

## Announcement

### TETRAMAX 2<sup>nd</sup> open call for Entrepreneurial Technology Transfer Experiments (TTX)

Project acronym:	TETRAMAX
Project full name:	TEchnology TRAnsfer via Multinational Application eXperiments
Project grant agreement no.	761349
Project web address	<a href="https://www.tetramax.eu">https://www.tetramax.eu</a>
Project coordinator	Prof. Rainer Leupers, RWTH Aachen University/DE, <a href="mailto:leupers@ice.rwth-aachen.de">leupers@ice.rwth-aachen.de</a>
Open call title	2 <sup>nd</sup> open call for Entrepreneurial Technology Transfer Experiments (TTX)
Open call identifier	TETRAMAX-ENTREPRENEURIAL-TTX-2
Open call publication date	31.08.2019
Full open call information	<a href="https://www.tetramax.eu/ttx/calls/">https://www.tetramax.eu/ttx/calls/</a>
TTX online proposal submission platform	<a href="https://tetramax.fundingbox.com/">https://tetramax.fundingbox.com/</a>
TTX proposal submission deadline	30.11.2019, 23:59 CET (Brussels time)
Expected TTX duration; estimated TTX start and end date	3-6 months; At the first day of the following month after entry into force of the TTX funding agreement. Any date prior to March 1, 2020 is not possible. The TTX has to end by November 30, 2020 at the latest.
Total financial support per TTX	<p>The <b>average of the requested TTX financial support of around €22,500 per TTX is preferred</b>. Nevertheless, the financial support per TTX can be between €20,000 and €30,000 maximum. Financial support will be granted to the applicant's organisation only.</p> <p>Maximum possible <b>funding per TTX partner over all TETRAMAX open calls is limited to €60,000</b>. Funding will not be awarded to individual legal entities that have already received more than 100.000 Euro via open calls (FSTP) from H2020 I4MS and SAE projects.</p>
Number and type of partner organizations/team members involved in the TTX	<p><b>Team:</b> The TTX team comprises three distinguished team members: principal investigator, entrepreneurial lead, mentor</p> <p><b>Organisations:</b> All team members are typically from one site located in an EU member state or in a country associated to H2020; nevertheless, the team may be formed by one <b>or</b> more entities, and team members may be located in a different country.</p>
Language of the proposal	English
Contact for more details	<a href="mailto:opencalls@tetramax.eu">opencalls@tetramax.eu</a>

*The project TETRAMAX, co-funded from the European Union's Horizon 2020 research and innovation programme under the grant agreement no. 761349, foresees as an eligible activity the provision of financial support to third parties, as means to achieve its own project objectives.*

## TETRAMAX and types of activities

Today's European industries are challenged by the fast developing digitalization era, making it increasingly difficult for small and medium-size enterprises (SMEs) to keep track with, and benefit from, modern ICT for their business and production cycles.

The innovation action TETRAMAX aims to boost innovation by stimulating, organizing and evaluating different kinds of Technology Transfer Experiments (TTX). These co-funded “application experiments” connect SMEs and other for-profit companies (mid-caps, large industry, etc.) with international academics, resulting in low-risk industrial adoption of novel computing technologies. TETRAMAX provides innovative advanced digital technologies for novel electronic and non-electronic products in the area of Customized Low-Energy Computing (CLEC) for Cyber-Physical Systems (CPS) and the Internet of Things (IoT) (Annex 1).

Additionally, building and leveraging a European Technology Brokerage Network (CCN) on CLEC will increase the exchange of technologies and solutions, hence increasing the opportunities for technology transfers. In the long term, TETRAMAX will be the trailblazer towards a reinforced, profitable, and sustainable ecosystem infrastructure, providing CLEC competence, services and a continuous innovation stream at European scale, yet with strong regional presence as preferred by SMEs.

TETRAMAX is one of the new initiatives established under the European *Smart Anything Everywhere* (SAE) initiative, which seeks to accelerate innovation within European industries.

## Overall goal and description of an Entrepreneurial TTX activity

The overall goal of an Entrepreneurial TTX is to mobilize, challenge and train small teams of potential entrepreneurs in the CLEC space, thereby having a long-term perspective. Therefore, this TTX is solely devoted to the exploration and evaluation of market and business opportunities, for example for typical “start-up formation” scenarios and acquisition of investments in the longer term. The focus is on a critical and systematic evaluation and generation of sustainable business opportunities for new, possibly disruptive, actors in Europe's digital technology markets.

The expected Technology Readiness Level (TRL) may range of 2-4.

A TTX team intends to bring itself towards a **convincing business idea and to get “investor ready”**. The TTX is a framework for describing a new technology-based business using a **Business Model Canvas**.

The TTX can be described in five steps:

1. Fill out the Business Model Canvas.
2. Develop testable hypotheses.
3. Specify business cases.
4. Run business cases and learn from them.
5. Persevere, pivot or perish. The term “pivot” here denotes revising business model assumptions in light of the lessons learned. For innovative products facing a lot of market uncertainty, pivoting is the rule rather than the exception.

Once the call is open, details on the Entrepreneurial TTX concept will be published at:

<https://www.tetramax.eu/ttx/calls/>

## Establishment of an Entrepreneurial TTX team

The TTX team comprises at least three distinguished team members:

- **Principal investigator (PI):** PI takes on the role of the Chief Technology Officer (CTO) and is a senior researcher associated with the research-based technology for the TTX. PI will be the formal TTX applicant of the TTX proposal, and officially employed at a legal entity (typically a university). PI will participate actively in the TTX, e.g. in the capacity as “door opener” for business contacts. Being the applicant, the legal entity will be the sole recipient of the financial support.
- **Entrepreneurial lead (EL):** EL takes on the role of the Chief Executive Officer (CEO) and is a person with the business interest and technical competence needed to investigate the commercial potential of the proposed innovation. EL is operationally responsible for leading the TTX through the entire process.
- **Mentor (M):** A business-oriented person experienced in taking research-based technologies to the marketplace. M will guide and track the progress according to the milestones set out for the TTX.

Specifications of the TTX team members:

- **The TTX team** is mainly formed by one academic entity (typically a university) located in one EU member state of in a country associated to H2020. Nevertheless, both the establishment and the location are flexible, for example: all are from the same academic entity/university, or from different academic entities or from other organisations, and may be located in the same or in different countries.
- **While EL and PI** are often from the same academic institution, EL may also be employed at another organisation.
- **M** should ideally be recruited from a different EU country / country associated to H2020 to bring in a more global market experience and perspective. M may be a private person but may also be employed at a legal entity.
- **Additional team members** may be added if needed. The person(s) and the benefits for the TTX shall be justified in the TTX proposal.

\*\*\*\*\*

## Annex 1: TETRAMAX competence fields

<ul style="list-style-type: none"> <li>• 3D Modelling</li> <li>• Additive Manufacturing (3D printing)</li> <li>• Aeronautics and Space Applications</li> <li>• Approximate Computing</li> <li>• Augmented and Virtual Reality</li> <li>• Automotive Electronics</li> <li>• Cloud Computing</li> <li>• Cognitive Systems</li> <li>• Communication Technologies</li> <li>• Compiler Technology</li> <li>• Computer Vision</li> <li>• Cybersecurity</li> <li>• Data Mining and Big Data</li> <li>• Dependable and Fault Tolerant Systems</li> <li>• Electronic System Level Design and Tools</li> <li>• Embedded HPC</li> <li>• Environmental Protection</li> </ul>	<ul style="list-style-type: none"> <li>• Gamification</li> <li>• Hardware/Software Codesign</li> <li>• Heterogeneous Computing</li> <li>• Human-Machine Interaction</li> <li>• Industrial Automation</li> <li>• Integrated Circuit Design</li> <li>• Laser Technology</li> <li>• Location Based Technologies</li> <li>• Low-Energy Computing</li> <li>• Machine Learning</li> <li>• Market Intelligence</li> <li>• Medical and Health Applications</li> <li>• Modelling and Simulation Using HPC</li> <li>• Multicore Systems</li> <li>• Multimedia Processing</li> <li>• Nanotechnologies</li> <li>• Oil and Gas Applications</li> <li>• Optimization Technologies</li> <li>• Parallel Programming</li> <li>• Processor Architectures</li> </ul>	<ul style="list-style-type: none"> <li>• Quantum Computing</li> <li>• Reconfigurable Computing</li> <li>• Robotics and Autonomous Systems</li> <li>• Safety Critical Applications</li> <li>• Semiconductor Manufacturing</li> <li>• Sensors, Actuators, MEMS and RF</li> <li>• Smart Buildings</li> <li>• Smart Cities</li> <li>• Smart Metering</li> <li>• Smart Mobility</li> <li>• Smart Textile</li> <li>• Software Performance Analysis</li> <li>• Sound Processing</li> <li>• Speech Recognition</li> <li>• Surveillance Technologies</li> <li>• Transport and Logistics</li> <li>• Video Processing</li> <li>• Virtual Prototyping</li> <li>• Web and Mobile Applications</li> <li>• Wireless Sensor Networks</li> </ul>
--	---	---