019, 187; Y. Marique and S. Van Garsse, *Setting up public-private partnerships in smart cities. An exploration of legal techniques and some challenges*, in J.-B. Auby (ed.), *Le futur du droit administratif. The Future of Administrative Law*, Paris, LexisNexis, 2019, 34.

³ See for example: E. Carloni, *Città intelligenti, agenda urbana: le città del futuro, il futuro delle città*, in *Munus*, n. 2, 2016, 235.

⁴ J.-B. Auby, *Les smart cities*, mentioned above note 2.

of direct democracy and a more bilateral relationship between citizens and public authorities.

4. *And in terms of values?*

Many of the contributions approach the topic of smart cities and law in a critical or at least skeptical way and it is quite welcome as a counterbalance to some specialized literature which tends to describe the smart cities evolutions as the access into urban paradises where the major plagues infesting our cities - traffic congestion, air pollution, and so on - would be soon evacuated thanks to technical evolutions.

The authors contributing to this dossier show the essential pros and cons.

No doubt that the “smart cities” process is susceptible to bring about a range of real improvements in urban life and urban functioning. Smart cities are fundamentally moved by an innovative drive which leads them to constantly improve their amenities: shown by Pedro Costa Goncalves (*Smart Cities e contratação pública*) in the field of contracts, this orientation is a general feature, with a lot of induced consequences⁷.

One can think that smart cities will be better equipped than traditional ones in the adaptation to climate change, thanks to their potential innovative performance in fields like energy, transport, housing, and so on. Isabel Celeste Fonseca (*Smart Cities and Law. E Governance and Rights: Do We Need a Global Digital Transition Strategy for the City?*) and Sofia Simou (*Interventos jurídicos locales en materia de cambio climático y su relación con las Smart Cities*) papers argue in that direction.

Potentially, smart cities can be more open to the world, more naturally “global cities”, as shown by Tomas Font i Llovet (*La ciudad inteligente como actor global*).

Then, it would be a bad idea to ignore the already identified and potential negative aspects and the risks associated.

Nobody can certify that smart cities will entail less discrimination than modern cities. The risk of a digital breach with people less adapted to the digital is obvious and already perceptible, as explained by Eva M^a

Menendez Sebastian and Javier Ballina Diaz (*Digital Citizenship: Fighting the Digital Divide*). Worth wondering, too, is whether smart cities will be hospitable to disabled people: the question is well explored by Clara Isabel Velasco Rico (*Smart Cities for All: Usability and Disability Bias*).

Then, various other questions can also be asked about whether fundamental rights will be properly respected in the future of smart cities. Victor Julian Sanchez Calle (*Smart Cities y derechos fundamentales*) shows that various basic rights could be at risk: the right to privacy, primarily, but not only this one.

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I hope these appetizers will have incited the reader to go further into this dossier, full of valuable food for reflection on an issue we, lawyers, and especially public lawyers, have started to consider as essential enough. Because it combines general evolutions in the public action and life with evident transformations in the functioning of cities, which we are a constantly growing majority of us to leave in.

⁷ Vv.Aa., *La Cité des Smart Cities, Smart Cities : L'innovation au cœur de l'action publique*, Boulogne-Billancourt, Berger-Levrault, 2016; G. Franz, *Smart City vs Città Creativa. Una via italiana all'innovazione della città*, Raleigh, NC, Lulu Press, 2020.