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# Public sector Open Source Program Offices

- Archetypes and practices



<< Further reading [3]

# **Clear intent and direction needed from policy makers**

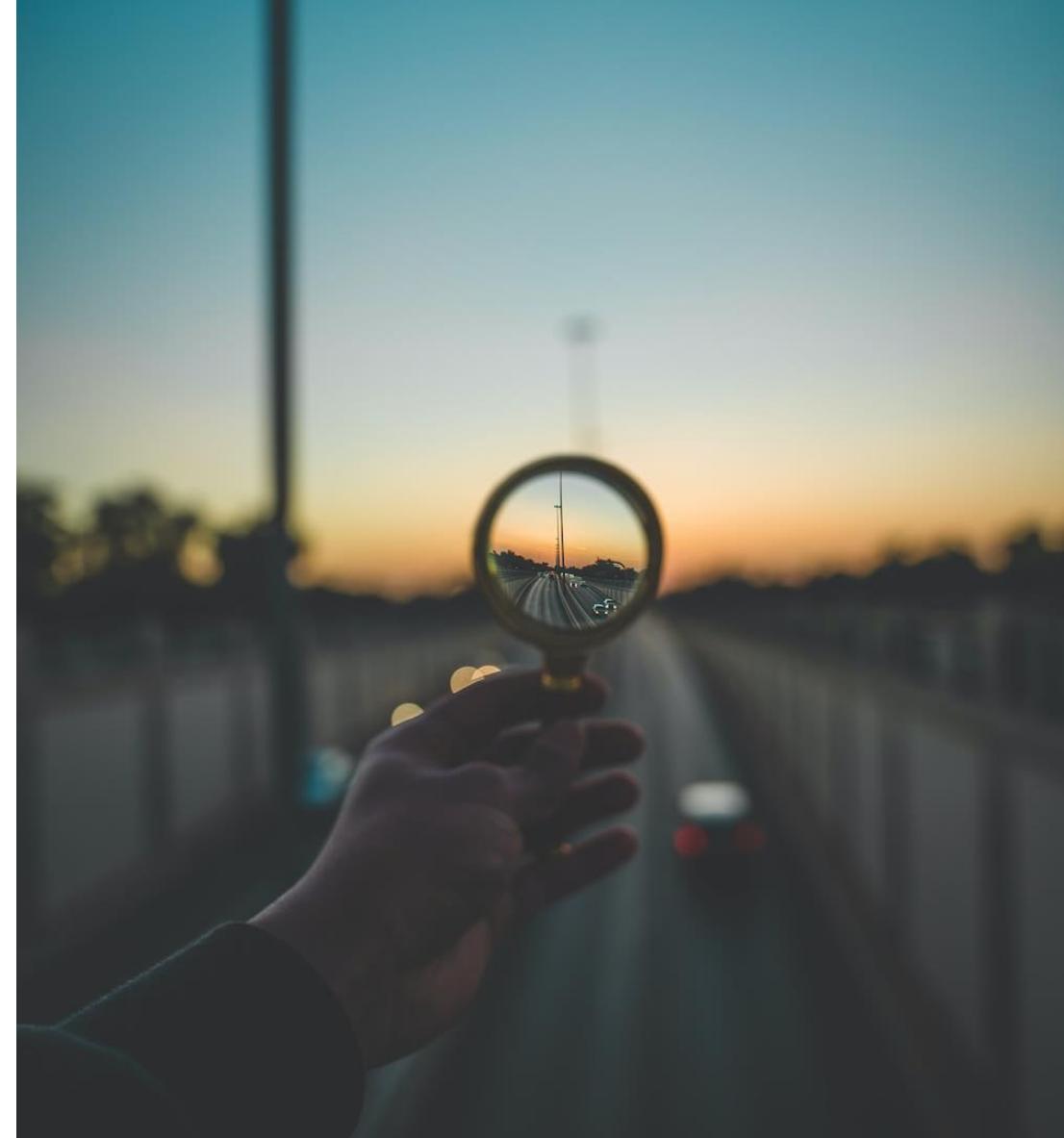
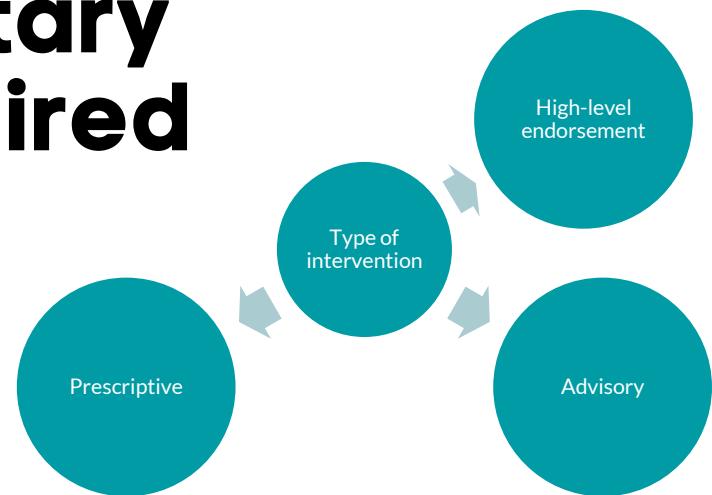
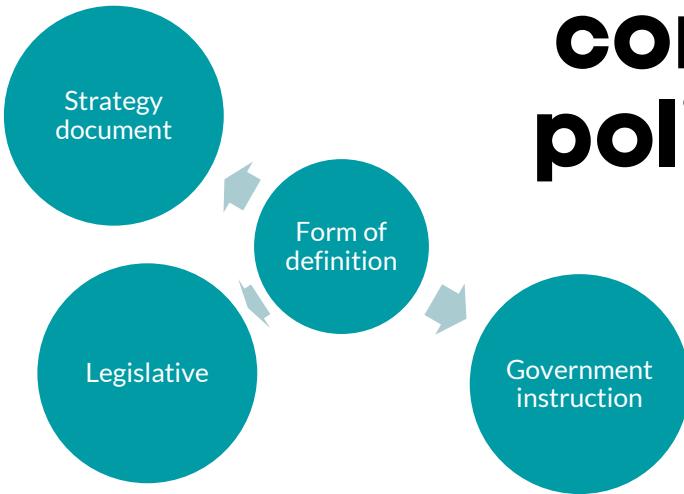


Photo by Yosef Futsum | <https://unsplash.com/photos/person-holding-magnifying-glass-during-sunset-ZAvhxLTcSok>



# Comprehensive and complementary policies required



# Support structures needed to enable policy goals



Photo by Nguyễn Hiệp | <https://unsplash.com/photos/grayscale-photo-of-crane-near-building-mvYyxn02rjk>

# Open Source Program Offices



## TODO Group

“Centre of competency for an organisation’s open source operations and structure”



## OpenForum Europe

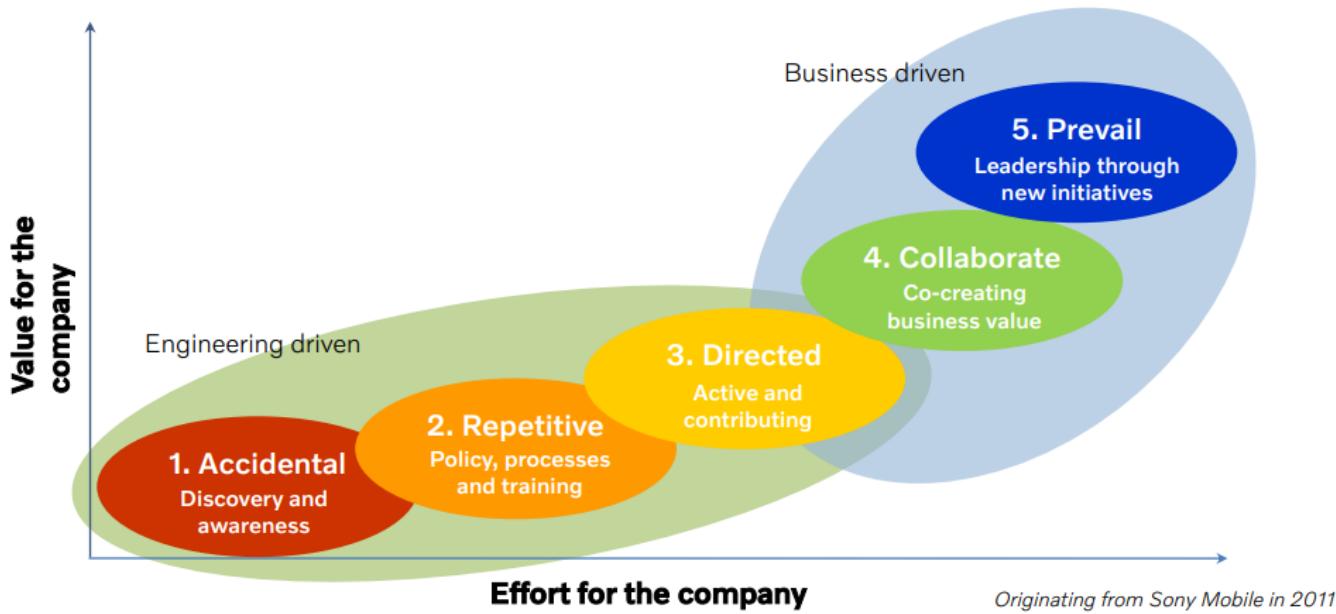
“An institutional organisational construct that supports and accelerates the consumption, creation, and application of open source software”



## OSPO Alliance

“A cross-functional team to help define and steer an organisation’s open source management strategy and organisational readiness”

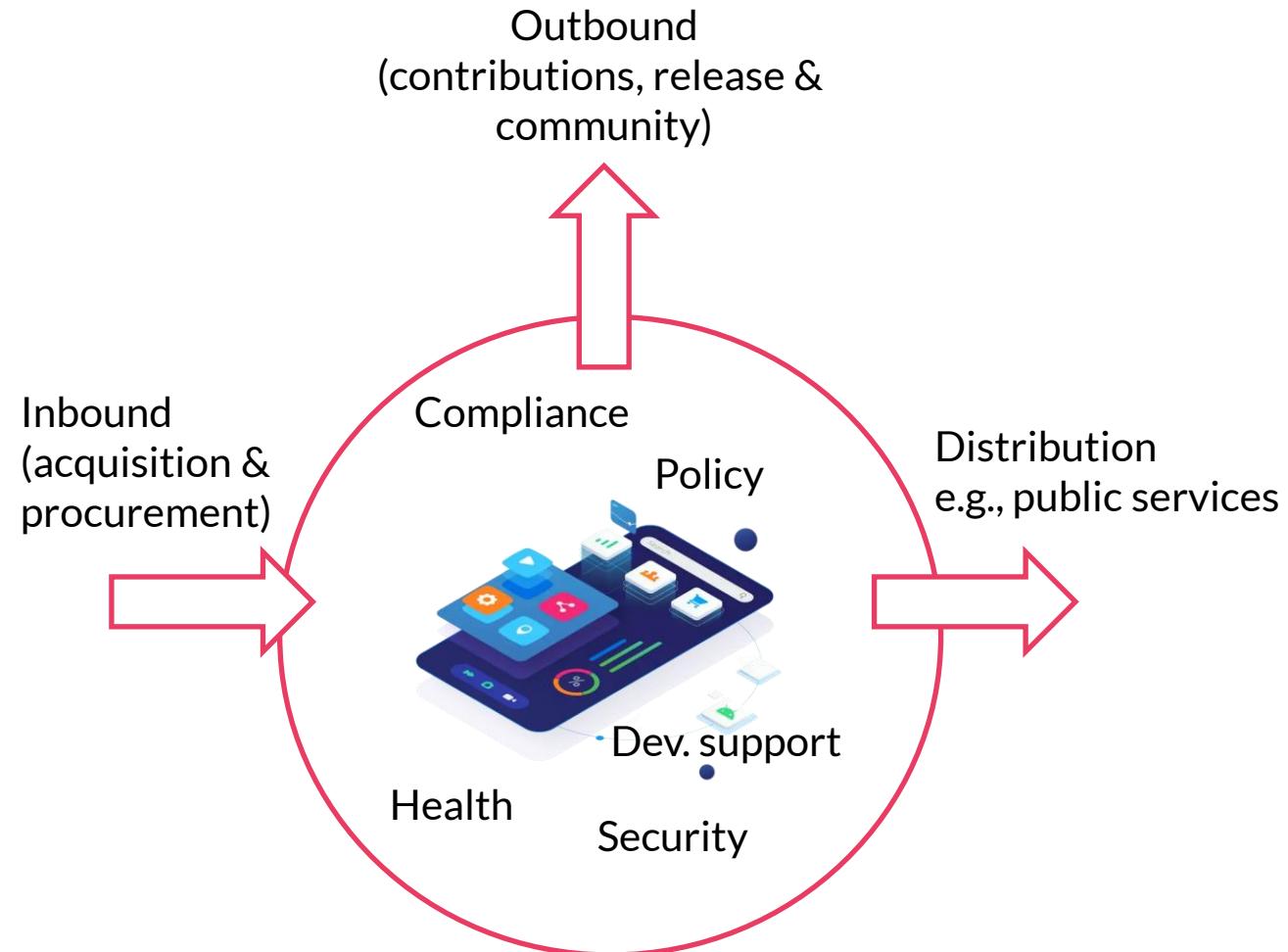
# Helps mature the organizational readiness



# A balancing act between Value and Risk



# Open Source Management





<< Further reading [5]

# **Public Sector Open Source - same but different**



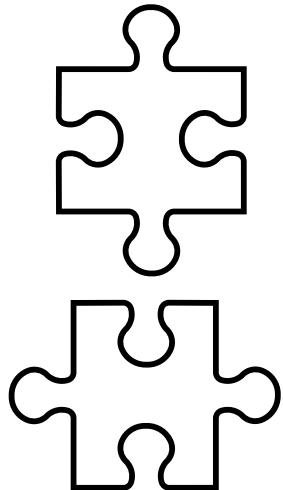
Photo by adonyig | <https://pixabay.com/photos/glass-globe-fot%C3%B3g%C3%B6mb-buda-castle-4112627/>

# **Vehicles for Cultural and Organisational change**



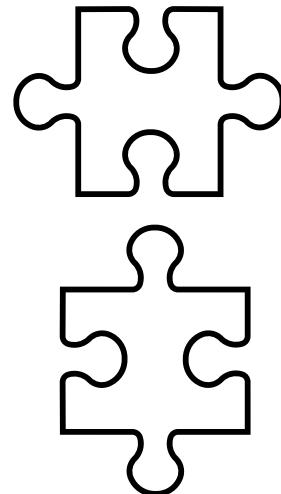
# **Interface and means of growing common capabilities**

National  
government  
OSPOs



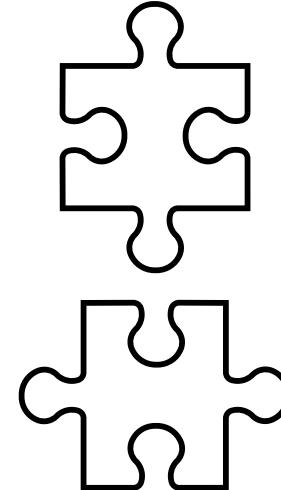
Association-  
based OSPOs

Regional  
government  
OSPOs



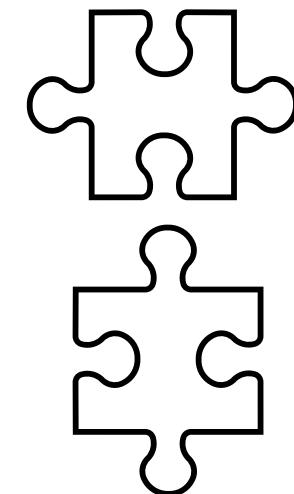
Academic  
OSPOs

Local  
government  
OSPOs



Trans-national  
OSPOs

Institution-  
centric OSPOs



Civil-society-  
based OSPOs



# National Government OSPOs

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## 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*)



Centre for Digital Sovereignty  
(*Zentrum Digitale Souveränität*)



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



# Case study: Italy

-  Law mandating public administrations to consider using OSS when procuring software solutions
-  **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
-  Developer **community** spanning public and private sectors, academia, and civil society supporting efforts

# Nations Government OSPOs - Responsibilities

## OSS Strategy

- Translate national policy into practice
- Guide PSOs in drafting strategies

## Use and Adoption

- Maintain central platforms/catalogues
- Offer acquisition support

## Development and Release

- Provide code collaboration platform
- Offer development/release support

## Licence Selection and Monitoring

- Curated licence lists
- Legal guidance
- Procurement support

## Stewarding Key OSS Applications

- Steward and drive key OSS projects (e.g., OpenDesk)

## Inner Source

- Preference for OSS over Inner Source

## Metrics and Follow-up

- Track platform/project use
- Monitor impact

## External Relations

- Grow cross-sector communities
- Host expert board
- OSPO network

## Training and Education

- Provide guidelines/practical support
- Leverage community



# Institution-centric OSPOs

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## 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)

A photograph showing several European Union flags waving in the wind against a background of a modern building with a grid of horizontal windows.

# Case study: European Commission's OSPO

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-  Resides within the **Directorate-General for Digital Services**
-  Executes on the **EC OSS strategy** and facilitates its renewal
-  **Liaison** between the EC's departments and external actors on OSS matters
-  External **outreach and collaboration** through European OSPO network
-  Promotes consumption and contribution through relaxed yet controlled processes for **compliance and security**

# Institution-centric OSPOs - Responsibilities

## OSS Strategy

- Shape and communicate institutional OSS policy

## Use and Adoption

- Support intake process
- Manage and monitor intake risk

## Development and Release

- Support release and contributions process

## Licence Selection and Monitoring

- Compliance automation
- Legal guidance

## Stewarding Key OSS Applications

- Enable project maintainerships
- Steward and drive key OSS projects

## Inner Source

- Preference for OSS over Inner Source
- Enable internal collab. platforms

## Metrics and Follow-up

- Management reporting
- Track code hosting activity

## External Relations

- Liaise between institution and OSS ecosystem
- Network engagement

## Training and Education

- Offer tailored support/training
- Peer review and advocacy



# Local Government OSPOs

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## 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



# Case study: City of Bratislava

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- 📍 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
- ⭐ OSS **preferred** within the Department, but strong business case needed for other parts
- 💻 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

# Local Government OSPOs - Responsibilities

## OSS Strategy

- Align local actions to policy/law
- Integrate OSS into city strategy

## Use and Adoption

- Business case validation
- Enable customisation

## Development and Release

- Develop and release in-house/procured OSS

## Licence Selection and Monitoring

- Inventory tracking
- Regular audits
- Procurement support

## Stewarding Key OSS Applications

- Steward and operate municipal OSS projects

## Inner Source

- Primarily open by default
- Not applicable at scale

## Metrics and Follow-up

- Informal, situational tracking
- Limited formal analytics

## External Relations

- Partner with other municipalities/cities
- Shared services

## Training and Education

- Knowledge transfer across functions
- Procurement guidance



# Association-based OSPOs

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## 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*)



## Case study: Open Cities

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- ➡ 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

# Association-based OSPOs - Responsibilities

## OSS Strategy

- Facilitate member-driven collective strategy

## Use and Adoption

- Host software directories; liaise vendor support
- Enable adoption by members

## Development and Release

- Manage collaborative project portfolios
- Host infrastructure

## Licence Selection and Monitoring

- Preferred licence models
- Compliance automation
- Legal guidance

## Stewarding Key OSS Applications

- Steward and maintain member OSS projects in collaboration with vendors

## Inner Source

- Facilitate internal collaboration among members

## Metrics and Follow-up

- Track member participation/project health

## External Relations

- Convene cross-jurisdictional networks/event facilitation

## Training and Education

- Workshops/toolkits for members
- Collaborative training



# Academic OSPOs

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## 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



## Case study: Lero

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

# Association-based OSPOs - Responsibilities

## OSS Strategy

- Advise on institutional policy and open science alignment

## Use and Adoption

- Guide researcher choices
- Promote open science principles

## Development and Release

- Assist research software dissemination
- Support development and release

## Licence Selection and Monitoring

- Advise based on project & commercial requirements

## Stewarding Key OSS Applications

- Steward key research tool
- Enable impact
- Promote cross-project funding

## Inner Source

- Promote collaboration through open science principles

## Metrics and Follow-up

- Tacit aggregation
- Impact monitoring

## External Relations

- Build research & stakeholder networks on OSS research software

## Training and Education

- Workshops
- Targeted mentoring programs and classes



# Complementary support functions

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## 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



Code for Romania



## Case study: Code for Romania

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-  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**

# Complementary support functions - Responsibilities

OSS Strategy	Licence Selection and Monitoring	Metrics and Follow-up
<ul style="list-style-type: none"><li>Identify and prioritise needs, provide solutions accordingly</li></ul>	<ul style="list-style-type: none"><li>Ensure compliance in OSS provided</li></ul>	<ul style="list-style-type: none"><li>Monitor end-user and community activity</li></ul>
Use and Adoption	Stewarding Key OSS Applications	External Relations
<ul style="list-style-type: none"><li>Provide suitable solutions</li><li>Support end-user adoption and operation</li></ul>	<ul style="list-style-type: none"><li>Steward and maintain key OSS applications initially, transfer with time</li></ul>	<ul style="list-style-type: none"><li>End-user (PSO) partnerships</li><li>Engage in existing OSS communities</li></ul>
Development and Release	Inner Source	Training and Education
<ul style="list-style-type: none"><li>Develop new/customise existing OSS projects</li></ul>	<ul style="list-style-type: none"><li>Not applicable</li></ul>	<ul style="list-style-type: none"><li>End-user (PSO) education and training</li></ul>

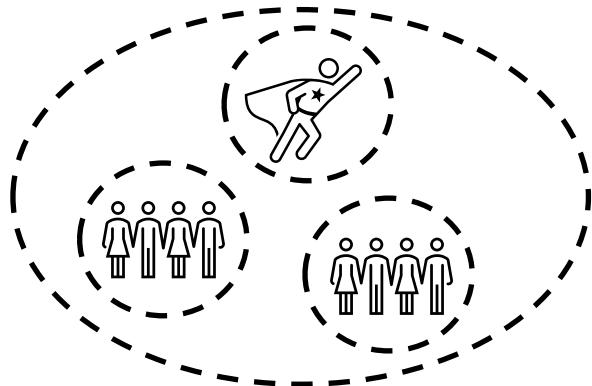
# OSPO support models

## Inward-model

Internally focused support, while <mainly> interfacing external ecosystem

Examples:

- Institution-centric OSPOs
- Academic OSPOs
- Local Government OSPOs

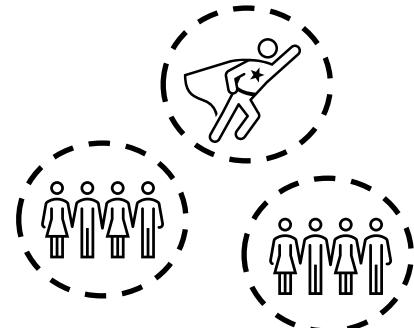


## Outward-model

Externally focused support across a specific/all levels of government

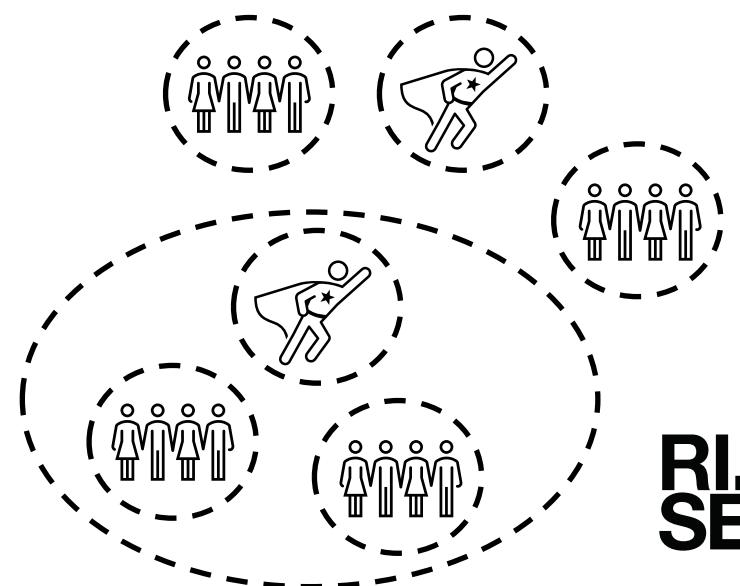
Examples:

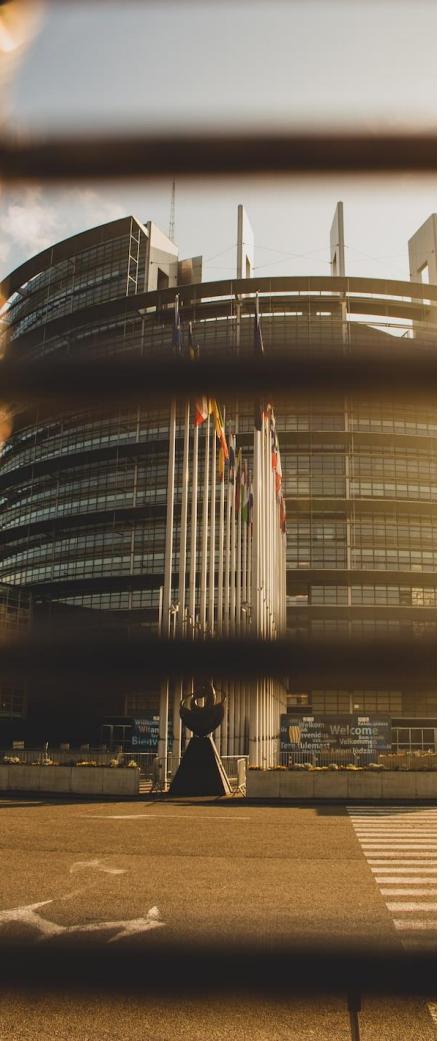
- National government OSPOs
- Association-based OSPOs
- Complementary support functions



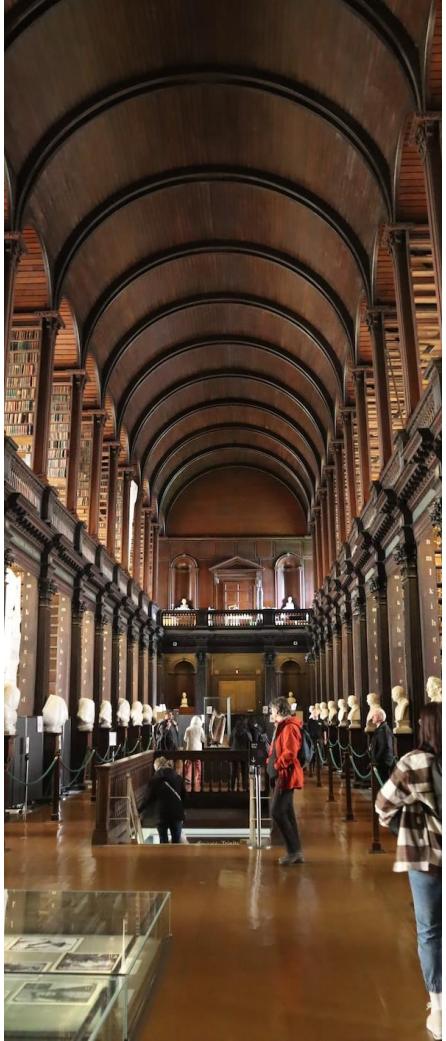
## Goal: Federated model

OSPOs with Inward and outward-modes present across all levels of government





**Public sector**



**Academia**



**Civil Society**

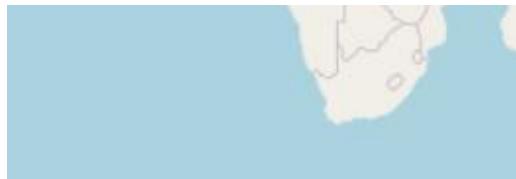


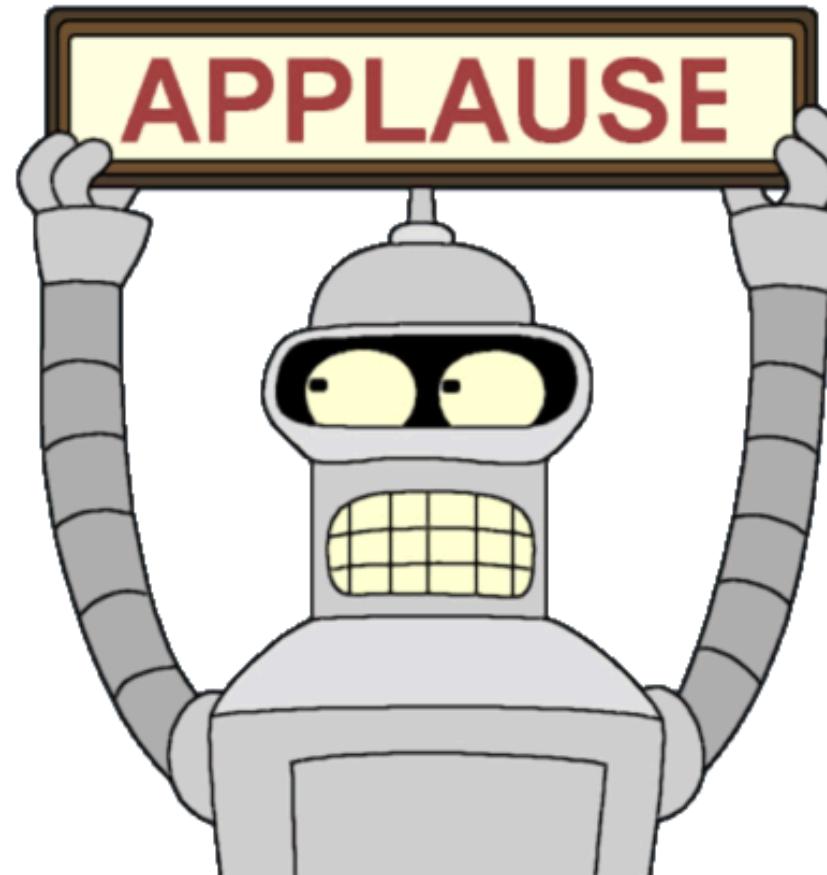
**Industry**

**R.  
I.  
S  
E**



**Need for growing common Institutional Capabilities across society and levels of government  
- OSPOs provides the interfaces -**





# Further reading

- [1] <https://www.linaker.se/blog/building-sovereignty-the-open-way/>
- [2] <https://arxiv.org/pdf/2409.01118>
- [3] <https://www.linaker.se/blog/report-software-reuse-through-open-source-software-in-public-sector/>
- [4] <https://www.linaker.se/blog/public-sector-open-source-program-offices/>
- [5] <https://www.linaker.se/blog/public-sector-open-source-software-projects-how-is-development-organized/>
- [6] <https://www.linaker.se/blog/sustaining-maintenance-labor-for-open-source-software-projects-through-human-Infrastructure-Copy/>
- [7] <https://www.linaker.se/blog/health-check-ups-on-open-source-software-projects/>
- [8] <https://europeanopensource.academy/>