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INTERNATIONAL  
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GOVERNANCE  
PRINCIPLES:  
Towards an  
International  
Framework

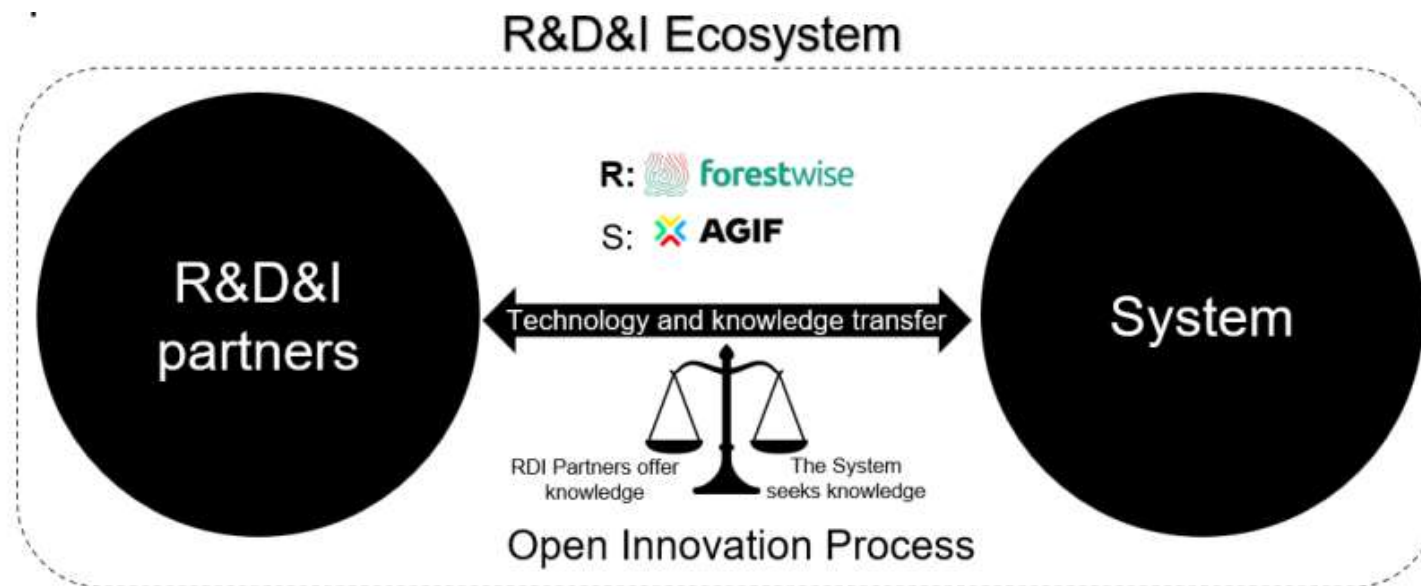
# Barriers to knowledge adoption

Upon 5 years of experience

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# Our vision



The starting point is a **common strategy** with the collaborative lab **ForestWISE** to bring science to wildfire management. Aiming to foster more applied r&d activities, **collecting needs** within the System and **bridging technology and knowledge providers with partners and end-users**.

The goal is to foster innovation by implementing an innovation management system that generates solutions in a systemic way.



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# Main barriers to knowledge adoption

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**Complexity:** Wildfire management is about uncertainty and dynamic field that requires a **broad range of expertise**. To organize knowledge in clusters that cover the entire wildfire value chain is important. It helps not to focus only in traditional fields, like wildfire detection and suppression, generating awareness to other important fields such as planning or communication (see Landscape Fire Governance Framework).

**Resistance to change:** When new knowledge and techniques are introduced, there may be resistance to change from those who are **comfortable with the existing practices**. It can be difficult to integrate new knowledge and techniques into existing operations, particularly if they are complex or require significant changes to existing protocols. Instead of wanting to change everything at once, it is necessary to **phase the implementations, achieve quick-wins and reach the end goal step-by-step**.

The criticality of the operations, namely those related to suppression, leads to some fear in the adoption of new untested and unvalidated solutions. Technology and knowledge providers **must deliver robust solutions**.

The **organizational culture** of all entities has to evolve to a more dynamic, response-focused approach.



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## **Lack of awareness and communication:**

- Entities involved in the integrated wildfire management system may not be aware of new knowledge and techniques that could improve their operations.
- R&D&I partners may not know the real operational needs.

This may be due to a lack of communication channels, limited research dissemination, or a lack of training, but also lack of stimulus alignment to consume knowledge.

In our experience, many have **difficulty in admitting the existence of problems** that could be shared with R&D&I institutions. We need to establish common communication platforms and figure out a way to make people comfortable sharing their pain with others.

Also in this context, a mixed **top-down** and **bottom-up** approach is critical.

- Operational entities must share their needs and priorities, but also allocate resources to projects.
- Researchers should plan projects with end-users.
- Whenever justified (e.g. when end-users don't have the required human capital), to ensure the future operation of scientific solutions, technological partners should also be involved in r&d projects.



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**Limited resources:** Public entities often have limited budgets and resources, which can make it difficult to adopt new knowledge and technologies that require significant investments. Public entities should set aside part of their **budget for innovation activities**, starting with lower risk projects that could bring **measurable quick-wins**. Consider 3% of budget of operational entities should be spent in innovation – to speed up the process

**Limited capacity for implementation:** Even if wildfire management agencies have the knowledge and resources to adopt new practices, there may be limited capacity for implementation. This may be due to a lack of personnel or expertise, or because the agency is already stretched thin due to ongoing activities.

We have also experienced some cannibalization of resources to EU funded projects, that deliver results in medium-term.

We need funding for smaller, more agile and short-term solutions.



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