



Urban Mobility

Co-funded by the
European Union



European Institute of Innovation and Technology
EIT Urban Mobility
Mobility for more liveable urban spaces



EIT Urban Mobility Innovation Programme

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About EIT Urban Mobility

EIT Urban Mobility is an initiative of the European Institute of Innovation and Technology (EIT). Since January 2019 we

- Change *the way people move*
- Make cities more *liveable places*.
- Transform the idea of *urban mobility*.

Co-funding of up to € 400 million (2020-2026) from the EIT, a body of the European Union, helps us achieve these goals.



We create systemic solutions that will **move more people around the city more efficiently and free up public space**



We bring **all key players in urban mobility together** to avoid fragmentation and achieve more



We **engage cities and citizens** from the word go, giving them the opportunity to become true agents of change



Why Innovation?



Innovation

From research to application

EIT Urban Mobility's Innovation Programme aims to resolve urban mobility challenges facing European cities via **action orientated innovation**.

We co-create ideas that lead to the project proposal, the demonstration of new solutions in real life and the creation of commercial value.



Challenge Areas

- **Future Mobility :**

Digitalisation and technologies such as artificial intelligence, big data and blockchain enable the creation and adoption of new services that improve liveability in our cities, release space to citizens and decarbonise our transport systems. This Challenge Area seeks innovative solutions/projects that ease the take-up of disruptive technologies for mobility providers, cities and citizens.

- **Sustainable City Logistics :**

Freight transport has negative impacts such as air/noise pollution and blocking areas of the public realm. Introducing innovations in city logistics and making it more sustainable requires cooperation between a wide range of partners as well as new vehicles, business models and technologies. This Challenge Area aims to improve urban services, goods delivery and waste management operations through logistics, future vehicle design, behavioural and technological innovations.

- **Mobility & Energy:**

This Challenge Area aims to reduce dependency on fossil fuel by increasing energy independence. Replacing internal combustion engines with cleaner fuel-propulsion solutions requires new vehicle technologies (including retrofitting), charging/refuelling supply, as well as demand for the fuels. This requires new partnerships, business models and new infrastructure (often in the public realm).

- **Active Mobility:**

Increasing active mobility includes a modal shift from private motorised vehicles to active mobility showing a decrease in noise and air pollution and increasing healthy city living. Supporting modal shift to active mobility requires a range of different measures and new solutions to support crowding/congestion of cycling infrastructure ensuring high quality of life and good use of public space.

Innovation Funding Opportunities

- **Rapid Applications for Transport (RAPTOR)**
 - ✓ Small budget for individuals, teams, start-ups and SMEs
 - ✓ Demonstrates fast, niche innovation over a 4-month period
- **Action and Impact Groups (AIG)**
 - ✓ External funding sources
 - ✓ Pre-TRL 6
 - ✓ Provides EIT UM partners and community opportunity to secure additional funding sources
- **EIT Urban Mobility Annual Innovation Call for Proposals**
 - ✓ Medium sized consortia and budget
 - ✓ TRL 6+
 - ✓ 1-2 years duration



Rapid Applications for Transport (RAPTOR)

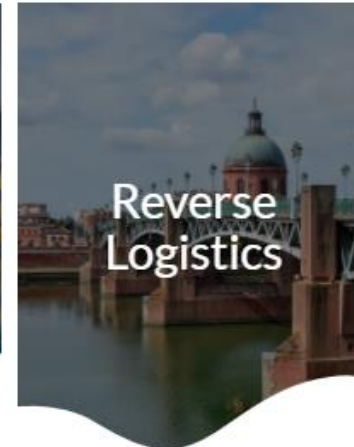
RAPTOR is a competition that swiftly creates and tests solutions to **niche urban mobility challenges** for cities/towns/neighbourhoods across Europe. Over **4 months**, participants (**individuals, teams, start-ups, SMEs**) compete to provide the most innovative, feasible, and impactful solutions. Winners receive a support package that includes **cash prize**, access to **pilot MVP** in partner city, **mentoring and support**. There is also potential to be involved in other startup / SMEs programmes at EIT Urban Mobility.



The mixed real estate development **Tour&Taxis of Brussels** seeks a solution to generate more private car sharing among residents near the Brussels North station



The **City of Valencia** seeks a mobility solution that will decrease traffic and pollution for travelers between the city and Albufera Natural Park



The **City of Toulouse** seeks a smart logistics solution to waste collection in the historic centre, a popular touristic part of the city

[RAPTOR Toulouse](#)



The **City of Cunit** seeks a solution to improve the collection and analysis of visual data to improve road maintenance procedures

[RAPTOR Cunit](#)

Cities involved on the RAPTOR program

Feb-May 22



Brussels



Sep-Dec 22



Cluj Napoca



RIGA CITY COUNCIL



CÂMARA MUNICIPAL



Tel Aviv



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Action and Impact Groups (AIG)

- The AIG is an initiative launched in June 2021.
- Created to identify additional opportunities for EIT Urban Mobility partners, cutting-edge innovators and researchers to identify, apply for, and **secure funding sources at the regional, national, and European level** for urban mobility projects (**pre-TRL6**) across a broad spectrum of activities and solutions.
- Aligned with the EIT UM scope to create more liveable places, tackle urban mobility challenges, and accelerate change.
- Aligned with Challenge Areas: **Future Mobility, Sustainable City Logistics, Mobility & Energy, Public Realm and Active Mobility.**
- Focus on **EU-level funding calls**, including **Horizon Europe (HE), Digital Europe (DE) and Connecting Europe Facility (CEF).**



Four mutually complementary objectives of AIG

Encourage innovative research and mid-TRL solutions before commercialisation

>20 partnerships supported

Enable closer cooperation within the EIT Urban Mobility community and provide matchmaking opportunities

>280 people engaged



Support access to non-EIT funding opportunities for the urban mobility community

>14 mln EUR mobilised for ecosystem

Support engagement of EIT Urban Mobility in strategic innovation projects

5 projects in implementation in sustainable logistics, mobility solutions for climate neutrality, data spaces and road safety

Annual Innovation Call for Proposals



- **Market-based** and solution-oriented. TRL > 6
- Pathways for SME's to expand and grow
- Centred on **pan-European demonstration** and testing in real-life contexts with public engagement
- 12 to 18 months duration

Technology, research and societal innovation:



Developed by **multidisciplinary teams** and supportive of EIT Regional Innovation Scheme country partners

Solutions should contribute to city services integration, helping cities implementing their own policies

Better mobility services for citizens, higher levels of *accessibility*, reduction in *greenhouse gas emissions*, and better *use of urban space*



Challenge-driven:

Based on specific Challenge Areas. **Focus 2023 call:** Active Mobility, Future Mobility Sustainable City Logistics, Mobility & Energy



TYPE 1

TYPE 2



- Between 300 K and 800 K EUR

- Up to 300 K EUR



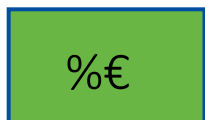
- A minimum of **TWO CITIES (demos)**
- A minimum of **two industry/SME applicants**

- A minimum of **TWO CITIES (demos)**
- A minimum of **one industry/SME applicant**



- **12-18 months** project duration

- **6-12 months** project duration



- Minimum **32% co-funding (across the Project)**



- **TRL 6 or above** (preference to proposals with highest TRL)

- **TRL 7 or above**



- Applicants from at **least two different member states or Horizon Europe Associate Countries**



- **OPEN to** all academic, public sector, industry, research, NGO, and SMEs organisations registered in EU Member states and associated countries.



- Innovation Proposal should identify RIS applicants in their application
- No standalone RIS innovation calls will be made in 2023



KPI are key to funding

Marketed Innovation

- New Product
- Improved product (before/after)
- 12 months (extra points)
- 24 months (points)

Existing product plan –
track and get credit

Start-up created

- New start-up
- Open Entity in other country
- Student/Start-up

Expansion plan
Accelerator Plan



Financial Sustainability Mechanism

- EIT Urban Mobility drives for the creation of commercial value
- A % or contribution from your success goes into a Perpetual Innovation Fund (PIF)
- From 2035 the PIF reserves will fund all of the EIT UM work
- Partners have say in how we spend the PIF reserves

FSM types of agreement

1. Equity
2. Revenue share
3. Predefined contribution p/a
4. Equity in new companies (newco)
5. Patent royalties percentage

Last mile logistics for autonomous delivery of goods

Challenge



Increase in traffic congestion, safety issues for pedestrian, cyclists and delivery workers from increased e-commerce

Strategic Goal



Design of a fully autonomous delivery system consisting of a hub vehicle and smaller delivery devices

Output



Autonomous delivery robots, fleet operation and remote back-end control center in different urban environments

Partnership

University led, three cities involved in demos and knowledge transfer



Living Lab for autonomous public transport

Challenge



Lack of transferrable regulatory safety framework among European cities for driverless shuttles/pods.

Strategic Goal



Phasing out the need for safety drivers in shuttles and moving towards remote operators.

Output



A robust transnational legal/safety framework and promotion of user acceptance with the deployment of autonomous shuttle/logistics services.

Partnership

University led, five cities involved in demos, results feeding into definition of regulatory framework



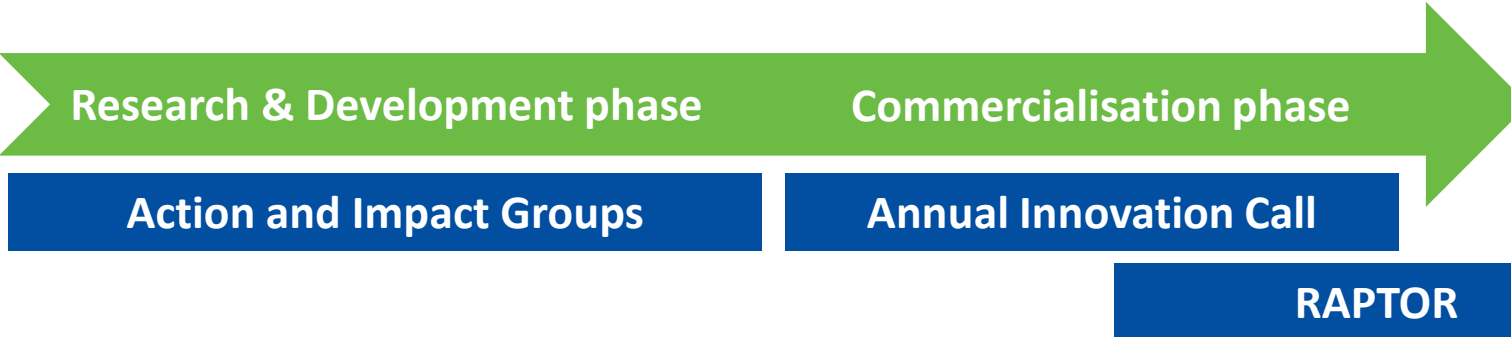
EIT UM Innovation and other programmes

EIT UM focus on:

- ✓ Mid-sized consortia
- ✓ Market-based solutions
- ✓ 12-18 months projects
- ✓ Real life testing
- ✓ High TRL and commercialisation pathways

Links to:

- ✓ Further research of mobility technologies e.g. Horizon Europe RIA
- ✓ Scale-up and replicability support e.g. EIB
- ✓ SME promotion and access to investment initiatives e.g. Business Creation





Thank you!

For more information, please contact:
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www.eiturbanmobility.eu

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