



Mobilität der Zukunft: Praxislabor für ein Wirkungsmonitoring zur Steuerung missionsorientierter FTI-Programme

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Background

- ▶ Project goal: Co-creation of a framework for impact monitoring on a project level for the Austrian “RTI-Agenda Mobility 2026”
- ▶ Project format: Living Lab
- ▶ Collaborators: Austria Tech, Environment Agency Austria, funded R&I projects, Federal Ministry
- ▶ Commissioner: Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology

Problem analysis and research questions

1. What are the key elements of monitoring systems for transformative MOIP and how do they interrelate?
2. How can funded R&I projects be leveraged for monitoring processes at the programme level?

Inputs from the literature

- ▶ Flexibility to adapt in a highly dynamic environment (Fisher et al., 2018; Janssen et al., 2020; Wanzenböck et al., 2020)
- ▶ Go beyond quantitative indicators and take into account qualitative insights on different levels (Fisher et al., 2018)
- ▶ Facilitate transition learning (van Mierlo & Beers, 2018)
- ▶ Facilitate convergent view on problems and solutions (Wanzenböck et al., 2020)
- ▶ Evaluation of transition/system dynamics rather than innovation outcomes (Haddad et al., 2022)
- ▶ Integrated tool to share knowledge and facilitate learning across stakeholders (Mazzucato, 2018)
- ▶ Leverage multiple stakeholders to manage uncertainties and conduct ex-ante assessments (Fisher et al., 2018)

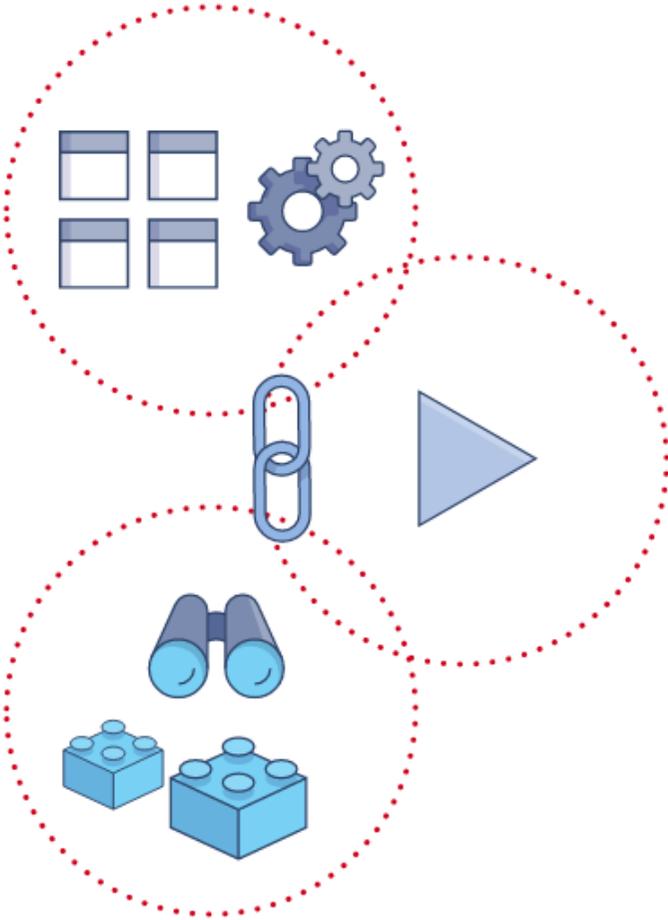
Development process of the monitoring system



Environment Agency Austria
supported the development of
"basic mechanics" at
programme level



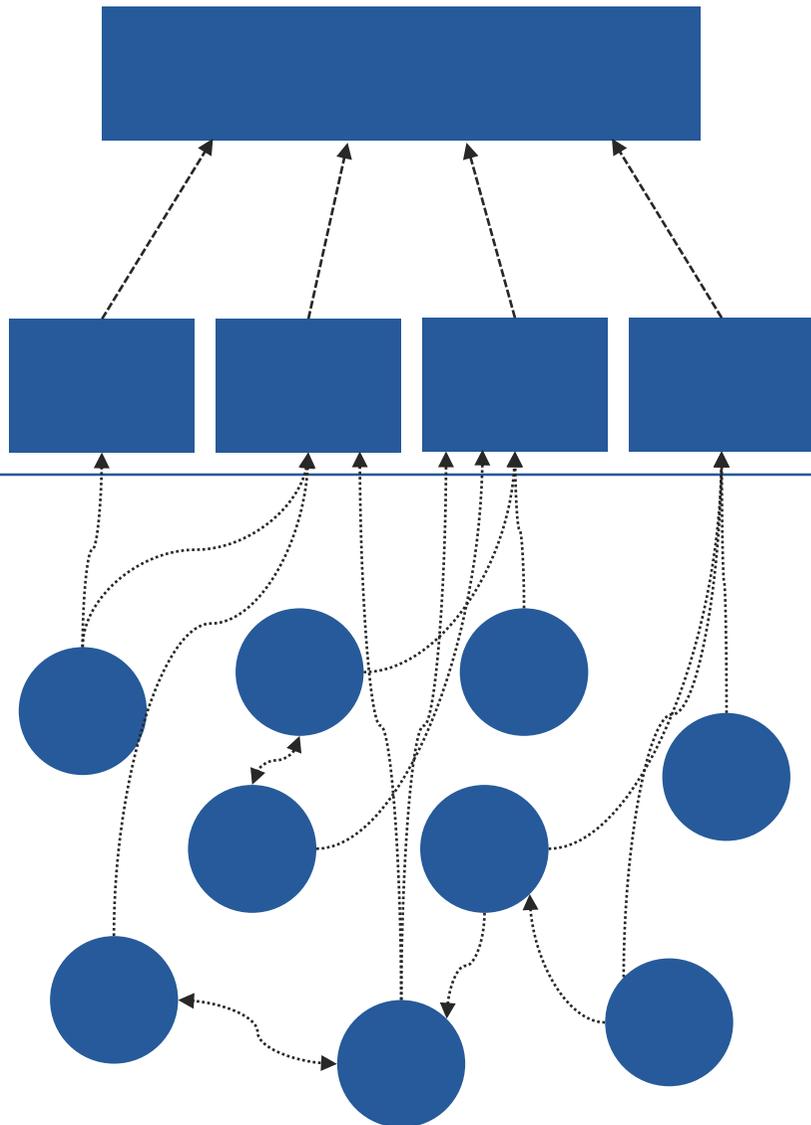
**Austrian Institute for SME
Research**
develops the monitoring at the
project/measure level and thus
creates the data basis to track
progress and allow an ex-ante
impact assessment.



AustriaTech
develops the
operationalisation at
programme level and
designs the interfaces

Source: AustriaTech

Structure of the programme



Mission

We take the necessary research and innovation policy steps to implement a sustainable, climate-neutral, and inclusive mobility system by 2040.

Mission areas

Cities, Regions, Digitalisation, Technology

Core elements

- ▶ Defined in a discursive evidence based-process by experts
- ▶ Progress tracked along three macro-processes (adapted from Gosh et al., 2021)
- ▶ Support decisions based on rolling assessment
- ▶ Supported by a set of four policy instruments

Expectations from Ministry and executive agency

- ▶ Continuously collect information on the progress of core-elements
- ▶ Focus on ex-ante assessment of potential outcomes
- ▶ Enable to focus activities/resources, bundle forces, find synergies
- ▶ Engage a wide range of stakeholders
- ▶ Encourage funded projects to contribute information
- ▶ Identify support needed by other policy fields to unlock potential

Expectations from funded projects

Impacts as starting point:

- ▶ Focus on output/outcome indicators could become an end in itself and thus undermine the achievement of medium- to long-term goals
- ▶ Monitoring should encourage the RTI community to design projects based on impacts

Incommensurability of impact contributions:

- ▶ Some contributions are small but very important for ethical reasons
- ▶ Too much focus on comparability of projects would undermine their diversity.

Impact size would be overestimated compared to impact depth:

- ▶ Transformation of the mobility system requires innovations at deeper levels
- ▶ In addition to impacts, potentials and barriers must also be taken into account

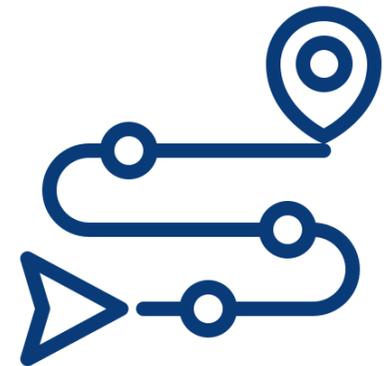
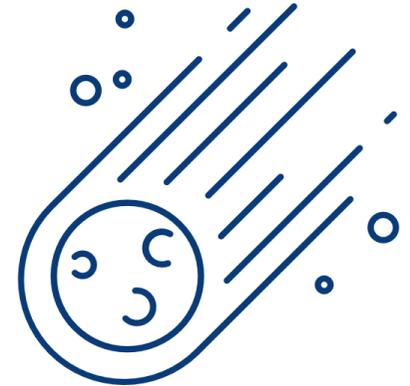
Operational aspects:

- ▶ Diversity in terms of project sizes must be considered
- ▶ Ensure the simplest possible linkage with the application and reporting processes

From impact monitoring to reflexive navigation system

Design principles

- ▶ Legitimising and adapting directionality in participatory way
- ▶ Collecting multidimensional information rather than just impact
- ▶ Leveraging stakeholder knowledge to track progress
- ▶ Making barriers and levers for transformation transparent
- ▶ Shifting perception from an obligation to co-creation
- ▶ Identifying synergies and avoiding redundancy
- ▶ Expanding reach beyond RTI-community
- ▶ Engaging new stakeholders



Reflexive navigation system

GPS-tracking

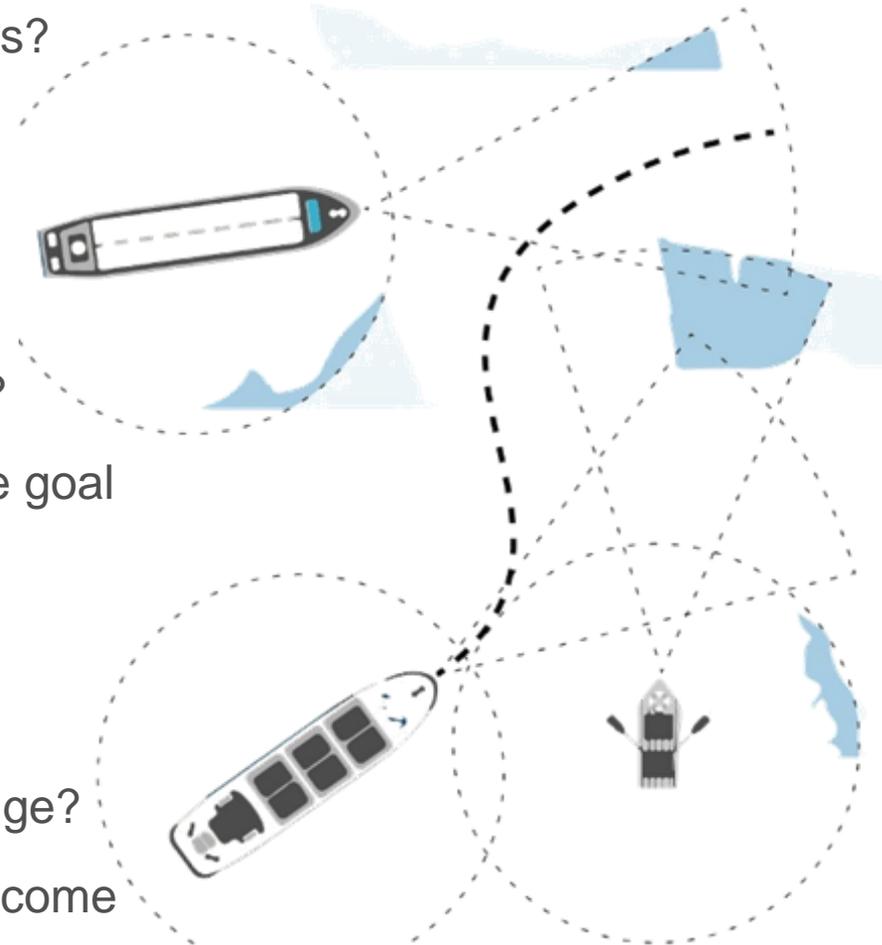
- ▶ Where is the core-element positioned relative to others?
- ▶ How is the core-element progressing?

Alternative routes

- ▶ Are there more promising ways to reach the goal?
- ▶ Does the changing context require to adapt the route?
- ▶ Are there barriers on a route or short-cuts to reach the goal faster?

Travel time estimation

- ▶ Which criteria are important in how to reach a goal?
- ▶ Is it still worthwhile to follow a route if the criteria change?
- ▶ With decreasing distance to the goal the estimates become more reliable



Source: AustriaTech



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Mitglied bei
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