

## Free Software Management And Open Standards

**Free Software, Open Data and Open Standards, Document and Data formats and communication protocols** are the bases for technological sovereignty for cities and best support the digital rights of our citizens.

Free Software, Open Data and Open Standards, Formats and Protocols provide cities and citizens with tools enabling non-discriminatory access to and provision of digital services. This is not just a technology paradigm, but a culture that helps individuals and communities to protect their digital rights as well as to achieve innovation and reach goals that are beneficial for society in a collaborative manner. The mandatory adoption of Open Standards, Document and Data formats and Communication Protocols will improve transparency, coordination between public authorities and collaboration with the private sector.

**Shared, open cross-government standards, formats and protocols make services better for users and cheaper to run. Open standards simplify access to information by all organisations and individuals that want to participate in the City's development.**

Cities should publish the components of their ICT service infrastructures and share them with other cities, to allow for wider participation in improving these shared components, individually or collectively. All components of city ICTs should conform to open standards, document and data formats and communication protocols.

**Free Software** provides a solid foundation to achieve better levels of efficiency, stability and interoperability required for cities' ICT platforms, through source code ownership, collaborative development and sharing, all of which enable participation in digital services' security, validation and improvement.

Municipal investment and participation in Free Software projects help develop local skills and contribute to technologies which can reinforce citizens' digital rights while bringing benefits to the local economy. Free Software offers value for money in terms of long term sustainability and local economic development that is greater than any short term financial gains. The main benefit expected from using and developing free software is that the city regains or maintains control of their digital infrastructures.

It is crucial for an entity that implements public services and processes a lot of information about citizens to know exactly what it is being executed, in what computers, who has access to the data, etc. As the [GNU project](#) puts it: "The state needs to insist on free software in its own computing for the sake of its computational sovereignty (the state's control over its own computing). All users deserve control over their computing, but the state has a responsibility to the people to maintain control over the computing it does on their behalf. Most government activities now depend on computing, and its control over those activities depends on its control over that computing. Losing this control in an agency whose mission is critical undermines national security."

— *Richard Stallman.*

### Measures Governments Can Use to Promote Free Software:

- Encouraging local software support businesses, more easily including small and medium-sized businesses in the procurement process.
- Creating crucial new capabilities in the public sector through internalization of staff and a program to create in-house skills to drive transformation.
- Increasing transparency and auditability of administrative processes.
- Never requiring individuals or organizations that need to interact with the city administration to use a non-free and open source program
- Ensuring data sovereignty, privacy and security, for the citizens and for the municipality.
- Avoiding vendor lock-in and, more generally, freeing IT policy and planning from commercial strategies, constructing better tailored, more flexible, more sustainable solutions.
- Saving money, by avoiding proprietary license fees and through sharing and pooling of resources among municipalities and other government agencies.

### See Barcelona City Hall Free Software Management Guide as best practice:

<https://www.barcelona.cat/digitalstandards/en/free-soft/0.2/introduction>

## **Actions to achieve these Goals:**

*Cities shall develop and implement a digital rights and equality agenda, track and monitor the respect for citizens' digital rights, and jointly create tools and resources to help advance this effort.*

*Cities shall procure ICT services based on Free Software and consider non-Free offers when a Free Software based offer is not available. Procurement of components for Cities ICT infrastructures shall enable offers based on Free Software and shall award projects to Free Software based offers when submitted.*

*Cities shall review and publish as Free Software existing components of its ICT Infrastructure in which it holds the rights to do so. In addition, Cities shall identify those elements of its ICT infrastructure that are opportunities for implementing with or substituting by Free Software.*

*Cities shall use hardware resources controlled by the City itself adopting appropriate technical and organizational measures to ensure the protection of their citizens' and visitors' data and privacy.*

*Cities shall pool their ICT Infrastructure budgets for common procurement of Free Software technologies and services, and tools for publishing Open Data sets.*

*Cities shall develop internally appropriate Free Software and Open Data related skills to achieve autonomous management of their ICT infrastructures and services.*

*Cities shall promote and support local Free Software and Open Data based enterprise and community through developing skills, encouraging networking, supporting Free Software and Open Data enterprise, user groups and events, and providing financial and other types of resources.*

*Cities shall support and encourage the development of Free Software, Open Data and Digital Rights curricula in their municipal area educational institutions, to create a culture of openness and collaboration that will then support the cities' ICT policies for the future.*

*Cities shall review and publish as Open data all non-confidential or private data generated by municipal ICTs and provide platforms for other entities to do the same, to promote a transparent and collaborative relationship between city government and citizens.*

