### Drones —speed up innovation! 2.11.2016 @MoilanenPiia



#### Tekes Drone –campaing lauched 2015

- To create new drone-related business-ecosystems
- To boost new start-ups

Tekes

- To get traditional industries to adopt novel drone-innovations
- Drones are tools for topical digitalization and robotisation strategies !



# Drone campaign workshops

- How to do business with drones 8/2015
- Drones& insurance business 11/2015
- Drones -speed up forestry 1/2016
- Drones- speed up environmental moniroring 2/2016
- Drones -speed up precision farming 3/2016
- Drones cybersecurity 4/2016
- Drones and finberries 5/2016
- Drones and environmental monitoring procurements 6/2016





The HyperGlobal - based on the absorption of electromagnetic radiation, and innovative gas sensors



**Idea:** Establish innovative and cost-effective instruments and solutions for the monitoring of global maritime emissions with a value network approach.

**Impact:** Enabling the authorities to establish a level playing field for maritime emissions, and providing tools for industry-level transparency.

"The HyperGlobal project builds a bold, forwardlooking value network to address one of the greatest challenges of maritime transport in our time."

-Tapani Stipa, Adjunct professor, Finnish Meteorological Institute-



Aeromon -Cost-effective emission monitoring service concept



Idea: Aeromon Oy develops a RPAS based (Remotely Piloted Aerial System) emission monitoring service concept to ensure vessels' compliance with IMO Marpol Annex VI requirements.

**Impact:** Our goal is to offer verified and realtime results for point of source, 2D- and 3Dmapping of gas concentrations with an extremely cost-effective way. "This project enables also the development of the general measuring concept in addition to the vessel emission monitoring."

Matti Irjala, CEO Aeromon Ltd



Merius – Easy-to-adopt engineering solutions integrated with virtual 3D as-built environment for industry

**Idea:** Create virtual 3D as-built environments from industrial infrastructure enables refined life cycle management & process development.

**Impact:** Utilizing accurate virtual 3D as-built environments, our customers with their interest groups can speed up decision making & engineering design to shorten project lead-time, reduce costs & errors to maintain competitive edge.



"Tekes is long-standing companion and support in our journey to utilize cutting-edge 3D-mapping tools to create easy-to-adopt digital service products"

Hannu Sarja CEO, Merius Ltd



Unmanned Aerial Vehicles in Mineral Exploration and Mining Operations in the Arctic Areas of Finland



**Impact:** Understand technical and regulatory applicability of UAVs on mineral exploration and mining operations. Find opportunities for new and existing enterprises to offer UAV services in as well as mining and exploration companies to purchase such services



"Project will be responsible for benchmarking the technical possibilities of UAV-based applications and researching the current regulatory framework concerning the use of UAVs in Finnish airspace. The results of the project will be published in a UAV-MEMO Best Practices Handbook."

-Heikki Salmirinne, geophysicist in Geological Survey of Finland (GTK) -



**Drones-Speed up innvation** 

Pohjoinen Group -Korento C, Advanced Multicopter system



**Idea:** Korento C is mobile, weather resistant and easy to operate solution for professional applications.

**Impact:** The modular construction of the aircraft makes it the perfect platform for carrying any third party payload reliably through the sky

"Iterative development and co-creation with our clients and partners has made it possible to bring complex project to a successful conclusion."

CEO Teemu Pohjonen Pohjonen Group Ltd



**Drones-Speed up innovation** 

#### Tietoa -Revolutionary Spatial Information Platform



**Idea:** Develop a new way to share, view and use geospatial information. The user interface will be based on a set of 360 aerial panoramas providing a new level of visual perception.

**Impact:** The application will revolutionize the way how the spatial information will be advertised, shared and used. It offers an innovative platform for uses such as urban planning, real estate marketing, tourism and venue organizing.

Tietoa Finland is specialized in data visualization. With help of Tekes we are able to use our skills to launch this new project.

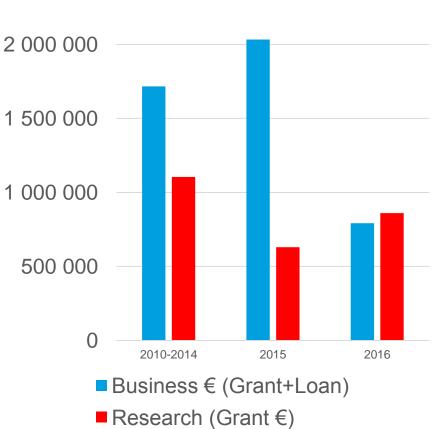
-Marko Rajala Managing director Tietoa Finland Ltd-



#### **Plentiful Tekes Funding Options for UAVs**

- R&D-project funding for companies
  <u>https://www.tekes.fi/en/funding/</u>
- Bio, cleantech and digital sector pilots and demos <a href="http://www.tekes.fi/en/programmes-and-services/campaigns/bio-cleantech-and-digital-sector-pilots-and-demos/">bio-cleantech-and-digital-sector-pilots and 2 500 000</a>
- Innovative procurement funding <u>https://www.tekes.fi/en/funding/public-service-</u> providers/innovative-public-procurements/
- Innovation voucher
  https://www.tekes.fi/en/funding/SME/innovation-voucher/
- Trade fair grant funding
  <u>https://www.tekes.fi/en/funding/SME/trade-fair-grant/</u>
- Funding for Horizon 2020 project preparation <u>http://www.tekes.fi/en/funding/horizon-2020-project-preparation/</u>
- NEW Call: New business from digitalization <u>http://www.tekes.fi/en/whats-going-on/application-schedules-</u> <u>2016/preliminary-information-on-the-call-for-applications-new-</u> <u>business-from-digitalisation/</u>

Tekes financing foir RPAS activities





## Tekes call for applications: New business from digitalisation

Application period: 09.01.2017 - 30.03.2017

- for joint projects, companies and research
- multidisciplinary projects between research and the business community

The aim of the call

- expedite the development of digital business operations across traditional sectors
- boost competitiveness of Finnish industry

Further details on 3 November 2016





#### **Multidisclipinary Applications call for Networking**

Networking & collaboration are essential

- to develope succesful solutions & teams
- to show sales potential at demand-side
- to create outstanding & international projects

Possible collaboration platforms:

- Business ecosystem for autonomous ships http://www.dimecc.com/dimecc-services/autonomous-shipsecosystem/
- Challenge Finland: <u>http://finlandinnovation.fi/challengefinland/</u>
- RPAS in environmental monitoring and research (LYNET, Helsinki University)





Contact us! https://www.tekes.fi/en/programmes-andservices/campaigns/drones/

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