PROPERTY TECHNOLOGY, “PROPTECH”,
POWERED BY SPACE

Funding Opportunities for Space-Enabled PropTech Solutions.

Supported by

European PROPTECH Association
Proptech house
Before we start...

- Please keep your microphones muted at all times and switch off the webcam function.

- You can use the conversation function anytime to submit your questions. They will be addressed during the Q&A at the end of the webinar.
1. Introduction
   • ESA and Space Solutions
   • What ESA offers

2. Introduction to Kick-Start Activity
   • Study Tasks

3. Guest speaker
   • Dirk Paelinck, Chairman and Founder of the European PropTech Association

4. Space for ‘PropTech’
   • Background
   • Key topics
   • Enablers from space

5. How to apply to Kick-Start Activity
   • How to apply
   • Authorization of funding
   • The proposal template

6. Q&A
ESA Pillars

Science and Exploration

Enabling and Support

Safety and Security

Applications
The largest space innovation network in the world

• The go-to place for great business involving space to improve everyday life.

• Supporting European companies to develop businesses using space technology and data.

• Offering funding, business and technical support to help to generate successful business and create jobs.
ESA SPACE SOLUTIONS OFFERS

- Zero-equity funding (from €50k to €2M+ per activity)
- A personalised ESA consultant
- Technical support and commercial guidance
- Tailored project management support
- Access to our international network of ESA and partners
- Access to our network of investors
- Credibility of the ESA brand
Space Technology

- Earth Observation
- Satellite Navigation
- Satellite Communication
- Spaceflight Technologies
- Space Weather

Users & Markets

- Maritime
- Environment
- Financial
- Education
- Energy
- Agriculture
- Healthcare
- Transport
- Media
- Aviation

European Space Agency
A FULLY INTEGRATED TOOLKIT FOR DOWNSTREAM BUSINESSES

Marketing & Local Outreach → Established Space-Using Companies

Newcomer SMEs → Product/Service Development & Demonstration

Startups → ESA BIC & Startup Support

Sustainable Development Goals → Revenue and Exports

Access to Global Customers → Access to Private Finance

Job Creation → Grow Europe's Downstream ecosystem

Growth Europe's Downstream ecosystem

A FULLY INTEGRATED TOOLKIT FOR DOWNSTREAM BUSINESSES
INVESTOR FORUM

ESA BUSINESS APPLICATIONS

ESA BUSINESS INCUBATION

ESA ‘NEAR ME’
- ESA Technology Broker
- ESA Business Applications Ambassador
- ESA Business Incubation Centres
ESA is Near You

- Wherever you are in Europe, we are near you.
- ESA is present in all Member States.
- Access to the largest space innovation network in the world.
Zero-equity co-funding up to €2M

- Demo projects: Mature value proposition & business plan and demo your service with customers.
  - Up to 50% co-funding*

- Feasibility studies: Explore ideas, create a business plan & connect with potential users.
  - Up to 50% co-funding*
  - 100% funding under Competitive Tender

- Kick-Starts: Thematic activities.
  - Up to 75% co-funding

* Up to 80% for SMEs (pending specific initiative and approval of National Delegation)
Kick-Start Program
In 2017, ESA Business Applications launched a Kick-Start (feasibility study) framework for providing up to 60k€ zero-equity financing open to any industry in participating Member States.

Kick Start activities are designed to be particularly interesting for SMEs (including fast-growing) and start-ups looking for opportunities to develop their ideas for new business applications.
"Kick-Start Activities" are ESA’s funding scheme enabling companies to undertake short Feasibility Studies that explore new service and application concepts making use of space capabilities.

- Limited initial investment by companies, particularly attractive for SMEs and start-ups, granting them an easy entry into ESA Business Applications.
- Competitive tendering procedure.
- Rapid evaluation process, to allow companies to keep the pace in the market.
- If successful, possible follow-up support via Demonstration Projects.

6 months duration - Overall cost €80K

€60K ESA funding (75% ESA co-funding)
Kick-Start: Goals

Kick-Starts looks at 3 main elements:

1. Engagement with potential end users and customers to understand their needs and translate these into service requirements.

2. Evaluation of the technical feasibility of the service, and definition of the service and system architecture.

3. Evaluation of the economic viability of the service and development of a business plan.
PropTech
Guest speaker

Dirk Paelinck

Serial entrepreneur in the real estate domain, and Chairman and Founder of the European PropTech Association.
PropTech covers all innovations in Technology and Business Models in the Real Estate value chain.

**WHY PROPTECH – WHY NOW?**

- **Macro economic trends** put pressure on returns and efficiency.
- **Data & technology** drive new needs of end-users.
- Real Estate is still a largely undigitized industry compared to other industries.
- **Technology giants** are entering the market.

Dirk Paelinck, Chairman European PropTech Association – PropTech House
WHAT IS PROPTech?

PropTech includes all innovations (technologies or business models) in the real estate value chain (construction and property industries).

It includes all the asset classes (residential, retail, office, logistics, hospitality, healthcare...)


Dirk Paelinck, Chairman European PropTech Association – PropTech House
5 segments covering the value chain of re

**Finance & Invest**
This category covers the beginning of any real estate project, the selection of the site, the investment and financing phase.

**Design & Build**
This category covers the design of the buildings, the execution of the construction works, up to the handover of the buildings.

**Market & Transact**
This category covers the commercialization of the building.

**Manage & Operate**
This category covers the management of the buildings, as operator, property manager, facility manager, asset manager.

**Live & Work**
This category covers any new technology, or service (access controls, air quality monitoring, community management solutions) impacting the end-user experience.

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PriceHubble
APROPLAN
vidoqui
simaxx
SPACEFLOW
AREX
VUCITY
SWEEP BRIGHT
sensorberg
BREEZE TECHNOLOGIES

Dirk Paelinck, Chairman European PropTech Association – PropTech House
WHY PROPTech – WHY NOW?

WHY PROPTech A PRIORITY?

- Macro economic trends put pressure on returns and efficiency
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- Real Estate is still a largely undigitized industry compared to other industries
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EU GREEN DEAL & EU NEXT GENERATION: the 2 top priorities for EC = GREEN + DIGITAL

PropTech at the crossroads of green and digital
REALITY CHECK: DIGITAL INTENSITY INDEX

Enterprises with high or very high digital intensity index by economic activity, EU, 2018 (% of enterprises)

- Repair of computers and communication
- Travel agency, tour operator
- Administrative support
- Professional, scientific and technical
- Real estate activities
- Computer programming, information
- Telecommunications
- Publishing, films & television and music
- Accommodation and food service activities
- Transport and storage
- Retail trade
- Wholesale trade
- Trade of motor vehicles and motorcycles
- Construction
- Utilities (Electricity, gas, water, waste)
- Furniture and other manufacturing
- Motor vehicles, other transport equipment
- Electrical equipment, machinery
- Computer, electronic and optical products
- Basic metals & fabricated metal products
- Coke, petroleum, chemical, plastics
- Wood, paper, printing
- Textiles, wearing apparel, leather
- Beverages, food and tobacco

Manufacturing sub-sectors

0% 10% 20% 30% 40% 50% 60% 70%
## EU GREEN DEAL AND EU NEXT GENERATION: BAUHAUS EUROPE

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<tr>
<th>Driver</th>
<th>CHALLENGES</th>
<th>IMPACT</th>
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| **EU GREEN DEAL**       | • Real Estate = 38% emissions, 44% of energy consumption  
                          • Renovation of stock: only between 0,4% & 1,2%  
                          • Decarbonisation goals  
                          • Digitisation and transformation needs  
                          • Sense of urgency  
                          • Reduce exploitation of mineral resources | • Lower emissions  
                          • Lower energy consumption  
                          • Increase buildings stock to 3%  
                          • reduce energy poverty  
                          • Support SMEs and local economies  
                          • Meeting the needs of the Circular Economy  
                          • = ACCELERATING THE NEED FOR PROPTECH SOLUTIONS                                                                                                           |
| **EU NEXT GENERATION**  | • build a more sustainable, resilient and fairer Europe for the next generation  
                          • €1.85trillion to boost the economy in the Eurozone  
                          • Prioritise green investments  
                          • Sustainability  
                          • Urbanization / Concentration  
                          • Build cost | • PropTech creates high profile jobs  
                          • Meeting the existing 2030 climate and energy targets can add 1% of GDP and create almost 1 million new green jobs.  
                          • Renovation Wave will focus on creating jobs in construction, renovation and other labour-intensive industries  
                          • Renewed Sustainable Finance Strategy 2021                                                                                                             |
European PropTech Ecosystem

Dirk Paelinck, Chairman European PropTech Association – PropTech House
Year by year, this ecosystem is gradually getting more mature.
Given the pandemic, 2020 is obviously a very specific year, with 61 bankruptcies compared to 5 in 2019.
Consolidation is happening gradually but accelerated, with the number of M&As increasing significantly.
The PropTech space is increasingly becoming a global category of investment. Growing number of vertical proptech funds (we currently track 19 of them, compared to 12 in 2019) + generalist VC’s active in PropTech + Construction and Real Estate Corporates investing in PropTech.
VC INVESTMENTS AS % OF GDP: INCREASE IN MOST EU COUNTRIES

VENTURE CAPITAL - INVESTMENTS AS % OF GDP
2019 - Market statistics - Location of the portfolio company

Source: IMF, World Economic Outlook Database (GDP); Invest Europe/UCI.
Notes: *Other CEE consists of Bosnia-Herzegovina, Croatia, Macedonia, Moldova, Montenegro, Serbia, Slovakia, Slovenia.

Dirk Paelinck, Chairman European PropTech Association – PropTech House
If we analyze the European Venture Capitalism, we see that 2019 was a record year, with €3,05B invested, and 2020 - due to the economical conjecture – for far decreased to €1,2B (updated Q3 2020)
What are you struggling with in your international expansion?

- Laws, Regulations: 66.95%
- Scaling the processes: 46.95%
- Timing: the market is not ready for us: 26.08%
- Language: 23.47%
- Competition: 6.95%
- Money (sales & marketing costs): 5.21%
- HR: 2.6%
Have you applied to any subsidies, or financing program of EU institutions?

- No - 84.3%
- Yes - 15.7%
The European PropTech Association – PropTech House

Our mission is to support a sustainable European PropTech market and to create a positive impact on the European living environment and beyond.

Our objectives: to scale up cross-border collaborations, to standardise the European PropTech markets, to create a legal framework adapted to PropTech, to foster innovation in Real Estate and to facilitate access to funding.

PROPTECH STARTUP & SCALE-UP EUROPE AWARDS 2020
24 National Networks: Local PropTech Ecosystems

Total of 2700 EU based startups/scale-ups
**EUROPEAN PROPTECH ASSOCIATION**

- Non Profit alliance of national/area PropTech associations
- **Mission:** Support a sustainable European PropTech market which creates a positive impact for all country/area PropTech hubs
- **First Goals:**
  - Standardise the fragmented EU PropTech market
  - Create a legal framework adapted to PropTech in Europe
  - Unique partnerships bringing a competitive advantage to the best EU proptechs

- Reference Point of Contact for PropTech for the European Commission & Institutions
- SPOC in the EC departments (DG Grow, DG Research & Innovation, DG Climate Action, DG ECFIN, DG Environment, EASME, DG Move, DG Move)

Dirk Paelinck, Chairman European PropTech Association – PropTech House
FINNOVA, WORKERO AND EU PROPTECH HOUSE ORGANIZING
PROMOTED BY THE EUROPEAN COMMISSION:

PROPTECH STARTUP EUROPE AWARDS
30 PEOPLE INHOUSE TEAM FACILITATING ACCESS TO EU SUBSIDIES & TO FUNDING

- More than 200 different programs
- EU Commission SME instrument most challenging and comprehensive program for startups
- EU PropTech House: Free first advice regarding EU Funding
- Cooperation with VCs has started

**Current status: helping 42 proptech companies to apply for funding at EC level**

- PropTech can have much more companies into the Horizon Europe SME Instrument
# Overview

**Digital Summit**

The first digital summit gathering PropTech startups raising funds, and investors

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<th>300 Deals</th>
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<td>Engage with the best 300 startups of the globe, currently fundraising, that passed our selection process</td>
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<tr>
<th>Top League</th>
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<td>Offering the best-in-class content programme, and top league networking experience</td>
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<th>23 &amp; 24 of June</th>
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<td>A perfect date, following the COVID-19 breakout, and before the recovery</td>
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<th>Specific Tracks</th>
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<td>Specific tracks on M&amp;A, Exits, Valuation trends, CVC, Expansion, Deal Rooms</td>
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<th>Pitch to LP's</th>
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<td>RELEVATION is organizing a pitch session where GP’s can pitch LP’s, in a confidential, closed door and on application only format</td>
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<th>Reports</th>
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<td>Have access to data and reports to be the best informed possible, and get the most out of your summit</td>
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THE DIGITAL FUNDRAISING SUMMIT FOR PROPTECH STARTUPS

23 & 24.06.2021 - From your place to the whole world
WHAT IS NEXT in Q1/Q2 2021?

- BAUHAUS EUROPE Miss Von der Leyen
- Partnership World Economic Forum (WEF)
- Partnership World Business Angels Forum (WBAF)
- Increase the existing Funding activities (Subsidies, VCs, ...)
- Installation of the Committees with European Commission
- Partnership European Institute of Technology

- EU PROPTECH SUMMIT 2021 WITH EU COMMISSION

Dirk Paelinck, Chairman European PropTech Association – PropTech House
Space for PropTech Kick-Start
To explore new business models and space-based solutions for commercially viable services addressing broad PropTech applications:

1. Call Open 14th September – 30th October 2020
   - Shared Economy
   - Market Intelligence, Investment Management
   - Sales and Marketing

2. Call Open 3rd November – 18th January 2021
   - Urban Planning
   - Insurance and Law

3. Call Open 19th January – 26th March 2021
   - Smart Buildings
   - “ConTech” (Construction Technology)

→ Kick-Start “PropTech”
Smart Buildings

Security, eco-friendship and building management. Increased digitalisation comes with increased cybersecurity risk exposure. Environmental considerations are proving to be important in terms of both contribution to global emissions, but also exposure to pollution of building occupants. Manual building management processes are expected to be replaced by automated digital solutions and predictive maintenance based solutions.

“ConTech” (Construction Technology)

ConTech (“Construction Technology”) can be described as the technology used to innovate the way in which companies conceptualise, design, engineer and build structures, as well as manufacture and install their components.
Global Navigation Satellite Systems (GNSS) provide precise positioning and guidance for drones, construction machinery and relevant robotics. Structural integrity monitoring, usage of location data relating to presence and distribution of people.

EO satellite imagery to identify environmental hazards, detect changes in urban development and infrastructure, understand the history of real estate assets, monitor environmental sustainability metrics, support urban planning modelling, risk modelling, property valuation and legal due diligence.

Satcom offer reliable connectivity in places with insufficient terrestrial cellular coverage, especially in the case of remote or poorly connected environments. Act as a back-up to terrestrial communications infrastructure in at-risk areas.
Prop-Tech and Space Examples

**Orbital Witness - Revolutionising Real Estate Legal Due Diligence with Satellite Imagery**

**Service**
Provision of archives of high-resolution satellite imagery, augmented by property datasets, to real estate lawyers (and other property professionals) to enable them to "look back in time" to understand legal issues affecting the use and development of property.

**Role of Space**
High-resolution (sub-1m) optical satellite imagery is used to allow real estate professionals to spot important property detail such as, e.g. a change of use at a site, a structural change to a property, or a boundary movement.

**ESA Support**
Demonstration project supporting the team in testing an MVP with end-users on-board.

**Further Info**
Raised £3.3M funding July 2020


**The Convex Lens - SafeBlock**

**Service**
Smart building IoT (Internet of Things) sensors equipped with GNSS (Global Navigation Satellite System) and indoor localisation capabilities to authenticate the test results of building safety systems (smoke alarms, emergency lighting).

**Role of Space**
GNSS combined with indoor localisation technology geolocates the site of the safety sensor test (to ensure that it took place in the expected place and expected time)

**ESA Support**
KickStart activity allowing to investigate the technical and economic viability of the service.

**Further Info**
https://business.esa.int/projects/safeblock
Prop-Tech and Space Examples

Dida – 4D Urban Insights

Study

Investigating the feasibility of detecting building height and changes to horizontal spread in rapidly-growing West African cities to provide insights into the dynamics of urban growth to urban planners, retail stakeholders and reinsurance companies.

Role of Space

Machine learning algorithms applied to satellite earth observation imagery to analyse city growth by detecting changes in horizontal spread and inferring vertical elevation of buildings.

ESA Support

KickStart activity supporting the team in investigating the technical and economic feasibility of the service.

Further Info

https://business.esa.int/projects/4d-urban-insights

Further ESA Examples:


Non-ESA Examples of Space and PropTech:

builtrobotics.com Vehicular automation start-up that develops software and hardware to automate construction equipment (technology uses GPS, amongst other tech) https://orbitalinsight.com/geospatial-solutions/due-diligence-real-estate Satellite Earth Observation used for real estate due diligence and research. https://www.cloudhawk.com/industry-applications/construction/ GPS-based asset tracking to give construction companies a bird's-eye view of all their valuable assets and heavy equipment across the construction site.
How to apply (1/2)

1. Register by completing online questionnaire on ESA-STAR Registration (minimum ‘light registration’)
   (https://esastar-emr.sso.esa.int)

2. Download the official tender documentation (Invitation to Tender) via EMITS ‘AO 10532’ from 14th September 2020

3. Create ‘Bidder Restricted Area’ in ESA-STAR


5. Submit your proposal via ‘Bidder Restricted Area’ in ESA-STAR Tendering by the relevant closing date (don’t wait until the last minute!)
How to apply (2/2)

The Letter of Invitation to Call for Proposals is issued on EMITS (http://emits.sso.esa.int/emits/owa/emits.main) under ‘AO 10532’ and includes:

- Cover letter
- Appendix 1: List of Thematic Calls for Ideas (including the calendar of the Thematic Call for Ideas and specific information on the themes)
- Appendix 2: Draft Contract
- Appendix 3: Tendering Conditions for Express Procurement Procedure - EXPRO/TC
- Appendix 4: Proposal Template
Authorisation from National Delegations

• The **authorization from National Delegation** for the specific Thematic Call against which you submit your Proposal is an admissibility criterion. Proposals not authorized at the closing date of the Thematic Call will not be admitted for evaluation.

• For each individual Thematic Call, **dedicated clarifications will be posted in EMITS** to provide information on the list of Member States that have already provided their pre-authorization to the Thematic Call.

• In case your company/organisation resides in a country which has not provided a pre-authorization to the Thematic Call you are interested in, you need to contact your National Delegation. The contact information of the National Delegations can be found at [https://business.esa.int/national-delegations](https://business.esa.int/national-delegations).
Your Proposal shall include the following information:

1. Executive Summary (max 1 page)
2. Business Potential (max 5 pages)
3. Technical Concept (max 5 pages)
4. Team and Resources (max 3 pages)
5. Management (max 4 pages)
6. Financials (max 2 pages)
Thank you!

→ Questions?

https://business.esa.int/funding/intended-tender/proptech

Christopher Frost-Tesfaye
Invited speaker

Christopher.Frost-Tesfaye@esa.int

Dirk Paelinck, Chairman and Founder of the European PropTech Association.