Innovation procurement mini-toolbox for a sustainable mobility practitioner

This toolbox is published by the collaborators Estonian Cleantech Association, Estonian Business School and EIT Urban Mobility, an initiative of the European Institute of Innovation and Technology (EIT), a body of the EU. The content emerged from conversations in a series of workshops and exploration of Estonian case studies in Tartu and Põlva. Read more about the initiative here.

1. Before you start: Is this really "innovation procurement"?

This toolbox is meant for situations where a municipality or agency is **not just buying a standard service or solution** but wants to do something new or significantly improved in mobility and transport.

Use this quick self-check:

If you answer "yes" to at least two of these, this mini-toolbox is likely relevant:

- ◯ The solution you need is **not clearly available off the shelf** in the Estonian market.
- ◯ The supplier will need to **develop, adapt or combine** technologies or services, not just install a standard product.
- ◯ Your organisation is ready to accept some **uncertainty** about the exact solution, as long as outcomes are clear (e.g. safety, emissions, accessibility, service quality).
- ◯ You expect to learn something that could be **useful beyond your own organisation** (e.g. for other KOVs or national bodies).

If most answers are "no," the **EIS Innovation Procurement Handbook** and regular procurement guidance can still help you integrate innovation-friendly elements (e.g. outcome-based criteria), but a dedicated innovation process may be less necessary.

For concepts, procedures and templates:
See *Innovatsiooni hankija käsiraamat* (EIS Innovation Procurement Handbook)

2. Three actions *before* you write the tender

Workshop participants repeatedly stressed that what happens before the tender often decides whether an innovation procurement feels manageable or overwhelming. The following three moves summarise what they highlighted.

Action 1 – Clarify the mobility challenge and desired outcomes

Rather than starting with a technology ("we need sensors"), start with the problem and outcomes as precisely as you reasonably can.

You can do this on a single page:

- **Problem**
  - What is happening now?
  - For whom is this a problem (residents, specific groups, operators, businesses)?
- **Why it matters**
  - How does this link to your municipal development plans, climate goals, safety goals or wider Estonia 2035 objectives?
- **Desired outcomes (3–5 points)**
  - What should be measurably better in 1-3 years?
  - Examples: fewer crashes, lower speeds, more cycling, modal shift, better accessibility, lower operating costs.
- **Constraints and boundaries**
  - Which formal limitations should be taken into account?
  - Examples: approx. budget envelope, expected timelines, key regulatory or political constraints you are aware of.

This is not a formal document, but it can become the starting point for discussions with partners, experts and potential suppliers.

Where to go deeper:

- EIS Innovation Procurement Handbook: sections on problem and outcome definition
- Your own mobility, climate and safety plans

Action 2 – Talk to people: users, internal colleagues and the market

During the workshops, both municipalities and suppliers underlined that **silent, rushed preparation** tends to increase risk and reduce innovation. Participants pointed to three basic conversations:

- **Users and affected groups**
  - Who will be using, operating, or living with the solution?
  - What do some of them say about the current situation?
  - What would "better" look like from their perspective?
- **Internal colleagues**
  - Who needs to be in the loop early on (procurement, legal, IT, data protection, finance, communications)?
  - Are there existing projects, data systems, or contracts that your idea depends on?
  - Has your organisation attempted to procure or test a similar solution before?
- **Market and solution providers**
  - Are there suppliers, startups or research groups in Estonia or nearby who already work on similar challenges?
  - What kind of solutions exist in other cities already, and what can be learned from them? A lot of case studies can also be found outside of Estonia, for example on EIT Urban Mobility's Mobility Innovation Marketplace.
  - What information do solution providers say they would need from you in order to respond meaningfully to a tender?

Early market dialogue can take different forms – written requests for information, info sessions, one-to-one conversations – as long as the rules on transparency and equal treatment are respected, and the process is documented.

Where to go deeper:

- EIS Innovation Procurement Handbook: chapters on market dialogue
- RTK guidance on procurement procedures
- EIT Urban Mobility tools (e.g. RAPTOR challenges, Mobility Innovation Marketplace)

Action 3 – Decide who should support you

During the workshops, municipalities often stressed that they **do not want to do everything alone**. Before you commit to a specific approach, consider who could help at each stage:

- **EIS (Ettevõtluse ja Innovatsiooni Sihtasutus / innovation procurement function)**
  - Methodological and legal guidance on innovation procurement procedures.
  - Potential role as a central partner or contracting authority in more complex cases.
- **RTK (Riigi Tugiteenuste Keskus / State Shared Service Centre)**
  - Guidance on procedures and documentation, especially if EU or state funding is involved.
- **Universities and research institutes (University of Tartu's Mobility Lab, TalTech, TTK University of Applied Sciences)**
  - Data, modelling and evaluation support; help framing the problem and outcomes.
- **Agencies and tech network organisations (Baltic Innovation Agency, EIT Urban Mobility)**
  - Market dialogue and other types of engagement with solution providers and other European local governments with experience.
  - Insights into current innovation frontiers and access to experts.
  - Support with tender drafting (Baltic Innovation Agency).
- **Other local governments and networks (e.g. Association of Estonian Cities and Rural Municipalities (ELVL), Estonian Cleantech Association, ITS Estonia, regional clusters)**
  - Experience from similar challenges; potential joint procurements.
- **Ministries (e.g. Ministry of Climate)**
  - Alignment with sector policies, safety and environmental requirements.

A short internal note ("who we will contact and for what") can be enough at this stage. The main point is to make sure you identify all the people who could be relevant to involve supporting you in the process.

3. Designing and running the tender in an "innovation-friendly" way

Many of the challenges described during the workshops were not about specific legal forms, but about **how requirements, criteria and risks were framed**. The tools below are meant to sit alongside – not replace – the detailed guidance in existing handbooks.

3.1. Focus requirements on outcomes, not a single predefined solution

Whenever your situation allows for it, try to describe **what** the solution must achieve rather than exactly **how** it must work.

Some questions that can help:

- What must absolutely be true at the end of the contract (e.g. performance, safety, uptime, user impact)?
- Which technical choices can reasonably be left open to suppliers?
- Are there minimum quality or interoperability requirements that are essential (e.g. standards, integration with existing systems)?

Suppliers can then propose different approaches, including ones you might not have anticipated.

Where to go deeper:

- EIS Innovation Procurement Handbook: examples of outcome-based requirement wording and evaluation models

3.2. Keep the evaluation model understandable and aligned with your goals

Participants pointed out that complex scoring models can discourage bidders and make decision-making harder. A simple model may be easier to defend and manage internally.

Typical components used in the tender scoring matrixes:

- **Impact/outcomes** – contribution to your stated problem and goals (e.g. safety, emissions, accessibility).
- **Feasibility and quality** – technical robustness, implementation plan, organisational capacity.
- **Total cost and value** – full life-cycle cost, not just lowest price.
- **Innovation/added value** – credible novelty or substantial improvement compared to existing practice.

The relative weights and exact criteria will depend on your context. The key is that they are **clearly linked** to your earlier problem/outcome definition and documented in a traceable way.

3.3. Document decisions and risks as you go

During the workshops, audit and legal risks were often described as major concerns. One of the practical suggestions was to treat **documentation** as a core risk-management tool, not an afterthought.

Minimal elements you may want to capture:

- Why you considered this procurement "innovative" (based on your self-check and internal discussion).
- What alternatives (including non-innovative options) did you consider, and why did you make the choice you made?
- How you organised and documented early market dialogue.
- How you defined criteria and weights, and who was involved in the decision.

This kind of record can support later audits, internal learning and future procurements, even if the project does not go exactly as planned.

Where to go deeper:

- RTK and Finance Ministry guidance on risk, documentation and avoiding typical procurement errors
- EIS materials on innovation procurement supervision and lessons learned

4. Data and "pilot-to-scale" questions to ask early

The Põlva and Tartu case studies both highlighted that **data management** and **what happens after the pilot** can become decisive issues.

You may not be able to answer all of these at the outset, but it helps to put them on the table early on.

4.1. Data and governance

- What kinds of data will the solution use or generate? (e.g. personal, non-personal, location, sensor data etc.)
- Who will have access to which data and under what conditions? (e.g. municipality, provider, police, research partners, others)
- How long will data be stored and where?
- What needs to be anonymised or aggregated for privacy reasons?
- Are there other regulations or sectoral guidelines that apply (e.g. traffic, safety, environmental reporting)?

These topics often require input from data protection officers, legal advisers and possibly national authorities.

4.2. From pilot to longer-term use

- If the pilot works, **who will decide** whether and how to continue or expand it?
- What would "success" look like in measurable terms (e.g. change in behaviour, service usage, cost per user, safety indicators)?
- Is there a realistic path for funding the next step (from pilot to wider deployment) if the results are positive?
- How will you handle operation and maintenance? Through the same supplier, a new procurement or an internal team?

These questions do not need perfect answers at the beginning, but having at least some ideas written down can prevent promising require perfect answers at the outset, can prevent promising projects from being abandoned because the next step was never considered.

Practitioners in the workshops found useful and points towards resources that already exist in Estonia and in European networks.

When you need more details, consider the following sources:

- **Enterprise Estonia, EIS – Innovatsiooni hankija käsiraamat**
  - Main national handbook on innovation procurement: concepts, legal routes, templates, examples. https://innohangetekasiraamat.eis.ee/
  - Capacity building provisions.
- **Riigi Tugiteenuste Keskus, RTK – Innovation procurement and funding instruments**
  - Information on financial support and programmes that can share risk and cost in innovation projects.
  - Capacity building provisions.
- **Riigikantselei / national digital and innovation resources**
  - Methods and case examples related to public-sector innovation processes.
  - InnoFund
- **Universities and research partners (e.g. University of Tartu's Mobility Lab, TalTech, TTK University of Applied Sciences)**
  - Support with data analysis, modelling, behavioural studies and evaluation.
- **EIT Urban Mobility tools and programmes**
  - Funding calls for larger and smaller innovation scaling purposes, check out the current calls: Innovations to Market - EIT Urban Mobility
  - Platform showcasing mobility solutions and city use-cases across Europe: Mobility Innovation Marketplace
  - Examples of challenges that European cities aim to address with solutions from SMEs and start-ups: Raptor Project