



STARBURST*

Accelerator

 **IMPULSE PARTNERS**
Strategy | Innovation | Performance

**An introduction to the 1st
Aerospace & Defense
Start-up Accelerator**

February 2013



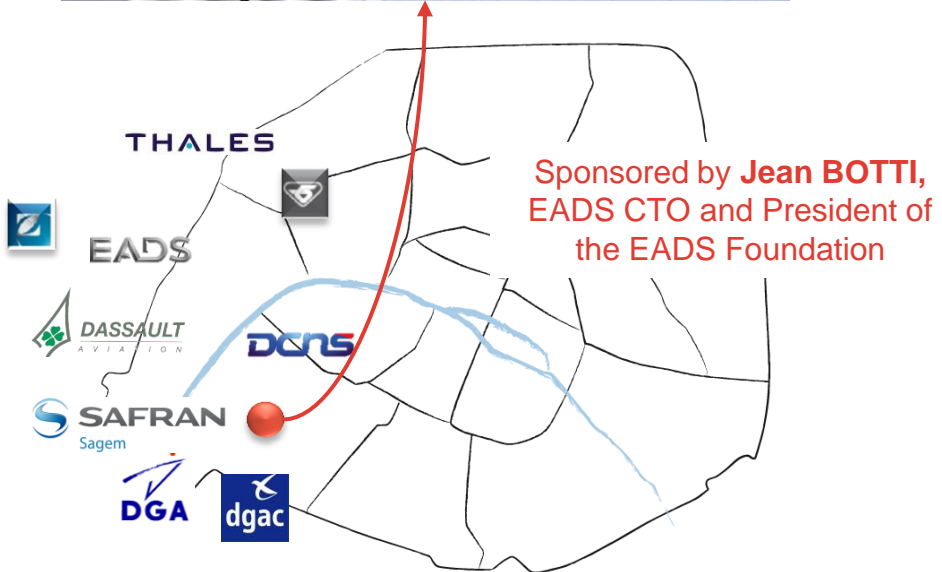
Starburst incubator in a few words

With the support of Paris City Hall, BPI and industry leaders, Impulse Partners is launching :

The #1 Aerospace & Defense incubator in France

- ▶ Launched **January 2014** by the RIVP with access to controlled, competitive rents (50% of market price)
 - Located in Boucicaut (15th arr), an eco-neighborhood close to the largest aerospace companies and public bidding / decision makers
 - **6 768 m²** of working space spread over 5 floors
- ▶ In collaboration with BPI for a privileged access to the **Paris Innovation Seed Fund**

Impulse Partners will search, select and support aerospace start-ups in order to guarantee their best chances for success



In the heart of the aerospace ecosystem

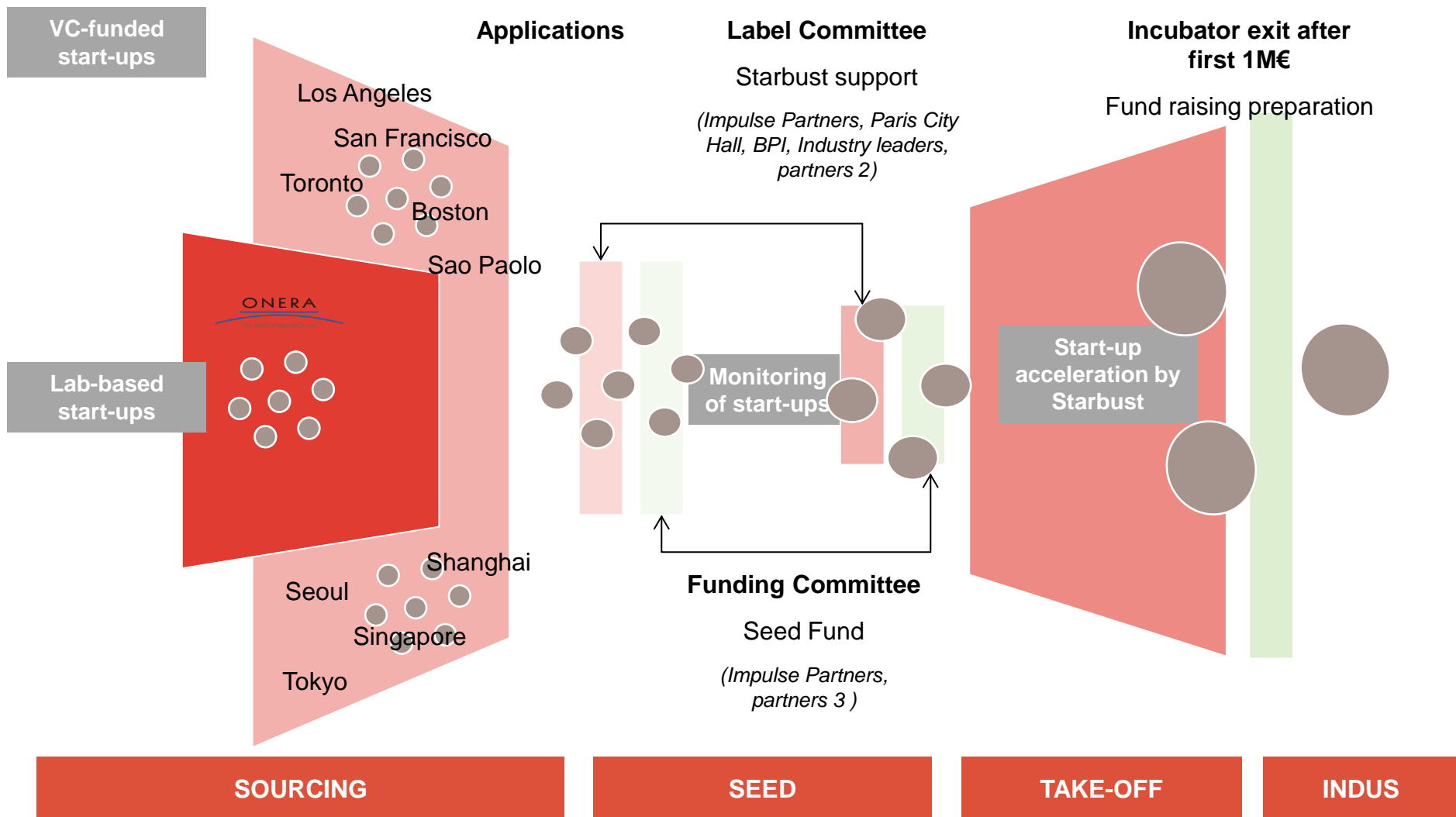
Starburst incubator building its mirror site in Toulouse

The objective is to gather and actively collaborate with the South West Aerospace ecosystem including key industrial partners, Corporate Finance, R&T center, and existing incubator



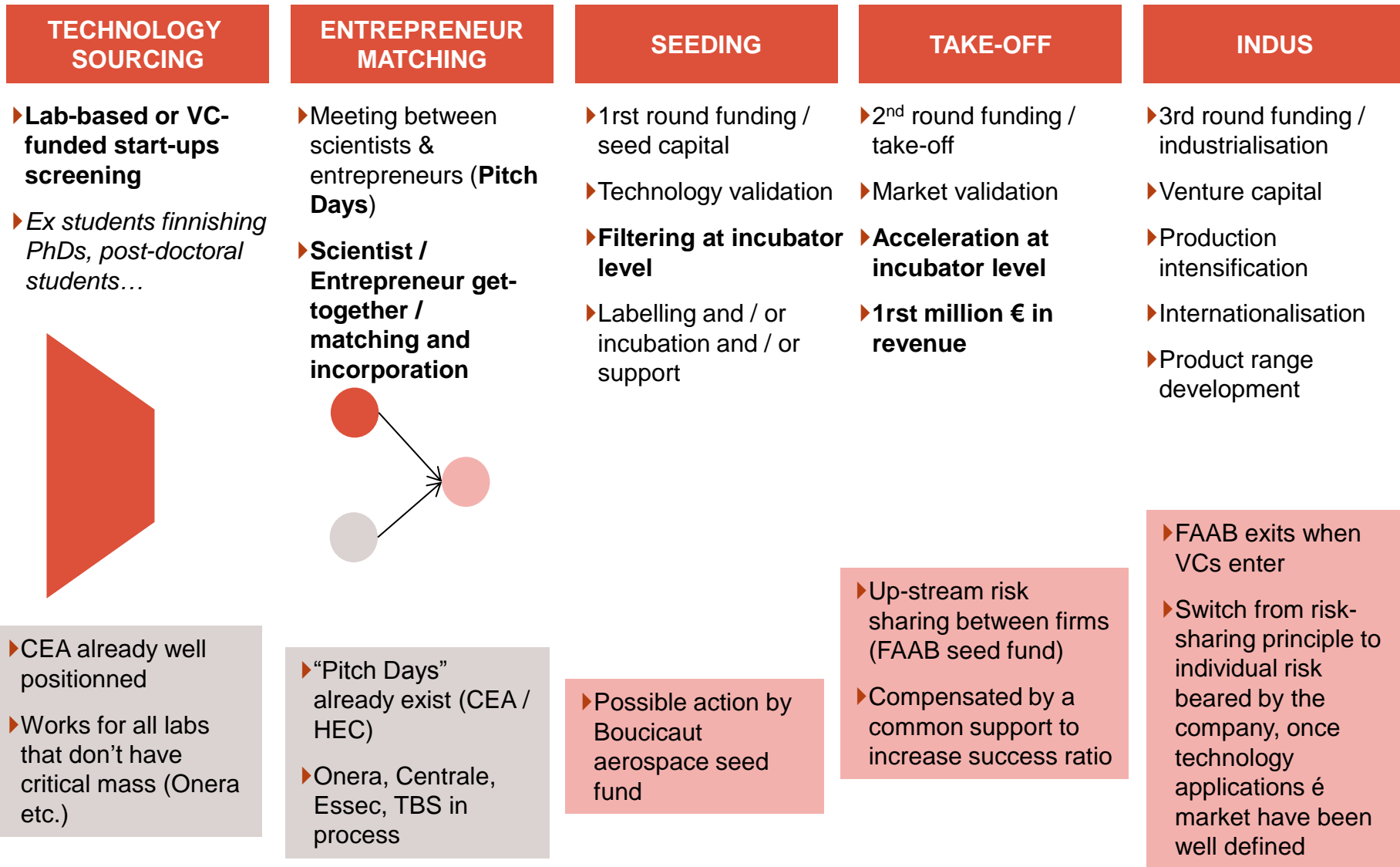
Starburst incubator expanded scope

Setting up a virtuous model where potential industrial applications for a technology / concept are known from the start



Starbust incubator: its mission in detail

From technology sourcing to company take-off





Start-up sourcing

Where to find them? (1/2)

▶ **Promoting the dissemination of leading French laboratories:**

- **Laboratories, academic research** centers where technologies begin to mature but no potential application has been identified or valued in the short term
- “**Pôles de Compétitivité**”, **IRT**, when collaborative research projects have expired but have no identified short term market value
- **Corporate research centers** of industry leaders where research projects may come to term but don't necessarily fit in the company's core business activities and could be valued as spin-out / spin-offs

▶ **Identifying new innovative services and business models**

▶ **Expanding start-up sourcing at a global scale by connecting to all innovation hubs and venture capitalists:**

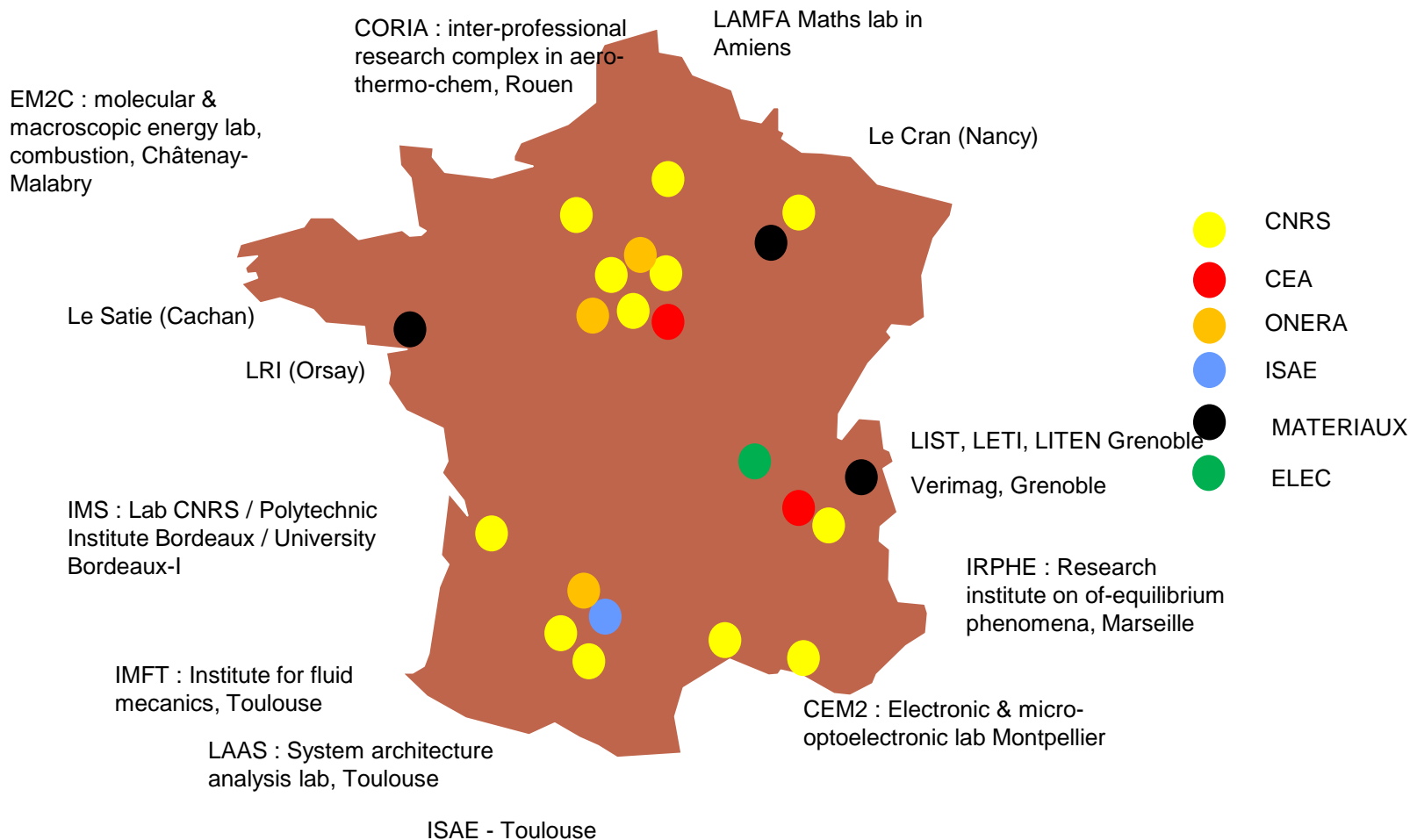
- USA, Canada, Brazil, Russia, Japan, Singapor, China, Korea...





Start-up sourcing

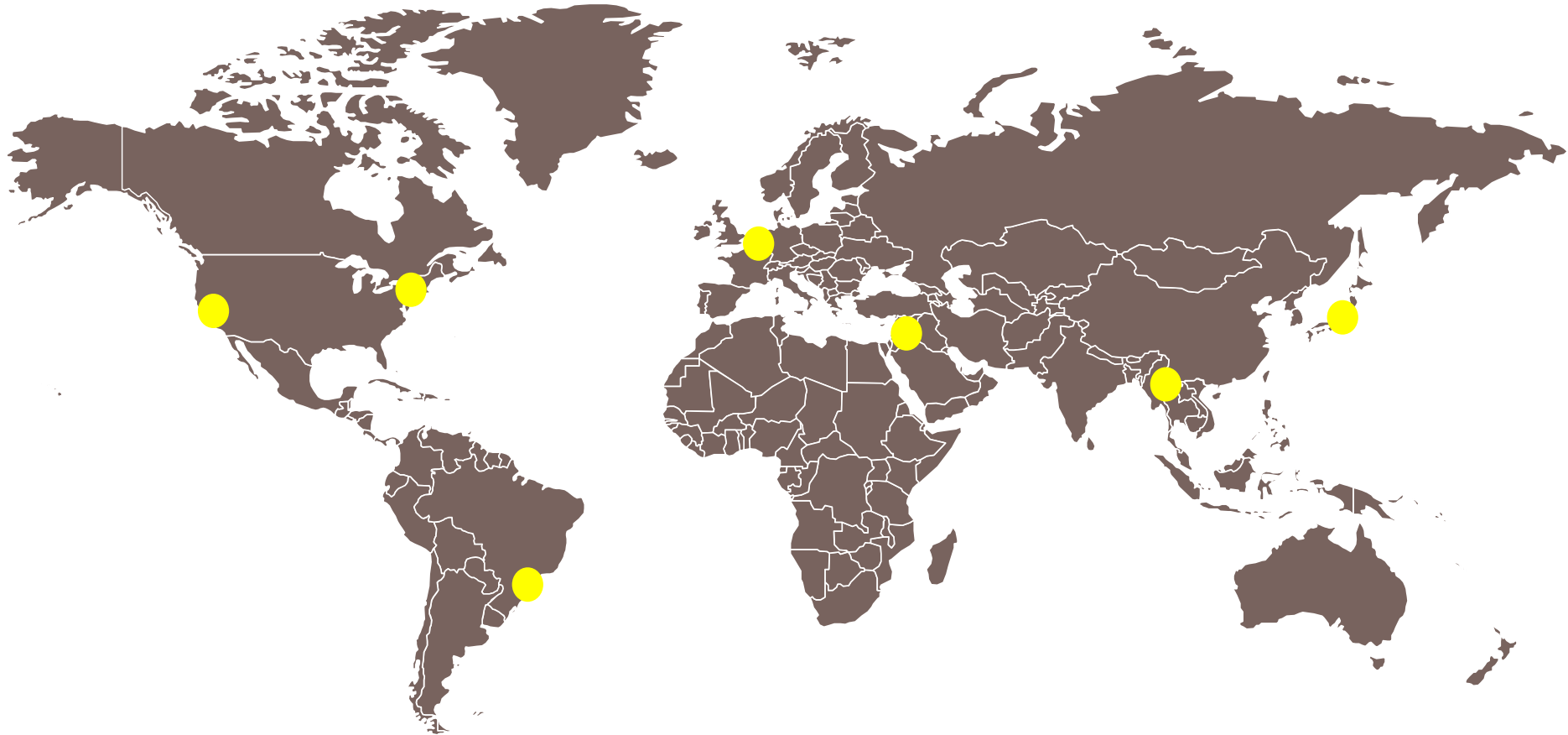
Where to find them? (2/2)





International sourcing and technology monitoring

Connecting the incubator to the most innovative regions for aerospace



Matching & working in pairs

Existing initiatives

HEC Paris

Frédéric ISELIN – HEC /CEA
Director of Entrepreneurship &
Innovation Center
Start-up in Vitro
<http://www.hec.fr/Start-up/Start-up-In-Vitro>



CEA TECH
Jean Therme

Arnauld Leservot
Technology Transfer Officer at CEA



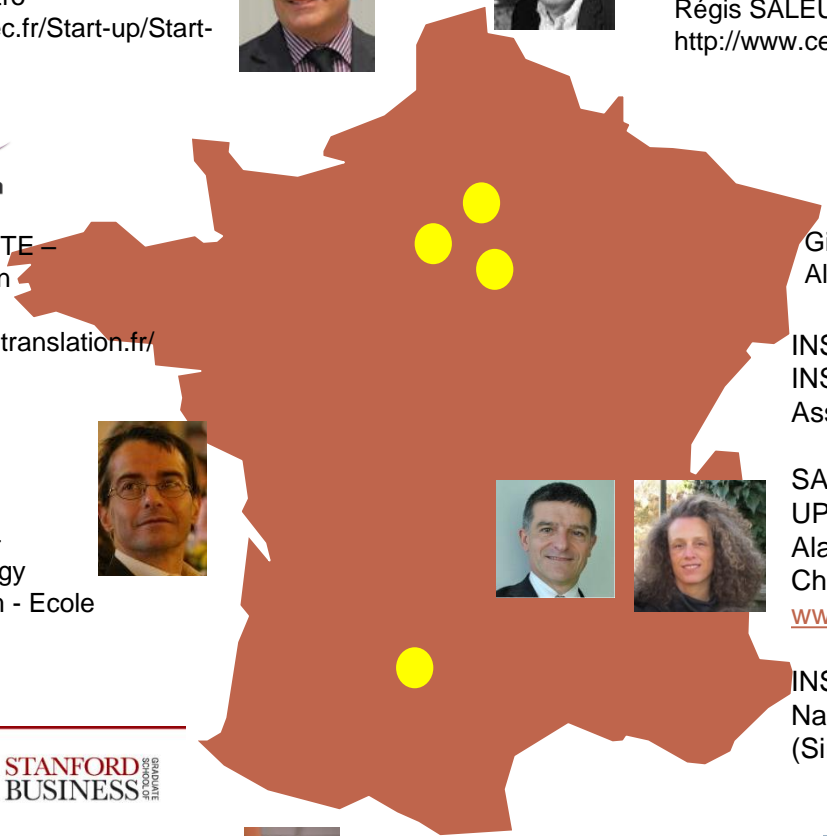
Régis SALEUR – CEA VALORISATION
<http://www.cea-investissement.com/equipe.php>



IT-Translation



Laurent KOTTE –
IT Translation
INRIA / CDC
<http://www.it-translation.fr/>



Gilles LEQUENEC - INSEAD
Alumni



INSEAD Centre for Entrepreneurship (ICE)
INSEAD's Science Entrepreneurship - Bill Magill,
Associate Professor of Entrepreneurship - Filipe Santos

SATT LUTECH, a technology accelerator
UPMC / CNRS
Alain Tassy
Chanta Vernis
www.sattlutech.com



INSEAD - Paul Kewene-Hite
National University of Singapore and SMART
(Singapore MIT Alliance for Research and Technology)

Bruneau MARTINEAU –
Director of the Technology
Venture Master Program - Ecole
Polytechnique
Stanford Ignite



STANFORD BUSINESS





Main innovation areas in aerospace

Target areas for the 1st round, to be re-specified on a regular basis

Candidate start-ups illustrations

▶ Drones

Fixed / rotating wings
Flying vehicle / swarm of drones

▶ Cabin of the future

Light seating

▶ Hybrid propulsion

Electric propellant

▶ System electrification / Embedded systems
/ Mechatronics

Breakdown detection

▶ New materials

Eye movement detection

Analysis of gas

Intelligent materials

...

▶ Cyber Security

New simulation tools

▶ Simulation

▶ MRO

Market for second hand products

▶ New services

Maintenance planning

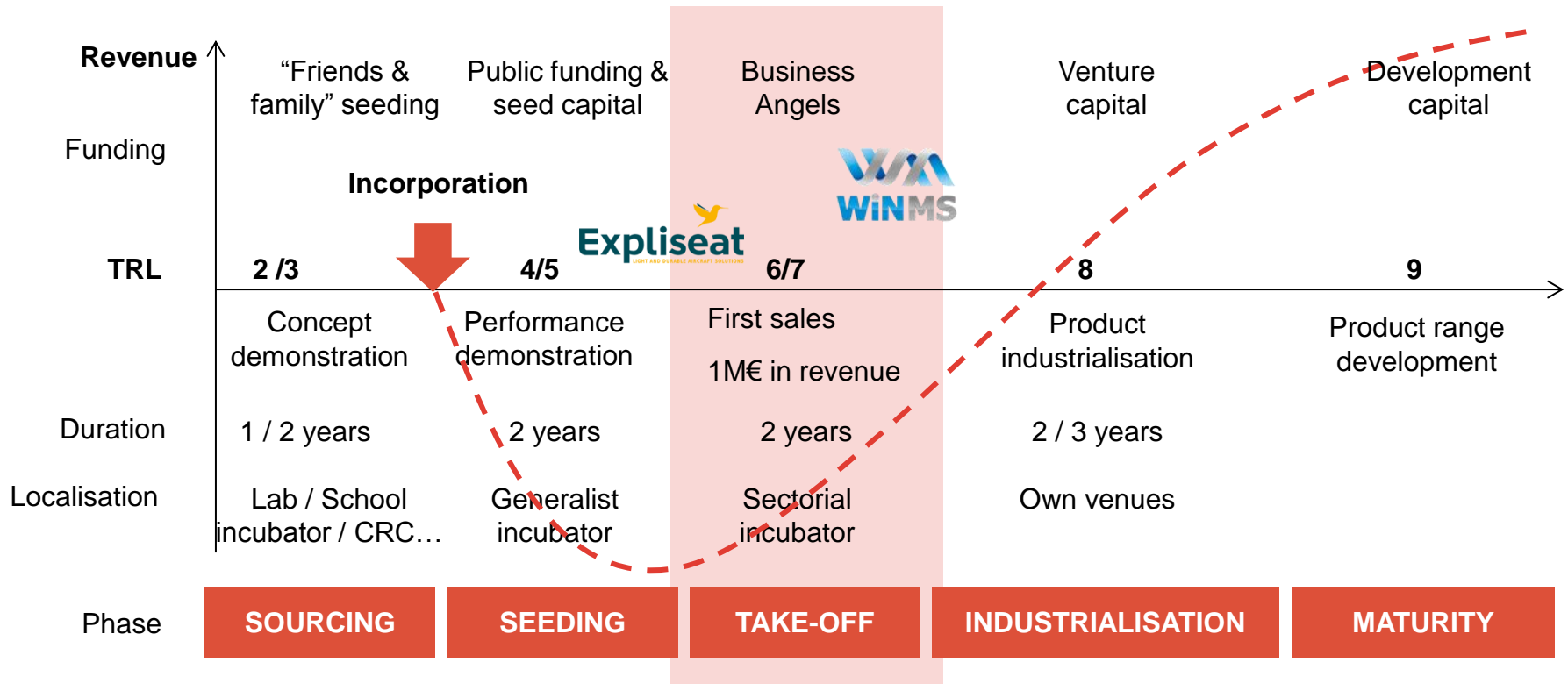
...

Priority start-up targets for the incubator

A specific focus on technological start-ups displaying some degree of maturity

Focus on start-ups that already have:

- Heavily invested in technology (TRL 4-5) when coming from a lab
- Raised some (little) funding at seed capital / business angel level
- 2 to 4 years of age



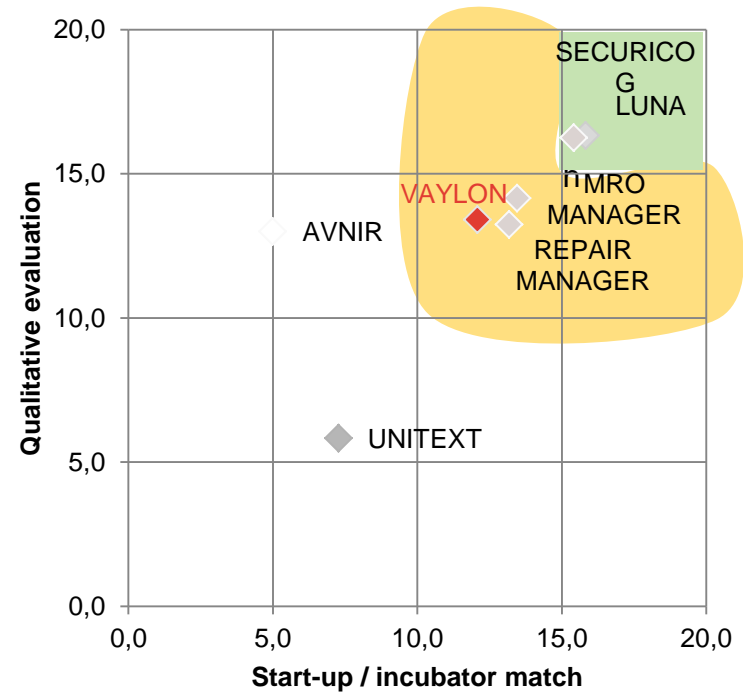
Criteria and illustrations from selection committee

Comments:

<h3>Value proposition</h3>	<ul style="list-style-type: none"> Technology / service differentiation versus current competition Degree of innovativeness 	
<h3>Market</h3>	<ul style="list-style-type: none"> Size of available market Maturity and evolution of target clients Access to market 	
<h3>Team</h3>	<ul style="list-style-type: none"> Team capacity to achieve project Capacity to develop business 	
<h3>Funding</h3>	<ul style="list-style-type: none"> Funding solidity Capacity to fund itself 	

Somme

Start-up selection matrix



<h3>Start-up / incubator match</h3>	<ul style="list-style-type: none"> Start-up relevance for your business sector 	
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Role of partners from industry

Above all: a benevolent mindset and ability to listen closely to start-ups

▶ Main operational expectations of start-ups for industrial partners

- 1 Easy access to experts
- 2 Easy access to decision makers, programme directors...
- 3 Sponsors that accompany the business's development, open doors, facilitate contacts, etc.
- 4 A charter / model for first contracts on R&T or prototypes that is sufficiently protective of the start-up's IP
- 5 Access to testing facilities (corporations or public labs)
- 6 Access to locals if required by a very strong phase of growth
- 7 Dedicated & specialized sponsoring during industrialization & ramp-up phases. Industrial partners may even deliver industrial investments on behalf of a "fab-less" start-up



The survival of an aerospace & defense start-up requires dedicated – but not necessarily financial – support



Accompanying start-ups in the heart of the ecosystem

Placing the start-ups at the heart of the aerospace's industrial ecosystem and under the most benevolent attitude of the players in the sector

1. A global vision of innovation in the aerospace sector and orientation towards relevant decision makers



2. Close collaboration with (co-funded) collaborative research initiatives

1. ASTech, Aerospace Valley, Pégase, Normandie Aeroespace, EMC2, M2P...



2. IRT Jules Verne (Nantes), AESE (Toulouse), ...



3. Leading laboratories: CEA, ONERA, CNRS, CNES, INRIA, ...



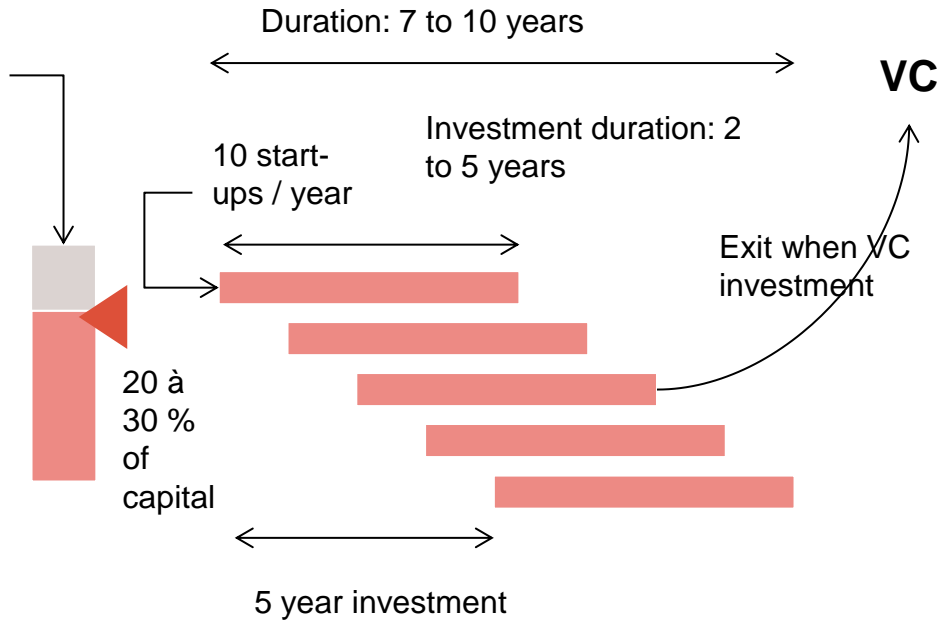
Setting up a seed development fund to ease funding

15M€ seed fund to finance ~10 start-ups per year over 5 years

Fund objectives

200 to 300 k€ investment

Start-up labelled (pre-checked) by the incubator



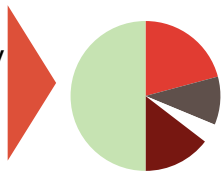
Requirements: 15 M€

- 300 k€ / start-up ;
- 10 investissements / year over 5 years
- 50% from CDC
- 7,5 M€ from industry leaders,
- 10 groups btw 500 k€ et 1M€,
- Possible min. at 200 k€,
- # votes propotional to investment

Governance

Stakes

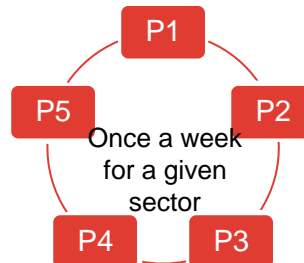
Contribution by all partners



- P 1
- P 2
- P 3
- P 4
- CDC

Proportional number of votes

Funding according to start-up pitches / applications & vote of partners



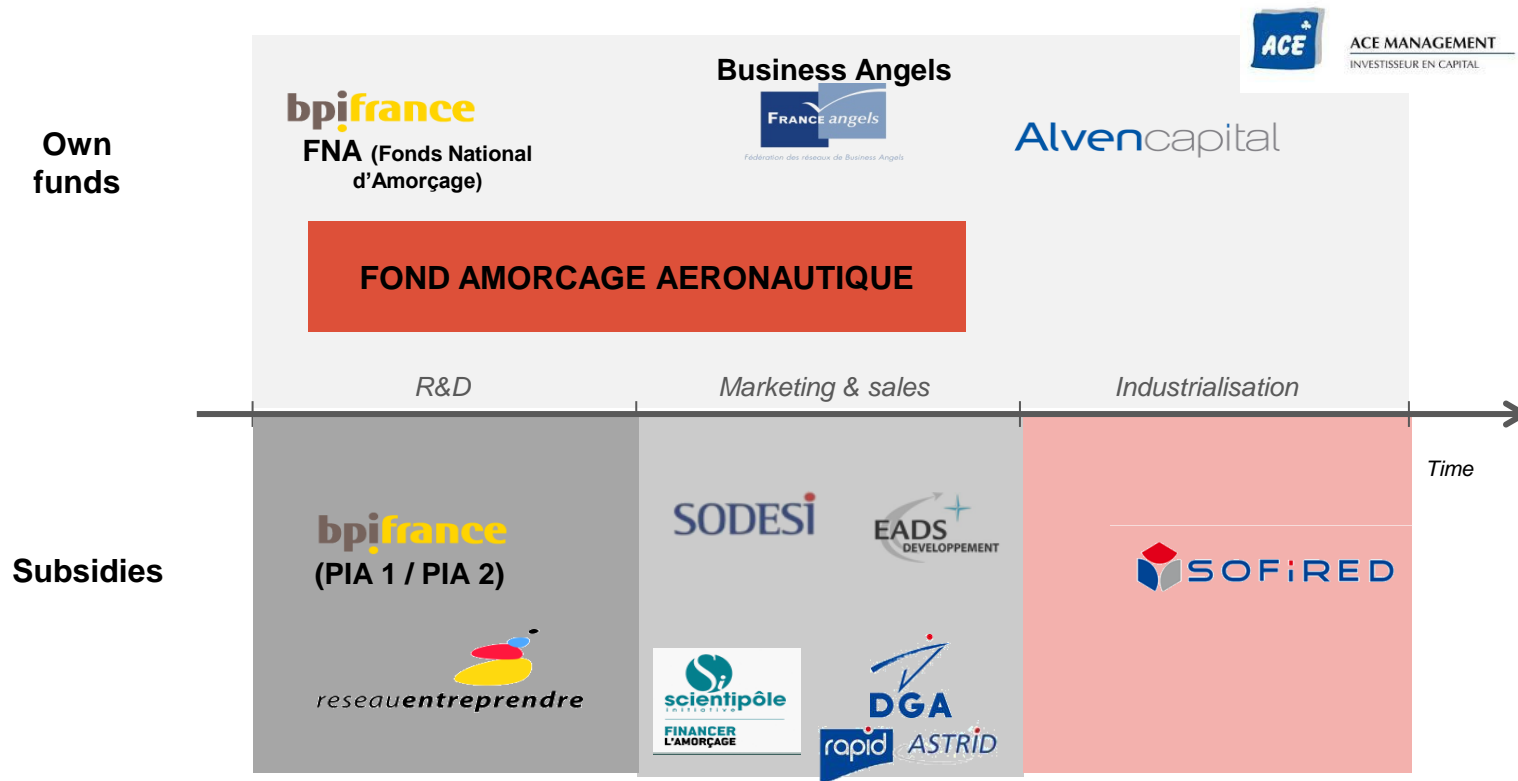


Additional funding

The incubator will help start-ups in their search for additional funding and support

► Main financial expectations of start-ups:

- Easy access to seed organisations such as EADS Développement, Sodesi, ...
- Easy access to business angels and other venture capitalists (e.g. CDC)



► The start-up's survival also depends on solid funding



Specific role for the incubator

Supporting start-ups in their take-off phase to secure their first significant contract and / or first million € in sales

Lab-based start-ups have already:

- Validated the specs / performance of their technology (TRL 3-4)
- Developed a first functional / feasibility prototype and are capable of demonstrating their concept
- De facto, they have already secured some level of funding, supporting tests / prototypes / equipment but not necessarily salaries

Providing them with 2 types of support:

1

Validating their Business Plan: business case/business model, as well as **timing**

This will be done by providing access to decision makers in the relevant industry sectors that will give rapid feedback on the market relevance of their concept & timing, as well as expected specs / performance

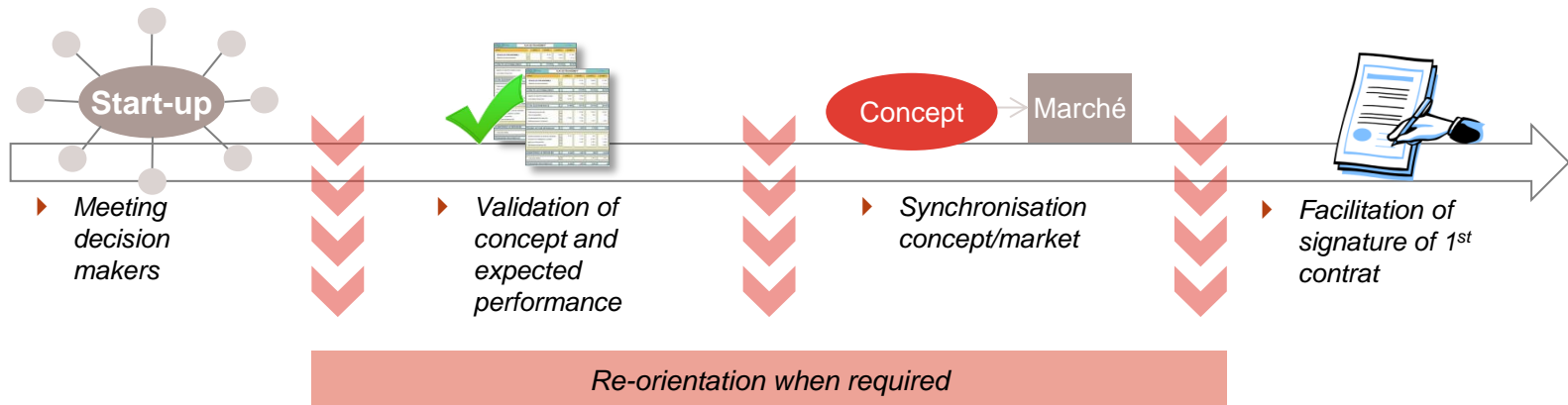
2

Validating their technology, expected specs / performance by benchmarking the industry and meeting the most relevant sector experts



Incubator value proposition

An ability to deliver a rapid « go / no go » on concept / technology based on sector / industry inputs



▶ Final recommendations enable the start-up, within a few months, to:

- Meet an significant number of decision makers in their given sector
- Validate perceived value of concept and expected performance
- Guarantee adequate concept / market synchronization in order to avoid burning cash in vain, especially if first market application way down the road (2 – 3 years)
- Facilitate first contract upon acceleration phase with industry leader
- Re-orient quickly the start-up towards other application or sector if required

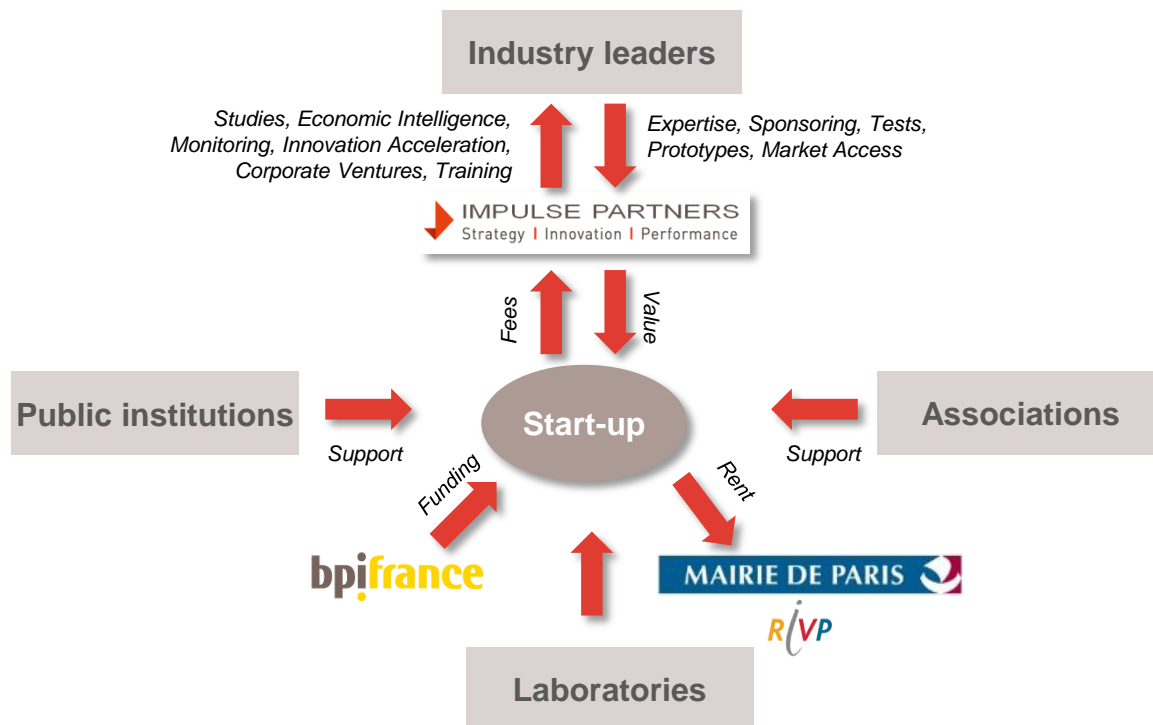


The incubator's model

Income derived from both start-ups and industry leaders

- ▶ The start-up pays a rent to the **RIVP / Paris City Hall**
- ▶ The start-up benefits from **funding by the BPI**
- ▶ This support enables the start-ups to fund **their basic support by the Incubator** (Impulse Partners) and **specific studies** (Pitch, Acceleration, etc.)
- ▶ To fund the rest of its support, Impulse Partners will develop **specific value propositions** based on the incubator but **addressed to industry leaders**:

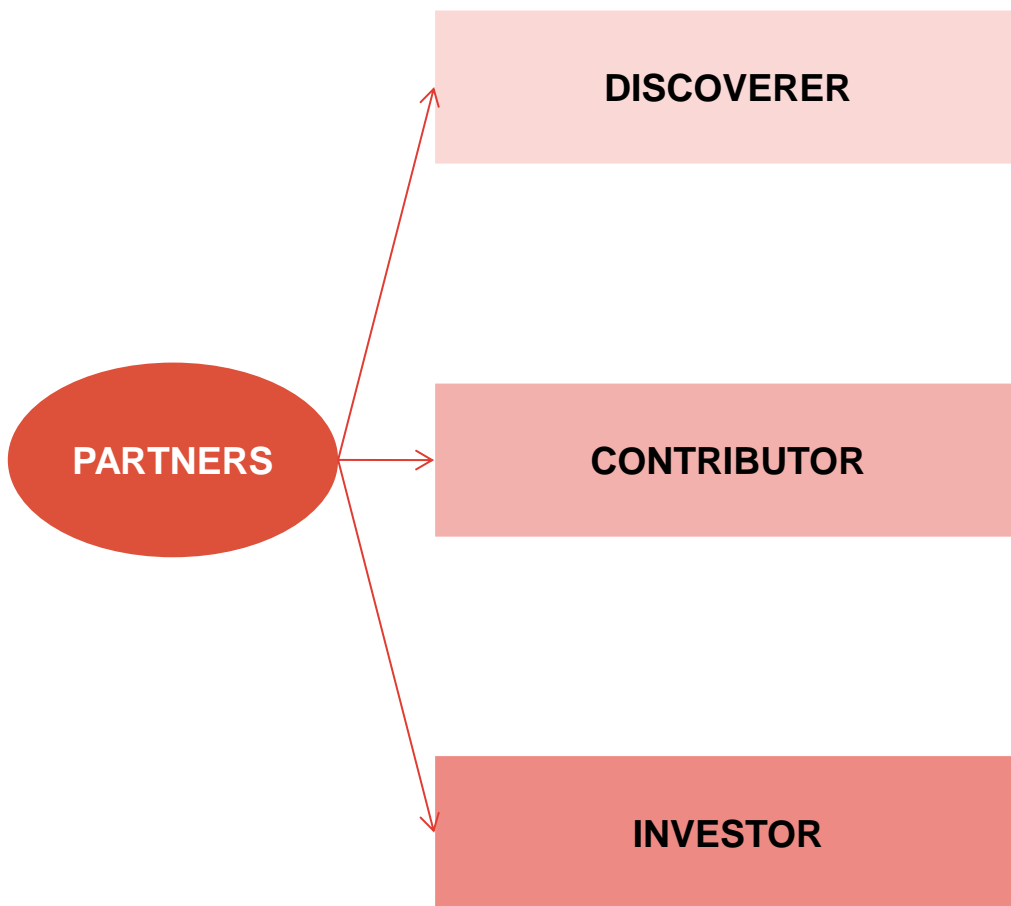
- Company-dedicated incubator on a specific topic
- Specific sourcing for start-ups throughout the world
- Technology monitoring, business model & economic intelligence
- Support for spin-offs or spin-ins
- TBD...





Partnerships with industry leaders

3 distinct levels



- Communicates
- Orientates
- Access to start-ups

- Identifies strategic domains
- Sourcing
- Selects
- Benefits from exclusivity

- Contributor +
- Finance
- Priority

Partenariats Grands groupes - incubateur

Les 3 niveaux de partenariats

Level 1	DISCOVERER	
	<ul style="list-style-type: none"> • Right: • Member of the partnership club & communicates about the incubator • Takes part in main incubator decisions • Access to start-ups (once sourced, labelled et funded by the incubator) • Interacts with start-ups and incubator management 	<ul style="list-style-type: none"> • Duty: • Provides access to experts and programme directors
Level 2	CONTRIBUTOR	
	<ul style="list-style-type: none"> • Right: • Previous • Orientes the incubator in choosing the strategic domains (technology / functions) • Benefits from the incubator's sourcing on these strategic domains • Priority access to start-ups • Takes part in labelling committee 	<ul style="list-style-type: none"> • Duty: • Previous • Takes part in selection committee • Sponsors start-ups on a regular basis
Level 3	INVESTOR	
	<ul style="list-style-type: none"> • Right: • Previous • Proportional voting right • Takes part in Fund Engagement committee • Member of the board of the fund 	<ul style="list-style-type: none"> • Duty: • Previous • Provides access to locals (abroad) • Provides access to testing means / facilities if required

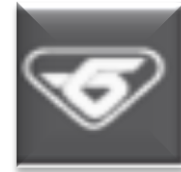


Our partners

EADS



THALES



DCNS





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We help our clients tackle growth challenges, identify opportunities, rethink business models and revisit innovation strategy

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