



# Healthcare testbed activities as a modular construct

Modularity in multi-provider service contexts, EurOMA 2022

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2014–2020

# What is testbed

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- “user-centered, open innovation ecosystems based on a systematic user co-creation approach integrating research and innovation processes in real life communities and settings.” (ENoLL, 2021)
- Testbed typically means testing devices, software or services in clinical or simulation environment with professionals or customers.



Pic Nina Karttunen

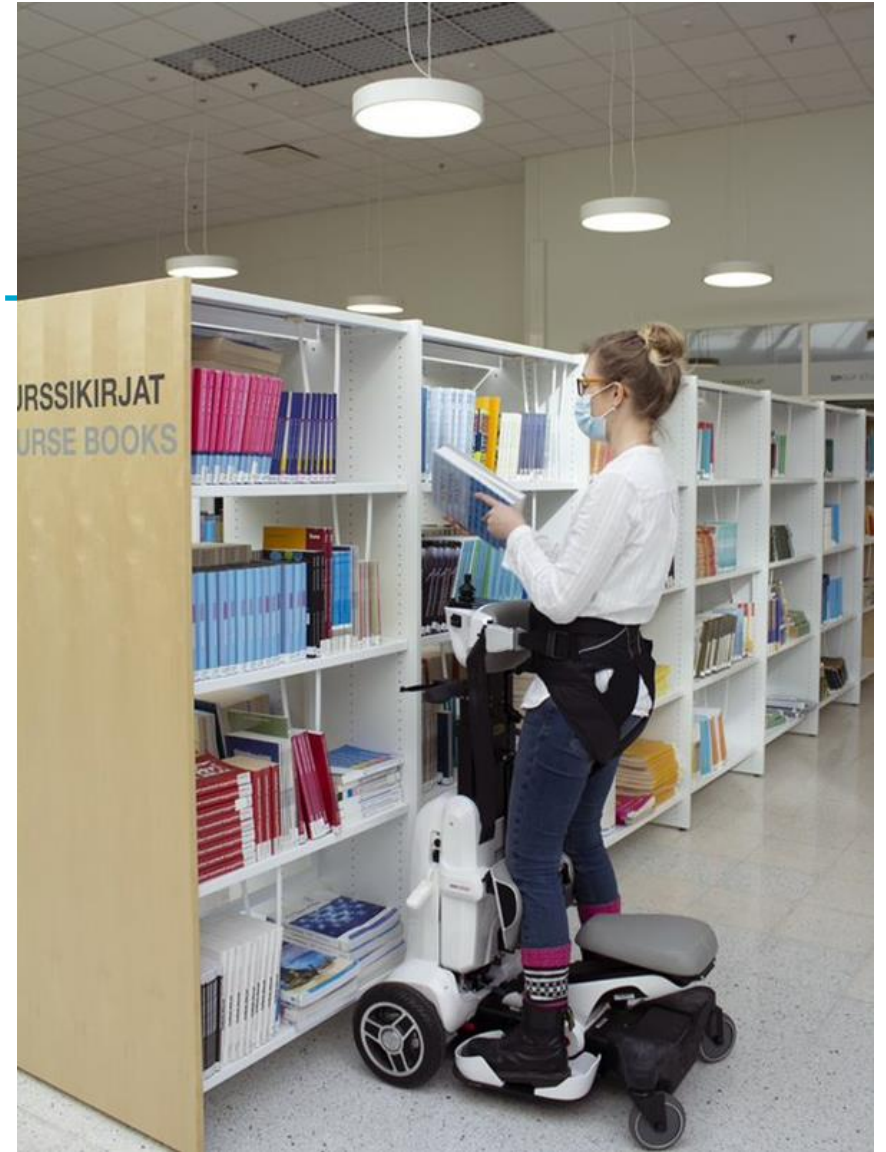
# Elements in testbed activities

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- Active (end)user involvement
- Real-life setting
- Multi-stakeholder participation
- Multi-method approach
- Co-creation

Ballon & Schuurman (2015)

➔ Complex environment with multiple providers and services



Pic Petra O'Rourke



# Material & Methods

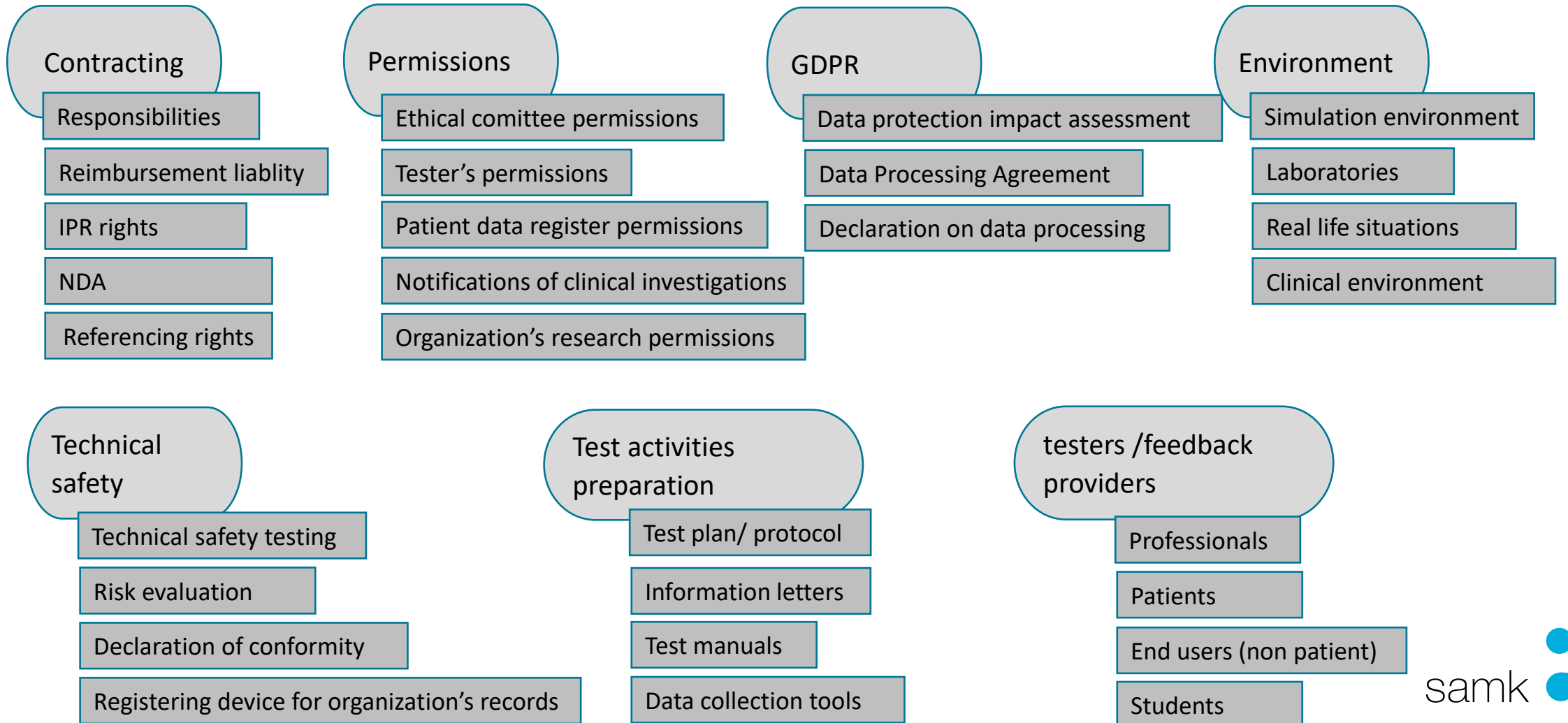
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- 10 testbed cases
  - Their service structure
  - Test process and documents needed for the processes
  - Representing different types of testbed services
    - Maturity of the service/device
    - Testing environment
    - Testers
    - Feedback providers
    - Focus of the feedback



Pic Petra O'Rourke

# Testbed modules and components



# Interfaces

	Entity	
<b>Aim</b>	Between services	Between providers
<b>Variety</b>	<ul style="list-style-type: none"><li>• Lists of modules and components available</li><li>• National and EU regulation</li></ul>	<ul style="list-style-type: none"><li>• Regular meetings between testbed coordination team</li></ul>
<b>Coherence</b>	<ul style="list-style-type: none"><li>• Standardized contact protocol for companies</li><li>• Standardized documentation</li><li>• Service descriptions</li></ul>	<ul style="list-style-type: none"><li>• Testbed coordinator</li><li>• Regular meetings between testbed coordination team</li><li>• Regular meetings for internal evaluation</li></ul>

# Contribution & Impact

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## Main impact on testbed services

- Helps testbed coordinator to illustrate the service structure for
  - Companies
  - Multiple services providers
- Creates understanding between stakeholders
- Revealed deficiencies in interface management

## Some impact on discourse of modularity

- Modular architecture tested in new complex service group

# Thank you!

CONTACT

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