

Helping Local Government to Open & Use Data

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Despite all the buzz about Open Data these days one hears very little about the practical steps that a city administrator needs to take to open local government data and unleash innovation. Too often Open Data advocates, for all their commitment and passion, forget that for many cities and towns, especially smaller ones with limited resources, opening and using data is easier said than done.¹

Citadel on the Move is a project funded by the European Commission that aims to address this challenge by providing cities and towns with simple and easy to use templates and tools to help them open their data and create new applications that can be used and shared across Europe and even around the world.

There will always be certain circumstances in which it is simply not feasible to freely open all data. Wherever possible, though, Citadel strongly recommends adherence to the norms of the Open Data Commons wherein the users and providers of data agree to share and share alike.² In addition, Citadel recommends that cities take the following steps when opening their data:

1. **Select the Data Set:** Remember – simple and small can be good! The key thing is that the data is publically available and has no IPR restrictions on the way it can be used, reused or redistributed.
2. **Publish the Data Set:** For ease of use with Citadel tools and templates, use CSV – a very simple form that can be saved from Excel, Open Office and most spreadsheet programmes.³ Try to use non-proprietary formats (such as CSV instead of Excel) and structured formats (e.g. not scanned images, PDF etc). But most important of all, put your data out there. If someone wants to use it they will find a way!
3. **Publicise the Data Set:** Data needs to be discovered and discoverable to be used. Make sure to post your data on your website or a central catalogue, and tell your citizens it is there!
4. **Keep your Data Up-to-Date:** Expectations for current, if not real-time, data are growing. Remember to publish new files as amended or updated data becomes available.

¹ The EUROCITIES Guidebook is a notable exception to this rule. The guidebook is written by and for cities, and offers tailored information and practical guidelines for cities with limited resources and/or knowledge. See:

<http://www.eurocities.eu/eurocities/publications/EUROCITIES-open-data-guidebook-open-data-working-group-publication-WSPO-9CTHZE>

² <http://opendatacommons.org/norms/odc-by-sa/>

³ NB: **Citadel on the Move** is not arguing that CSV is the preferred approach for all open data initiatives, not least of all because it only works when the dataset is small, static and simply formed. In its simplicity, however, **Citadel** believes that CSV is a good place way for municipalities with limited resources and expertise to get started. Cities that are further along in their Open Data efforts should examine the Open Data recommendations of W3C - <http://www.w3.org/TR/gov-data/> - as well as new Linked Data initiatives e.g. LOD2 project <http://stack.lod2.eu/blog/>

Citadel-on-the-Move is not just about helping to open data - it is also about making sure that, once open, the data is used. To support local administrators aiming at this objective, Citadel has created a new tool to 'convert' data released as a CSV file into a format (JSON⁴) that is compatible with Citadel's App Generator – which has been specifically designed to make it easy for just about anyone with basic computer skills, even a nine year old, to create a mobile app that works not only in their own city but also across borders.⁵ For more detailed instructions about how to use these tools see: <http://www.citadelonthemove.eu/en-us/cities/publications.aspx>

There are a wide variety of potential technical procedures and norms that local governments can follow as they start to open their data. The Citadel approach is quite different to many of these in that it aims to simplify the process by helping to quickly get online the bulk of public data that is currently sitting as Excel files. Thus, instead of publishing somewhat complex datasets as web services and then releasing them through an API, Citadel aims to significantly de-professionalise the process in order to extend it to broader communities of users such as the local government sector.

Ultimately, however, **Citadel on the Move** believes that regardless of the tools and templates used, the key to success lies in getting started – one data set at a time, and getting users engaged – one application at a time. Data is only as valuable as its use. The more people who use data the more value is created, and the greater the incentive to open data becomes.

⁴ Currently Citadel templates use JSON files. As a result, the starting version of the Citadel Converter converts CSV datasets to JSON files. To continue to make it as easy as possible to use Citadel tools and templates, Citadel will shortly release a new Converter for JAVA. Citadel envisions the future development of additional Converters for other formats, as well as new templates that work with additional files.

⁵ Different cities often publish the same type of data in different ways. These differences create a large interoperability challenge because for a mobile app to work across city borders because (which is a core goal for **Citadel**) the datasets must be compatible. To overcome this challenge, Citadel-on-the-Move conversion to a common format that is compatible with the Citadel mobile app templates is required.