



# DIGITAL CITIES CHALLENGE

## Working Group meeting

### Open data collaboration

6<sup>th</sup> June 2019



## Context and background

Open data can re-invent the way we manage cities' growth and respond to the big societal challenges. Open data provides access to information and facilitates improved decision-making, thereby it helps to address governmental inefficiencies and brings about efficiency gains for city administrations and stakeholders in the delivery of public services and processes.

The interest among the participating cities in the DCC initiative has been triggered by practices from the cities of Amsterdam and Espoo presented during the first Academy seminars in Brussels. During the process of developing the Digital Transformation Strategies, open data has been identified as a thematic area of common interest for several DCC and Fellow cities. Based on the cities' needs, support has been provided by the thematic expert, who has been closely working with the respective city teams on scoping the activities and giving hands-on advice on practical aspects for the implementation. There is no doubt that the context of and progress on open data varies across cities, but the experience has shown an ability of some cities to advance very quickly and launch the Open data portal.

On the basis of the discussion in peer group on Open data organised as part of the last Academy seminar which took place on 9 April in Brussels, the following ideas of cooperation developed:

### 1. Best practices exchange regarding local administrations

Description: General best practices should be exchanged with regards to convincing and motivating local administrations to set-up an open data platform as well as on the most effective ways to ensure data quality.

### 2. Joint data identification

Description: Cooperation should be initiated to jointly identify the 10 most important and useful data sets for the cities and their local digital solution providers. Through consultations with local administrations and organisations, cities can each contribute to the long list of datasets. This joint list can then be refined and serve as a focus point for the city's open data initiatives. As a result, this list could be shared between all other DCC cities.

### 3. Lessons learned from early adapters

Participating cities leverage the experience of an early adapter city, in a collaborative project with sister cities. This collaboration will provide support and access to successful approaches, methods and tools.

Following the seminar, a group of cities playing an active role in promoting exchanges and fostering collaboration on topics related to open data have expressed an interest in establishing a working group as a platform for dialogue with other cities and explore opportunities of cooperation. The participation in this working group is on voluntary basis and is open to all cities interested in this topic.

From a city perspective, some of the main challenging aspects of open data relates to the data itself, including the data gathering process. The identification of useful datasets, the ability to consistently capture high quality datasets and the generation of visibility and interest from local digital solution providers induce barriers for the uptake of open data initiatives at city-level. As means to overcome such challenges, city collaboration around specific topics provides opportunities to leverage open data in a collaborative manner.

### **Focus of activities**

- The focus of activities of the Working Group on Open data will be concentrated on the following aspects:
- Requirements and conditions for sharing data by public administration, academic entities, private companies, NGO, etc.;
- Analysis of target application markets and customers profiles;
- Minimum data qualification required;
- Data standard and license regimes;
- Unified data models;
- Security of the data life cycle (from acquisition to distribution);
- Complementary/optional services offered to data users;
- Promotion of the outputs of city open data initiatives (competitions, showcases, etc.); and
- A dedicated entity for managing open data / operation of the territorial data market place (e.g. economic model - sustainable or subsidised, full public, public-private or full private legal entity, profile of private investors if PP entity, profile of private investors, governance model).

### **Open Data Pilot project**

Pilot an Open Data project, based on a limited number of data topics (e.g. mobility) on the transfer of experience and knowledge of a mentor city to interested Challenge and Fellow cities.

In summary, the main objectives of the project are defined as follows:

- Develop a business case for the open data topics selected by each city;
- Develop an organisational and operational model for the medium-term management of open data activities in each city; and
- Test the business case, organisational and operational models of each city by completing a pilot implementation using open source OpenData software and tools.

## **Objectives of the meeting**

During the meeting, the participants will discuss the deployment of open data as a tool to support the digital transformation at city-level as well as cooperation opportunities among cities. The meeting will seek to scope the needs and requirements of cities as well as the data topics and services of particular interest for collaboration.

Particularly, it will discuss the following priorities:

- Demand side case of open data;
- Data topics and services relevant for collaboration; and
- Setting up of an Open Data Pilot initiative (i.e. developing a shared vision on key aspects of implementing a city Open Data initiative, developing a common understanding of the proposed project among interested regions, assessing the interest in (sufficient cities) and feasibility of (likelihood of funding) of developing a full project proposal, and agreeing on responsibilities and next steps and a timetable).

# **1. Introduction: Aim, objectives and approach of the workshop**

Introducing and contextualising the workshop, Jacek Walendowski, Technopolis Group, emphasised the opportunity to collaborate in a joint open data pilot initiative. The meeting served to explore the demand side case for an open data initiative, to scope relevant data topics of interest among participating DCC cities and to identify possible ways forward for an open data pilot initiative. The Digital Transformation Strategies elaborated within the DCC initiative have a significant focus on open data; while the strategies display some differences there is also a solid ground for alignment with many DCC cities focusing on setting up an open data policy or strategy and to implement measures for the collection and management of data. It was informed that while the participating thematic experts on open data in the meeting will present practical recommendations, the EC representatives (DG CNECT, DG GROW) will outline policy developments, high value datasets and funding opportunities for open data at EU-level.

Colm McColgan, ERNACT, Derry / Londerry, made a reference to the need for cities to be able to collect, treat, manage and organise data and to put processes in place as well as to make data available for citizens and businesses, which were key topics at the DCC Final conference. While open data is important for the DCC cities, many cities do not have experience or existing practices with open data. The involvement of Mentor cities (such as Espoo and Nice) was perceived as an opportunity for a practical project on open data building on best practice sharing and cross city collaboration. The 5th DCC Academy Seminar had indicated a solid interest of DCC cities in joining forces around a joint open data project. Colm McColgan, ERNACT, Derry / Londerry, mentioned the need to initially focus on the business case, requiring participating DCC cities to identify data topics for further exploration. On this background, the cities could then explore processes for organising the data, involving stakeholders and concrete piloting opportunities.

## 2. Demand side case of a collaborative open data initiative

Julian Tait, Open Data Manchester CIC, presented the demand side case for open data. The multiple challenges faced by cities, such as the decline of the old economy, inequality, the skills gap, old infrastructure, struggles with retaining talent, were initially emphasised. Given a lack of resources, cities often struggle in meeting citizens and stakeholders' expectations. For the development of an open data initiative, the importance of a vision and strategy on open data was stressed; a reference was made to the city of Manchester that had come up with a clear vision and strategy on open data aligned within the delivery of the city's broader strategy documents. Manchester's strategy has a basis in the city needs – the demand side and needs for open data should come from within the city. Two specific open data initiatives were presented: Bristol's "Our Data Bristol" and Edinburgh's "Empowering Edinburgh – Strategy for Open Data", both delivering a strategy on open data and data sharing.

It was further explained by Julian Tait that open data allows to engage several actors – as problem solvers - which is key given that the current challenges faced by cities tend to have a high level of complexity and requires involvement of multiple actors. With an open data initiative, four sectors should be involved: public sector (providing the governance structure); businesses (as employers and with the link to the economy and innovative practices); academia (offering insights and latest thinking on trends); and the civil society (grass root connection is critical). A lack of open data tends to induce operational insufficiencies, duplication of efforts, data silos, reduced stakeholder engagement and restrictions for innovation. Open data helps to create trust but must work within the broader environment of a city. Open Data Manchester CIC works with the Manchester City Council on how to set up procurement in an open and standardised way with an eye to encourage local businesses to become involved. The focus of the work is on creating a cycle where demand is created on the basis of citizens, businesses and public bodies.

Six concrete steps were presented about how to make the use of open data effective:

- 1) Taking stock and understanding what data is available to specify city expectations;
- 2) Prioritising the problem by aligning open data demand with concrete priorities and needs. Open data needs to be based on a real need for releasing such data and a dialogue among city stakeholders. The conversation about introducing open data should start around the problems to be solved;
- 3) Developing the business case: Once the value to be created is identified, the stakeholders can start creating the business case in a needs-based context. Focus should be on defining the key questions that drives the problem area;
- 4) Segmenting stakeholders by mapping and targeting relevant actors: deep conversations with relevant stakeholders are required with a focus on refining city practices and explore ways to ensure an efficient delivery;
- 5) Assessing readiness and demand in terms of readiness and impact. This step entails having an understanding of the stakeholders that most effectively would use open datasets if made available;

- 6) Matching demand: Once actors are identified from which the data will be collected, the next step is to understand who will use the data. Recommended to perceive step as a virtuous cycle around demand and supply that is necessary to engage in meaningful manner with businesses - as opposed to the presumed business case - requiring a need to focus on the real demand rather than presumptions.

It was clarified that the first 5 steps listed can be done in a relatively short timeframe of around 6 months, while step 6 requires a continuous assessment. As a response to a question on how to identify the value behind data in the context business case development, the challenging aspects for cities to economically exploit their own data and sell to third parties were emphasised. A city charging for data may be perceived as inducing double taxation, taking into account that such activity would already be financed by tax payers in the first place. A city is not a traditional economic player and needs to be careful in identifying its business proposition.

Bart Rosseau, City of Ghent & Council of Cities Coordinator of OASC, outlined two important elements for cities when scoping the business model for open data: 1) the city first needs to realise that the biggest user is the city's own organisation and knowing which data to provide is a business model in itself; 2) Several restrictions are in place for the selling of data and the associated costs with providing open data tend to be high for cities. In this context, a promising activity is to work jointly also with neighbouring cities, including also traffic and energy authorities, on extracting and providing data. One main challenge with joint collaborative initiatives relate to who will assess the demand side and be responsible for data collection.

As for the costs with an open data initiative, Julian Tait emphasised that a critical data mass is required (the more crowd data collected, the higher the relevance). The usability of open data is accordingly linking with scaling that requires effort. The business model example of the SynchroniCity project was referred to; SynchroniCity provides a platform that is based on crowd sourced data from cyclists who generate the value, allowing the city to map the conditions of roads among others. Nicos Kominos, URENIO Research, gave the perspective that with an open data initiative a city will go in a direction of delivering datasets that are not usually part of a city's agenda, which would induce costs that needs to be taken into account.

### 3. Data topics of interest and needs

A few DCC cities, including Derry / Londerry, found that the 6-step approach offers a good basis for developing a business case for open data. During the discussion, each participating city presented the data topics found most promising, as outlined in the following table:

City	Data topic(s)
Alcoy	<ul style="list-style-type: none"> <li>• Mobility</li> </ul>
Algeciras	<ul style="list-style-type: none"> <li>• Mobility</li> <li>• Smart lightening</li> </ul>
Derry / Londerry	<ul style="list-style-type: none"> <li>• Energy efficiency</li> <li>• Tourism</li> </ul>
Guimaraes	<ul style="list-style-type: none"> <li>• Mobility - Observatory</li> </ul>
Karlskrona	<ul style="list-style-type: none"> <li>• Citizen portal (giving the information, legal model through the citizens)</li> </ul>
Kavala	<ul style="list-style-type: none"> <li>• Business activities</li> </ul>
Sofia	<ul style="list-style-type: none"> <li>• Business activities (internal user perspective)</li> <li>• Decision-making data (air, pollution, mobility, energy utilities)</li> </ul>

Charalampos Papadopoulos, Kavala, explained that there is a requirement in Greece to provide the data collected by municipalities to the portal managed by the central government. For Kavala it would be relevant to have data on business activities in local context. So far, this data is provided only by the local business agency, but the data is not made available online. It was stressed that it is easy for the public authorities in Kavala to create and maintain data, i.e. it is a relatively straightforward process to provide technical specifications in order to generate the data. However, the challenge relates to the control of the data and if the city or global provider should provide the data.

Pedro Ramiro, Alcoy, highlighted the lack of data culture among public servants. Alcoy is currently using an open data portal to display how to make use of the data; it is perceived as crucial to show examples of what the city and citizens can do with the data (i.e. how it can improve people's life) and to understand how data can be generated. From the perspective of Alcoy, a key data topic is mobility while also information on local businesses have relevance.

Begoña Oliva Pérez, Algeciras, explained that the city does not currently make use of open data. Topics of interest are in particular smart lightening and mobility. In this context, the city is currently preparing a sustainable mobility plan.

Augusto Ferreira, Guimaraes, mentioned that mobility represents a key topic for Guimaraes, while tourism also would be a relevant data topic to focus on.

Colm McColgan, ERNACT, Derry / Londerry, outlined energy efficiency and tourism as promising business cases. Mobility was less relevant due to city's lack of control on mobility.

Nadia Sultanova, Sofia, highlighted that new measurements in general have relevance for Sofia. Sofia currently work on many pilot activities and from an internal user perspective there is a strong interest in topics such as business ownership and business activities. Beyond businesses, there is also a broader interest in air pollution, energy efficiency and building stock.

Per-Olav Gramstad, Karlskrona, explained that the city so far had a limited focus on open data. A use case could be a citizen portal to give back collected information to citizens.

Alberto Gago Fernandez, DG CNECT, and Bart Rosseau, City of Ghent & Council of Cities Coordinator of OASC, emphasised the challenges in understanding how to create value from open data or big data. It was mentioned that researchers currently are exploring ways to generate value from open data and can offer insights and recommendations. It was also perceived that hackathons have worked well as a mean to understand the value of data. The challenges with digital literacy and teaching citizens how open data can be used should also be factored in. Bart Rosseau, City of Ghent & Council of Cities Coordinator of OASC, stressed the relevance of simply talking with citizens as regards what data can do, although it is time consuming. When data is generated in a local way, local ownership and citizen engagement are important. Another challenge relates to inducing stakeholders to provide the data needed. The Data Catalog Vocabulary (DCAT) was also referred to as an example of data that is published locally also allows stakeholders at the national level to use the data.

Nicos Kominos, URENIO Research, mentioned that both energy and mobility are very broad topics with several sub topics covered. What is needed is a generic methodology that can be applied in any domain, also taking into account that cities' preferences could change from one day to another.

Bart Rosseau, City of Ghent & Council of Cities Coordinator of OASC, presented Smart Flanders, a Flemish open data initiative involving 13 Flemish cities. IMEC coordinates and receives funding from the Flemish government with approx. € 1m given to IMEC for a three-year period. The initial challenge was to encourage people to provide data and the starting point was an assessment of the challenges faced. The first pilot topic chosen was parking data, as opposed to mobility that is a much broader topic. A second pilot topic focusses on buildings, including accessibility information for governmental buildings, while a third pilot topic covered business activities in the city. On the basis of the implementation experiences, Bart Rosseau, recommends as first step a consultation with citizens in order to understand the challenges faced. This should be followed by a focus on networks and the development of strategies and guidelines. While cities are different, there are commonalities so important to look for best practices. Along these lines, Julian Tait, stressed the need to create a learning environment for cities on open data, taking into account that everybody can learn from everybody.

Alberto Gago Fernandez, DG CNECT, informed the group about recent policy developments at EU level: The Open Data Directive was expected to be approved shortly by the European Council. The European Commission has provided a set of high value data (HVDs) sets that will be made available for free in EU Member States. The HVDs covers thematic categories as: 1) geospatial, 2) earth observation & environment, 3) meteorological, 4) statistics, 5) companies and company ownership and 6) mobility. It was recommended that the group align their work with these topics. The 2018 data packages and three policy instruments were also presented: 1) proposal for a revision of the Directive on the re-use of public sector information; 2) guidance on sharing private sector data in the European data economy; and 3) updated recommendation on access to and preservation of scientific information. With the **Open Data Directive**, they are e.g. trying to limit the exceptions that allow public bodies to charge for the re-use of their data more than marginal costs of dissemination. For more information about the Open Data Directive, please refer to <https://ec.europa.eu/digital-single-market/en/policies/building-european-data-economy>.

In terms of funding opportunities, **the Connected Europe Facility (CEF)** will fund actions from the 2019-2020 Work Programme to improve the availability for re-use of existing open data falling into the high value data sets categories. For more information about the CEF call, please refer to <https://ec.europa.eu/inea/en/connecting-europe-facility/cef-telecom/apply-funding/2019-cef-telecom-calls-proposals>.

Through the link, information is available about the call objectives and how to apply as well as timeline for the virtual info day providing further instructions. According to indicative planning, the **Public Open Data call** will be launched on 4 July 2019 with the deadline for submission of proposals on 14 November 2019. In addition, the Digital Europe Programme (DEP) is a new funding opportunity for which cities would also be eligible to apply.

## 4. Conclusions

Dana Eleftheriadou (DG GROW) stressed the current momentum as an opportunity for DCC cities to join forces in an open data pilot initiative. Beyond the participating DCC cities, also other cities flagged interest (such as Antwerp, Espoo, Nice, Reggio Emilia and Thessaloniki). While CEF may provide a good opportunity for a joint proposal, inspiration can also be found from OASC and the Flemish initiative. For the way forward, it was suggested to set up a task force with interested cities in order to assess if a proposal can be submitted to CEF.

The relevance of exploring the opportunities for a joint proposal was also emphasised by Jacek Walendowski, Technopolis Group. It was summarised on the basis of the discussions that a small leading group could drive this forward, involving Nice, Guimaraes and Derry / Londerry with guidance and support from external experts. The collaboration is on a voluntary basis and open to all interested cities. In conclusion, it was recommended to look into the CEF proposal requirements and to initiate a separate process focussing on understanding the data needs.

# Appendix I: Agenda

---

09:00-09:30 **Registration and welcome coffee**

09:30-09:45 **Introduction: Aim, objectives and approach of the workshop**

- Jacek Walendowski, Technopolis Group
- Colm McColgan, ERNACT, Derry / Londerry

09:45-10:00 **Demand side case of a collaborative open data initiative**

Presentation by:

- Julian Tait, Open Data Manchester

10:00-10:30 **Data topics of interest and needs (discussion)\***

Moderated by:

- Colm McColgan, ERNACT, Derry / Londerry

10:30-11:15 **Piloting of an open data initiative (discussion)\***

Moderated by:

- Augusto Ferreira, Delegate from the city of Guimarães

11:15-11:30 **Conclusion and next steps**

- Dana Eleftheriadou, Head of Advanced Technologies Team, DG for Internal Market, Industry, Entrepreneurship and SMEs, European Commission

\* The discussion with the involvement of experts:

- Alberto Gago Fernandez, DG for Communications Networks, Content and Technology, European Commission
- Bart Rosseau, Chief Data Officer of the City of Ghent and the Council of Cities Coordinator of OASC

## Appendix II: Workshop participants

---

Manuel Gomicia - Alcoy

Pedro Ramiro – Alcoy

Begoña Oliva Pérez - Algeciras

Colm Mc Colgan - Derry and Londerry

Anne Marie McLaughlin - Derry and Londerry

Eilis McFadden - Derry and Londerry

Augusto Ferreira – Guimaraes

Per-Olav Gramstad - Karlskrona

Charalampos Papadopoulos - Kavala

Mark-Alex Evtimov - Sofia

Nadia Soultanova - Sofia

Julian Tait - Open Data Manchester

Nicos Kominos - URENIO Research

Bart Rosseau - Chief Data Officer of the City of Ghent and the Council of Cities Coordinator of OASC

Piedad Rivas - EASME

Alberto Gago Fernandez - DG CNECT

Dana Eleftheriadou - DG GROW

Sebastian Otte - Technopolis Group

Morten Rasmussen - Technopolis Group

Jacek Walendowski - Technopolis Group

**DIGITAL**  
Cities Challenge