

### Public Sector Open Source Program Offices Archetypes for how to Grow (Common) Institutional Capabilities

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#### KNOWLEDGE

Limited knowledge on what open source implies and how to consider it in established processes (e.g., public procurement)

#### CULTURE

Limited culture of sharing knowledge and intellectual property, as well as collaborating and communicating, both in public sector and open environments

#### RESOURCES

European Commission

No or limited resources in terms of funding, nor human resources to enable consideration,

development, or collaboration on open source

### Main Challenges



### Defining OSPOs OSPO = Open Source Programme Office



**TODO Group** 

"Centre of competency for an organisation's open source operations and structure"



**OpenForum Europe** 

"An institutional organisational construct that supports and accelerates the consumption, creation, and application of open source software"



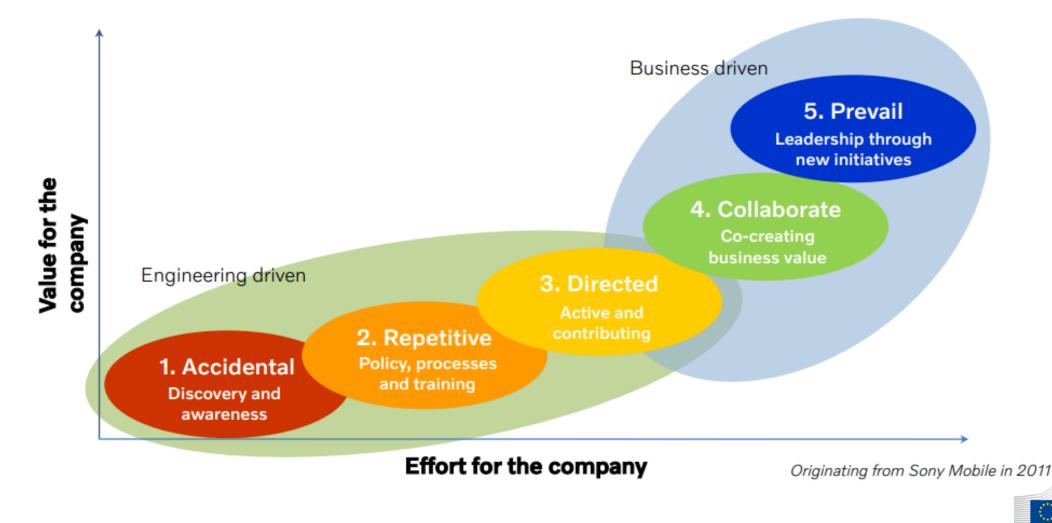
**OSPO** Alliance

"A cross-functional team to help define and steer an organisation's open source management strategy and organisational readiness"



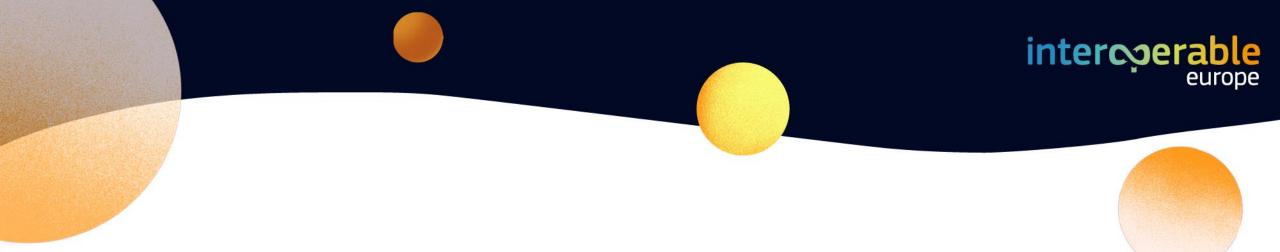
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### Helps to mature the organizational readyness



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### How are OSPOs organised and structured in public sector organisations?







## Different archetypes available based on need and context





### National Government OSPOs

#### Hosting organisation

National administrations or ministries responsible for digital transformation and government (in general or for specific domains)

#### Primary goal

Build and scale capacity in national public sector in adopting and collaborating on OSS

Free Software Unit at the French Interministerial Digital Directorate

(Direction interministérielle du numérique - DINUM)



Developers Italia at the Department for Digital Transformation (Dipartimento per la Trasformazione Digitale)





Luxembourg House of Cybersecurity OSPO at the Ministry of the Economy (*Ministère de l'Économie*)







Spencer Davis | https://unsplash.com/fr/photos/veduta-aerea-del-colosseo-a-roma-italia-:kotRXopwRM

### Case study: Italy

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- **Law** mandating public administrations to consider using OSS when procuring software solutions
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- **Developers Italia**, founded in 2017 and jointly managed by the Department for Digital Transformation and the Agency for Digital Italy



Educates and supports **development and growth** of processes, knowledge, and culture



- Guides, catalogues, and interactive **support** provided for users in terms of finding, choosing, and collaborating on open source
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- Developer **community** spanning public and private sectors, academia, and civil society supporting efforts



### Institution-centric OSPOs

#### Hosting organisation

Internal departments responsible for IT service provisioning to the overarching institution

#### Primary goal

Build and scale capacity inside the institution in adopting and collaborating on OSS

European Commission OSPO at DG DIGIT (Directorate-General for Digital Services)

IT Department at the French Public Employment Service (*Pôle Emploi*)



Bureau Open Source Software at CTO's Office of Dutch Tax and Customs Administration (Belastingdienst)







Case study: European Commissión's OSPO

- $(\bigcirc)$ Resides within the **Directorate-General for Digital Services**
- Executes on the **EC OSS strategy** and facilitates its renewal *{*0*}*
- **Liaison** between the EC's departments and external actors on **OSS** matters
- External outreach and collaboration through European OSPO SSZ network



Promotes consumption and contribution through relaxed yet controlled processes for compliance and security



Guillaume Périgois | https://unsplash.com/photos/blue-flag-on-pole-near-building-during daytime-HL4LEIyGEYU

### Local Government OSPOs

#### Hosting organisation

Departments responsible for IT service provisioning within local government (including municipalities, cities, and regions).

### Primary goal

Enable adopting and collaborating on OSS in the digital transformation of the local government



IT Department at City of Paris, France



Department for Digital Services and Innovation at City of Bratislava, Slovakia



Digital Centre at City of Ventspils, Latvia







Aartin Katler | https://unsplash.com/photos/aerial-photography-of-buildings-6PwyzRpf13w

### Case study: City of Bratislava

- Part of the Department for Digital Services and Innovation, headed by the City's Chief Innovation Officer since 2019
- OSS highlighted through Digital Innovation policy and Bratislava 2030 policy
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  - OSS **preferred** within the Department, but strong business case needed for other parts
- <u>5</u>
- Develops, maintains, and provides **OSS-based services**, including the City's e-service platform
- Works actively with **stakeholders** and uses **metrics** to improve and guide development



### **Association-based OSPOs**

### Hosting organisation

Associations with PSOs as members or owners

#### Primary goal

Enable members to initiate and collaborate on OSS projects addressing common needs

OS2 – Public Digitalisation Network, Denmark (OS2 – Offentligt digitaliseringsfællesskab)



Dutch Association of Municipalities, The Netherlands (VNG - Vereniging van Nederlandse Gemeenten)



Open Cities, Czech Republic (Otevřená města)





Martin Krchnacek | https://unsplash.com/fr/photos/ponte-di-cemento-grigio-vicino-agli-edifici-OyoaCpMCR0U

### Case study: Open Cities

- A Czech non-profit gathering **20+ cities** in the Czech republic to support their digitalisation
- Receives and hosts OSS projects initiated by public entities. **Facilitates** joint requirements engineering and planning, and performs the main development of the projects
- \* \_\_\_\_ \* \_\_\_\_
  - Currently **hosts six projects**, including Cityvizor an open source tool for transparent municipal management



- Collaborates with civic tech and hacker communities
- Actively **engaged** and driving efforts in creating a Czech national OSPO, and driving the European transformation through the Brno declaration



### Academic OSPOs

#### Hosting organisation

Institutions for higher education and scientific research

#### Primary goal

Provide support for development and dissemination of research outputs as OSS Technology Transfer Office at Trinity College Dublin, Ireland



OSPO at Lero - the Science Foundation Ireland Research Centre for Software, Ireland







Joshua Hoehne | https://unsplash.com/fr/photos/cappello-accademico-blu-e-biancoiggWDxHTAUQ

### Case study: Lero

- Constituted by an internal community of subject matter **experts**
- - Supports and trains **researchers** in how to develop, collaborate and disseminate software-based researchoutputs as open source



Considers open source as an instrument for **open science**, with a broadening interest for other areas within



- Ambition of **extending the OSPO** and open source as an instrument to the Technology Transfer Office, similar as to Trinity College Dublin
- Rapid **growth** of Academic OSPOs in the USA





Joshua Hoehne | https://unsplash.com/fr/photos/cappello-accademico-blu-e-biancoiggWDxHTAUQ

### **Common challenges**

- Culture, knowledge and organizational support for OSS lacking
  - E.g., license selection, business models, communiy growth...
- Growing sustainable funding for the OSS project's development and maintennace
- Typically very technical and specific knowledge required to contribute
- Narrow groups of end-users
- Parallell academic hieararchy inhibiting open collaboration and governnace



### **Complementary support functions**

#### Hosting organisation

Organisations independent of ownership or membership of any PSO, for example within the civil society

#### **Primary goal**

Build and scale capacity in national public sector in adopting and collaborating on OSS









### Case study: Code for Romania

- National civic tech **non-profit** launched in 2016 with about 25 individuals on staff
- Aims is to **equip** civil society and PSOs with OSS tools and solutions to better public services. Prioritises 37 areas identified as critical
  - Provides about **50 different applications** across areas such as education, citizen engagement, health care, environment, and social services

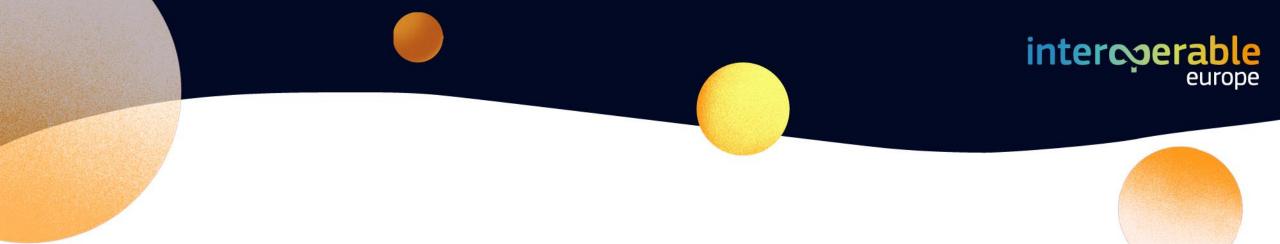


All applications are maintained and offered as **hosted services** primarily for PSOs within Romania



Structured process for initiating, developing, and hosting services, with research and close stakeholder **collaboration** 

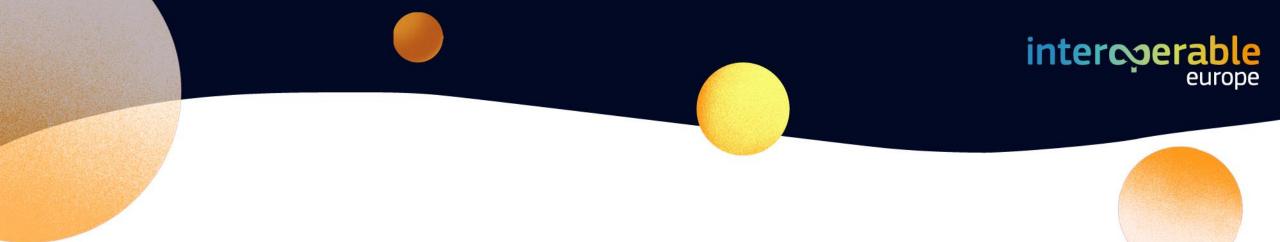




### Which archetype to choose?







# There is a need for growing common institutional capabilities





### Growing stronger... Together

RI. SE Those more capable fill an important role in leading OSS initiatives and adoption

There is a will and need to support each other in the collective adoption of OSS Association-based OSPOs enable less capable PSOs, especially at the local government level, to collaborate and initiate OSS solutions by addressing common needs

Civil society specifically fills a gap in enabling the use of OSS and in helping to organise PSOs

Bridging and growing common communities







Academia



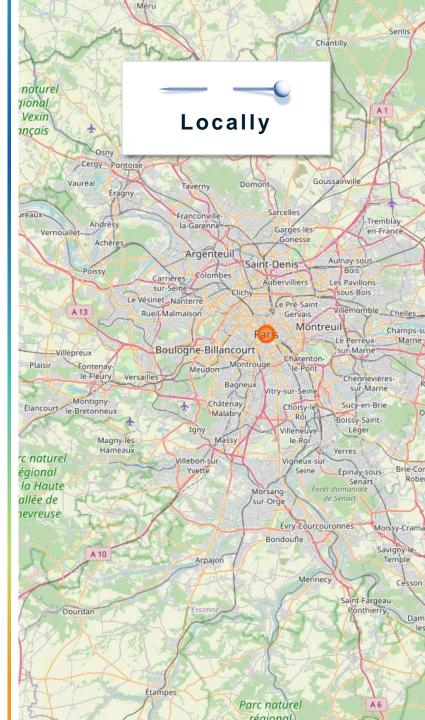
Civil Society



Industry European Commission







### Looking forward

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The OSPO constitutes a change agent and policy enabler



OSPOs will continue to play a pivotal role going forward Helps enable a more digitally sovereign, interoperable, and innovative society



"Open Source" will expand beyond code and software towards open technologies in society at large





## Thank you!

