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Keynote speech by Martin FODOR (United Kingdom, GILD-ILDG)

Check against delivery - Seul le prononcé fait foi

Smart cities - A view from the Congress of Local and Regional Authorities

Dear colleagues,
Ladies and gentlemen,

As city councillor of Bristol and in my capacity as a full member of the Congress of Local and Regional Authorities of the Council of Europe, I am delighted to be back in Budapest to take part in the "Central and Eastern European eDemocracy and eGovernment Days 2018" and to give a keynote introduction. I hope we can all learn from each other here.

The continuing rise of interconnected mobile devices, applications, social media and increased connectivity of technologies continues and we see ever more significant developments and innovations in these technologies in 2018. Driverless cars, drones, assistant robots, artificial intelligence, the 'internet of things,' and virtual reality will continue to change the world in years ahead.

I studied urban living as a student, and in 2008, the number living in cities finally overtook the number of people living in the countryside. In 2050, the population of the world's cities could reach 9.7 billion, so we need 'smart city' instruments to help manage this gigantic population. We believe that these technologies can improve our quality of life and that we need intelligent urban systems to increase service provision to this large population as well.

So what do we mean by 'Smart City'?

We need an effective and sustainable vision of urban development, creating an innovative city government and increasing the quality of life by using information and communication technologies, so that public needs can be met in accordance with the needs of the era. As cities continue to grow rapidly, it will be necessary to improve city life for citizens, by using the 'internet of things' as leverage (connected equipment and devices), and to integrate technology with solutions that will make urban life more practical and comfortable. I can refer to experiments in **Bristol** where smart homes with energy generation, battery storage and incentives for residents can help manage down peak power demands.

Theoretically, a smart city means a city that allows intelligent devices to communicate with intelligent infrastructures, using information and communication infrastructure. In other words, your watch, your phone, your refrigerator, your smart TV, your smart car must be able to communicate with the city's information and communication network. In that sense, "**Data**" is needed to build a smart city. Data is at the heart of our daily lives, and has an impact on numerous economic and social sectors. E-commerce, e-government, driverless vehicles, medicine, robotics - the list is growing by the day. And let's not forget Artificial Intelligence, since without it, it is impossible to talk about data gathering and analysis.

Three things are required for **Artificial Intelligence** to work: models, data and computing power. Useful data is important to make the machine learn properly and make better decisions. By using those machines, the local governments can potentially add value to their services; by automation and efficiencies, enhancing the customer experience, using data insights to drive better decision making. By using AI, the city management can be incorporated into a smart city initiative including arenas such as transportation, energy conservation, monitoring environmental concerns such as climate change and air pollution, public safety, infrastructure, urban manufacturing and farming. In **Bristol** 5G connectivity trials have been used with ARTists to help interpret the urban experience and to use what is called a ***Playable City*** to show the potential of smart city developments. Culture and arts can help us innovate and experiment.

The notions of **intelligent buildings – I.B**. - is also becoming increasingly popular, due to its potential for deploying emerging technologies to develop more comfortable and effective space usage and reduce energy consumption. IB enables a building's occupants to access to facilities management from their office computers, also ensuring the control over and access to security systems. Taking account of lifetime costs this investment in sustainable design for energy and water conservation, effective waste disposal and reducing pollution can create IBs that work better.

Developing an intelligently monitored building environment is often considered an essential standard for new constructions. Through analytical tools, building engineers can find anomalies and manage energy usage. This is achieved by connecting data on building energy consumption - integrating heating, ventilating, and air conditioning, lighting and air quality. With advanced building energy management systems, smart lighting, customized technology facilities, and thus energy efficiency and management should improve. It's not the only way to have a comfortable, energy efficiency building but it can help.

As smart cities evolve, services and infrastructure will be more integrated. Information can be collected in **real time** with the use of sensors, cameras, wearable gadgets and smart devices which interconnects cars and sensors, and facilitates traffic management. It aims at smoothing traffic flows, reducing pollution and enabling effective response to traffic incidents by monitoring equipment to collect detailed traffic data. We are already putting some of these elements into place in the city of Bristol to try to deal with our polluted and gridlocked city. The upgrade of our integrated control centre is underway now.

When it comes to **health**, smart cities equipped with AI can improve the monitoring of health by giving emergency services new tools to improve their response in the required situations. Promoting individual healthy behaviour, like regular physical activity, monitoring solutions for the elderly, reducing overcrowding in healthcare institutions, improving the lifestyle of the people with disabilities and chronic diseases, and coordinating urgent care can be given as the potential benefits of the projects. AI can be used to reduce doctor waiting times. There is a current boom in online doctors – the "GP in your pocket", although not

everybody is convinced that this is better than the traditional consultation. Health and safety monitoring of vulnerable residents is being added into our new control centre, too.

Many cities have now started down the path to becoming a Smart City. For instance, Bologna is considered the smartest city in Italy, with several active projects, including innovative solutions for producing electricity and heat. If the consideration is going green and environmentally sustainable living, which as a Green I am keen to see, then Copenhagen is a strong example. Exciting developments are also taking place in Vienna, Grenoble, Helsinki and Barcelona, to name but a few.

In many areas of the UK and indeed within local government, there are examples of these technologies in use already, but the basics need to be in place for true optimization. The Smart city initiative of Bristol, to make the city a more liveable and sustainable city to be in, has been recognised in the **"**UK Smart Cities Index 2017**"** as leading the way in areas such as **open data access**, energy innovation, and community engagement. Just as all other UK cities, Bristol has numerous constraints including population growth, land availability, resources, revenues and such. But to advance the innovation and deployment Bristol brings together leaders from industry, government, academia and citizens to create a cooperative platform called **Bristol is Open** to ensure support and assistance and trials to meet the growing needs of its citizens. Examples I am most involved in include tackling fuel poverty by making smart appliances available to low income residents, so they can manage energy use better. Another example I referred to earlier used home energy generation from photovoltaics, linked to home energy storage, to see if low income residents can be incentivised to save energy when it is in high demand, and release stored energy when they can supply it back to the network.

What is important at this point is to raise awareness about the benefits of the smart city technologies, and also **promote the use of open, democratized data**. But we also need to think about how we can create a 'smart citizen' – by which I mean one who is engaged and empowered who can positively contribute to the city and the community. In that sense, new and innovative collaboration methods are important. Greater transparency will enable citizens, via open data portals or mobile apps, to engage with the data and understand what it is used for. **Data privacy and security** then become the top two considerations of people; therefore any smart city data that is collected should be anonymous and not contain personally identifiable information. For instance we must take care not to release data on those who are sick or have previous criminal backgrounds when this should remain private.

I hope you will study our **Congress report*** on the open data for cities and find it useful. As stated in our 2017 report – which you can find on the Internet - "Open data offers greater transparency and not only provides citizens with the information to understand what their local governments do but also empowers them to contribute to the decision-making process of their local governments." It is our belief that the release and creative use of this data can give local governments the opportunity to transform themselves into more transparent, democratic and effective authorities. (* we have copies here for you)

The Congress puts great emphasis on the above-mentioned report, on open data for better public services, examining the opportunity that it represents for European cities, especially by focusing on several issues;

1. Open data can first be used to **improve public service delivery**, providing citizens with analysis, insight and tailored information to enhance their use of public facilities. The variety of applications enabling citizens to locate all kinds of public services is astonishing. From recycling points to

public toilets, parks to kindergartens or schools to restaurants: you will have an application that will help you find this service. A community group in Bristol has created its own App to enable people to access maps that locate the nearest free refilling taps for drinking water, to reduce plastic water bottle waste. This is now being extended nationwide with thousands of locations mapped for smartphones to locate.

2. The use of open can also help strengthening local democracy. Some projects build on public data to create or improve channels of dialogue between citizens and municipalities and facilitate more inclusive decision making processes between citizens and municipal authorities. They can also offer greater transparency and accountability. Of course we need to make sure all can access this debate.

3. Our report also examines how the use and reuse of open date can contribute to the **transition to greener cities** and to the **enhancement of cultural experience**.

In addition, under **e-governance and e-democracy** headlines, the Council has proposed important recommendations and resolutions for national and local governments to adopt, which can be stated as;

- Open data for cities
- E-media: game changer for local and regional politicians
- E-democracy: opportunities and risks for local authorities
- Digital divide and e-inclusion in the regions (as not everyone is connected equally)
- E-tools: a response to the needs of local authorities
- Electronic democracy and deliberative consultation on urban projects.

The world is full of many excellent smart city case studies, demonstrating the benefits that such technologies can bring. Smart cities resources continue to expand at a rapid rate.

On the other hand, however, making cities "smart" and subjecting their citizens to the **logic of algorithms**, can sometimes feel more like a new form of authoritarianism rather than freedom. ***Being controlled - not being in control***. The smart city concept is more a political than a technological challenge. We need to reflect on how it can affect democracy and human rights: "Smart for whom? Cities for whom?" Smart cities can create winners and losers. Do they cater more for the wealthy? What about those whose interests are not protected by smart city policies? **We need to ensure that Smart Cities are cities for all. I strongly believe this as a Green politician.**

Smart cities bring more cameras, sensors and connected devices to our daily lives, which expose people to both government and corporate surveillance all the time. As more and more devices are built to track peoples' activities and to generate intelligence for use by public and private actors, this will have detrimental consequences for our democracies. I already have some voters unhappy that car number plates can be recognized automatically and the streets get watched by video cameras, even as others want surveillance to deter crime. E phone boxes that track residents around the city are now being proposed in Bristol, too – raising many objections.

Smart cities have yet to solve social and economic inequality. The **digital divide** is caused by unequal access to resources, technology, education and decision-makers. Change can occur only if we design systems to provide equal access to technologies and resources, and to build in new freedoms and capabilities for everyone. The gender divide also requires attention, beginning with who has power in the

household. The promotion of gender equality and empowerment of women by means of education, raising awareness, and ensuring women can participate fully in the workplace and public realm is necessary.

Another significant consideration is the **protection of rights on the internet**. Citizens are subject to violence; private sectors collect and store citizens' data illegally, violently racist and separatist threats are allowed to go unchecked, and protection of children is not safeguarded. Data protection and privacy laws and policies must be strictly adhered to when data is made available to the public. Promoting human rights for Internet users among citizens, public authorities and private sector actors, taking action regarding its application in order to enable users to fully exercise their human rights and fundamental freedoms online is significant. When data collection is deemed mandatory, only the data that is strictly necessary should be collected and generated. It should also be available free of charge: **Open data**. The informed consent of all affected persons is also necessary before any project is implemented. I have been putting in place the new European regulations on this in the last week.

The Council of Europe's Internet Governance Strategy deserves a mention here. The strategy is based on the principle that: "Everyone must be able to exercise their human rights and fundamental freedoms online as well as offline, including the right to private life and the protection of personal data, subject, in certain cases, to narrowly circumscribed restrictions." The overall aim of the strategy is to ensure that public policy for the Internet is people-centered, meaning that it should respect the core values of democracy, human rights and the rule of law. The strategy is a multi-disciplinary tool which covers issues concerning content, services and devices connected to the Internet, including relevant aspects of its infrastructure and functioning which can affect human rights and fundamental freedoms. The strategy identifies many challenges raised by the growth of the Internet and provides governments and other stakeholders, including civil society, the private sector and technical and academic communities, with means to address them.

Commitment and sustainability are crucial counterparts for building smart cities, as urbanization rises. Smart technologies will sustain growth and efficiency for society's welfare and government effectiveness in urban areas in the years to come. Cooperation with related partners, involving citizens and other actors like academia and industry, as in our Bristol is Open partnership work, is in our experience essential.

However, **when talking about smart sustainable cities, we must not forget about the protection of human rights and the promotion of democracy.** Choosing a specific area and making it smart will not work; we have to involve everyone in the design to make it work, we have to be sure that we are not leaving anyone behind. This is a question of human dignity. A restricted concept of the smart city relies too heavily on just economic or technological models. Citizenship cannot be determined by algorithms.

On behalf of our citizens and the next generation, let's work to keep **people at the heart** of the smart cities, by keeping human rights, social justice and equality as our priorities.

Thank you.