

STF 561

Smart cities and communities: standardisation  
to meet citizen and consumer requirements

# The project and its recommendations

Presented by: **John Ketchell**

For: **STF 561 Open Meeting**

Brussels, 11.12.2019



# Who are we?

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ETSI Technical Committee Human Factors:

“Human Factors is the scientific application of knowledge about human capacities and limitations in order to make products, systems, services and environments effective, efficient and easy for everyone to use”

<https://portal.etsi.org/TBSiteMap/HF/HFToR.aspx>

HF TC is responsible for the approval and publication of the proposed Technical Report

The Specialist Task Force (STF) 561: a small team of experts to produce the proposals for HF Technical Committee approval

# The STF561 Team



**John Ketchell (FR)**  
ex-Professional  
standardiser,  
nominated by  
ANEC (BE), ETSI 3SI  
Advocate



**Emmanuel Darmois,**  
Commledge (FR):  
former ETSI Board  
member and ex-Chair  
of OCG, IoT expert



**Jacqui Taylor,**  
FlyingBinary (UK):  
represents BSI on CEN-  
CENELEC-ETSI Smart  
Cities Sector Forum,  
ISO TC268 and JTC1



**Ricardo Vitorino,**  
Ubiwhere (PT): Software  
standards specialist for  
Smart Cities, Vice-Chair  
of ETSI ISG CIM

With support from Nikolaos Fioratos, accessibility expert, and Lindsay Frost, ETSI Board member responsible for smart city policy

# What are we doing?

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We are preparing a document called an ETSI Technical Report, that will:

- ✔ take a first overview of what the needs of citizens in smart communities are;
- ✔ relate those needs to standardization activities, ongoing or foreseen, and assess if they are being met;
- ✔ if not, make recommendations as to how to rectify this;
- ✔ lay down some basic principles as to how citizen needs should be addressed

**This Technical Report will be**

- ✔ Reviewed within the community through an open process, with today as a key meeting
- ✔ Finalised on the basis of the comments received and published in June 2020

# The STF561 work so far

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## We have

- ✔ Set up the project, and carried out a survey of interested stakeholders
- ✔ Held a first awareness meetings in March and looked at the initial survey results
- ✔ Held a second awareness meetings in September and discussed an early draft of the Report
- ✔ Set up an Advisory Group of interested stakeholders
- ✔ Visited a number of standards meetings and some other events

## And we've produced a first draft of the Report with

- ✔ A thorough analysis of the citizens' needs and an analysis of the standards landscape
- ✔ The identification of a number of issues to be addressed
- ✔ Proposed recommendations for standards actions

# Draft Recommendations to Standardization

## Some major issues to address

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Cities do not know standardization:

- ✔ Sensible – not over-technical - information is required

Cities cannot participate in standardization:

- ✔ SDOs need to capture cities' requirements and involve them without undue participation burdens

Standardization is too ad hoc:

- ✔ Standards-makers need to present a more coherent and collaborative image to cities

Problems where standardization can help:

- ✔ Services are not designed for citizens;
- ✔ Services are not accessible for citizens;
- ✔ A better approach to citizen data is needed.

# Draft Recommendations to Standardization

## How to improve standards processes

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- ✔ Engage better with cities, smart or otherwise
  - ✔ Maybe create a Horizon Europe project to explore how to improve interface
- ✔ Engage better with policy makers
  - ✔ Possibly by engaging more systematically e.g., national organisations with the relevant ministries or with DG REGIO in Europe
- ✔ Take city views into account
  - ✔ Contact cities in advance of drafting standards relevant to them, to make sure that their requirements are understood, and that they can comment on the drafts
  - ✔ Use a panel of experts as “intermediaries” to report cities needs and comments
- ✔ Think about a summit
  - ✔ A one-off city standards-related “summit” with city participation to consider how these proposals can be taken forward

The proposed individual recommendations fall into three categories

- ✔ Guidance: high-level approach that smart cities could adopt in order to deal with a number of citizens' requirements. Providing informative documents that will help cities meet citizens' needs, not adding unnecessary technical solutions
- ✔ Codes of Conduct: recommendations proposing precise approaches to the development of solutions for specific issues (e.g., design and delivery of services)
- ✔ Standards: additional standardization activity (including amendments to existing standards) – or considerations as to whether additional work is needed



# Draft Recommendations to Standardization

## Individual Recommendations: Guidance

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1. Ensure physical presence in management of city services, to support all user needs, but in particular those of vulnerable categories
2. Draw up guidance material for smart cities to help them implement the proposed standard for service design and delivery
3. Prepare a Local Digital Economy and Society Index (DESI) for smart cities, which supports the cities to develop an outcome-based approach to city services, focused on improving outcomes for citizens
4. Provide guidance for cities, oriented towards protection of the citizen, on cyber-security measures to be implemented across the city, and for individual services
5. Provide guidance to city personnel who have legitimate access to city services and technology, to protect citizen cyber security, including staff training and a code of good practice for management
6. Review physical security arrangements by cities in the context of the vulnerabilities these create for city services, and the requirements to ensure the safety and security of citizens

# Draft Recommendations to Standardization

## Individual Recommendations: Codes of Conduct

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7. Draw up dedicated standardized guidance for cities concerning service complaint and redress procedures, aligned as far as possible with the EU's ADR principles
8. Provide standardized codes of conduct to help smart cities ensure correct design and delivery of citizen services, including a transparent and open declaration of the ethical approach taken

# Draft Recommendations to Standardization

## Individual Recommendations: Standards

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9. Study the potential security difficulties for citizens arising from future over-dependency on ultra-fast 5G transmissions to manage and control apparatus in the city environment
10. Review physical security arrangements by cities in the context of the vulnerabilities these create for city services, and the requirements to ensure the safety and security of citizens
11. Explore a standardized approach to citizen uses for and requirements from the data spectrum
12. Standardize the basic elements of citizen-oriented service design, to provide clear and easy-to-use electronic interfaces, with background supporting information easily available, ensure human interface possibilities are always there (in whatever form) as back-up and avoid digital divide issues, by providing special interfaces designed for the less able, and support provided for these persons
13. Explore a standardized approach to citizen participation without the accompanying privacy and security concerns, utilising shared data rather than open data

## Next steps

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The Technical Report has entered a public commenting phase:

- ✔ Taking into account the comments made in today's meeting
- ✔ Anybody can comment until 31 January
  - ✔ Report and Commenting Form are available at <https://standards4citizens.etsi.org/Report/>

Once all comments are collected:

- ✔ A new draft will be developed by the STF team, taking account of the comments
- ✔ It will be submitted to ETSI Human Factors Technical Committee for approval
- ✔ The final version of the Technical Report will be officially published in June 2020

The CEN-CENELEC-ETSI Sector Forum on Smart and Sustainable Cities and Communities is forming a Working Group to examine how to take our recommendations forward

# Thanks!

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Questions, comments, please (later today, or by e-mail...)  
[standards4citizens@etsi.org](mailto:standards4citizens@etsi.org)

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Many thanks to the European Commission and EFTA Secretariat for  
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And to the ETSI Events Team and ANEC who have put this meeting  
together and are supporting it today