



# Phi-Labs

## Entrepreneurship & New Business Models

Frascati, 12 November 2018

Rainer Horn, SpaceTec Partners, Managing Partner

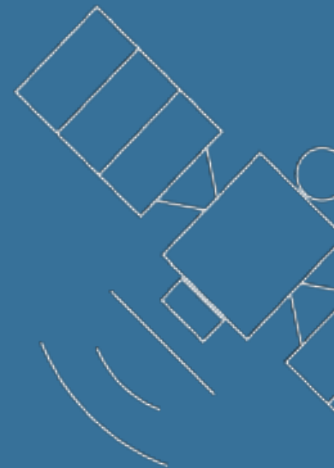
### SpaceTec Partners SPRL

Avenue Louise 66  
1050 Brussels  
Belgium

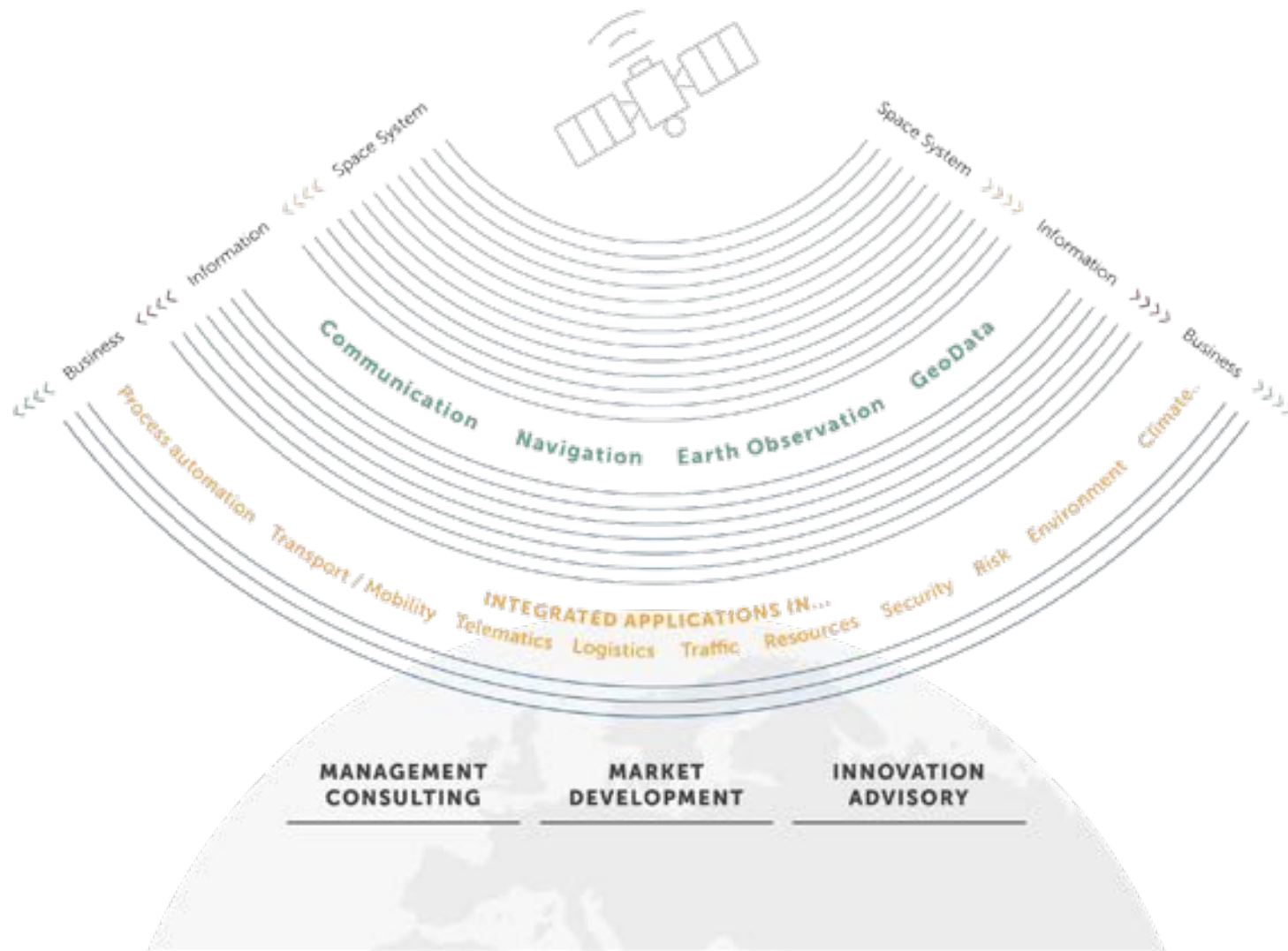
[www.spacetecpartners.eu](http://www.spacetecpartners.eu)

### SpaceTec Partners GmbH

Rumfordstr. 10  
80469 Munich  
Germany



# SpaceTec Partners – where space technology means business



# Past engagements and clients along the space value chain

Space systems

Data

Information



Copernicus User Requirements	Cosmo-SkyMed Progr. Mgmt.	Maritime Services	Copernicus Support Office, Relays, Academy		
Galileo use in outer space	User Feedback Mechanism	Copernicus Cost Benefits Analysis	Downstream Market Assessment	Non-space partner engagement	
Non-dependence study atomic clocks	Galileo Timing Service Concept	Copernicus User Uptake Strategy			ITS e-Call workshop
EU Micro-Launcher Demand & Supply Analysis	Galileo High Precision	EGNOS uptake in Aviation	Ecosystem Workshops	LBS Developer Engagement	
SSA Impact Assessment	EGNOS Programme Support	Geo Cluster development	Space Innovation Procurement	Industrial cooperation	
H2020 Development	Commercialisation strategy	Galileo OS-NMA	EMS Outreach	Copernicus Accelerator	R&D Data distribution strategy
Small Satellite Market Analysis	Diversification strategy	Copernicus Data Policy Study	InfoSessions	Galileo Hackathon	Spin-off coaching
PPP Evaluation Support	EO VHR Study	Data Security Study	GNSS.asia Challenge	Customer matching	
NewSpace Study (DE)				POSITION – Poland Ecosystem	
CleanSpace Impact Assessment	Access to Finance Study	Incubator development	Space Ecosystem development		



Earth Observation

Navigation

Other Space



Concepts developed by SpaceTec Partners



# Selected startups from SpaceTec's coaching portfolio

## Strategy



Laser terminals air & space



The thrd aircraft



Marine real-time analytics



Low-power cm-positioning for IoT

## Investment Readiness



GeoIntelligence & machine learning



Enabling geolocated IoT



Safe marine navigation



Single-chip based navigation

## Market Access



VanderSat

High-resolution moisture data



IoT authentication

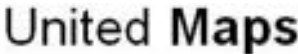


Operating system for IoT



Locating solutions

## Funding



Hyperlocal maps



Data fusion for automated driving

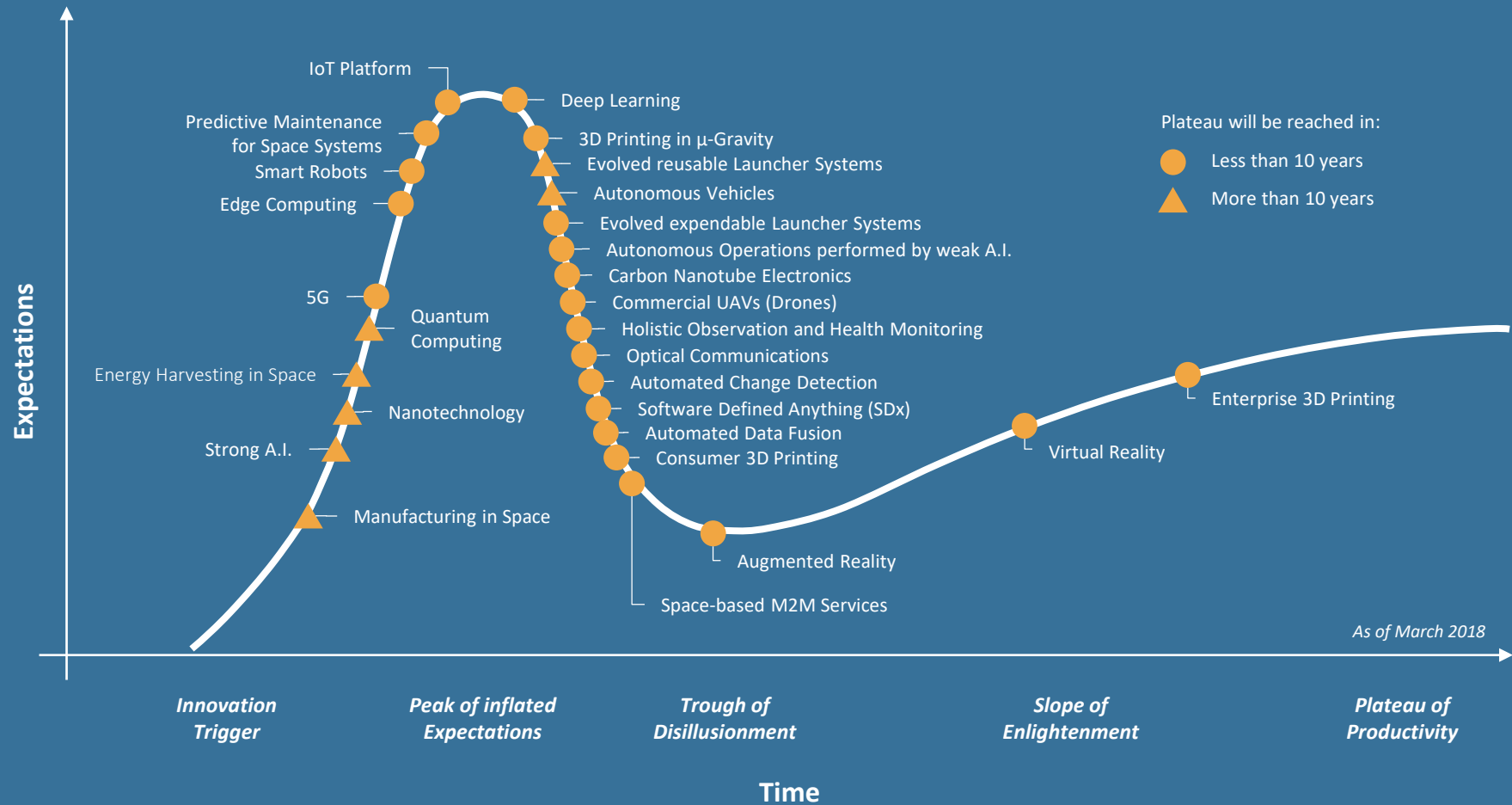


Connected space telescopes

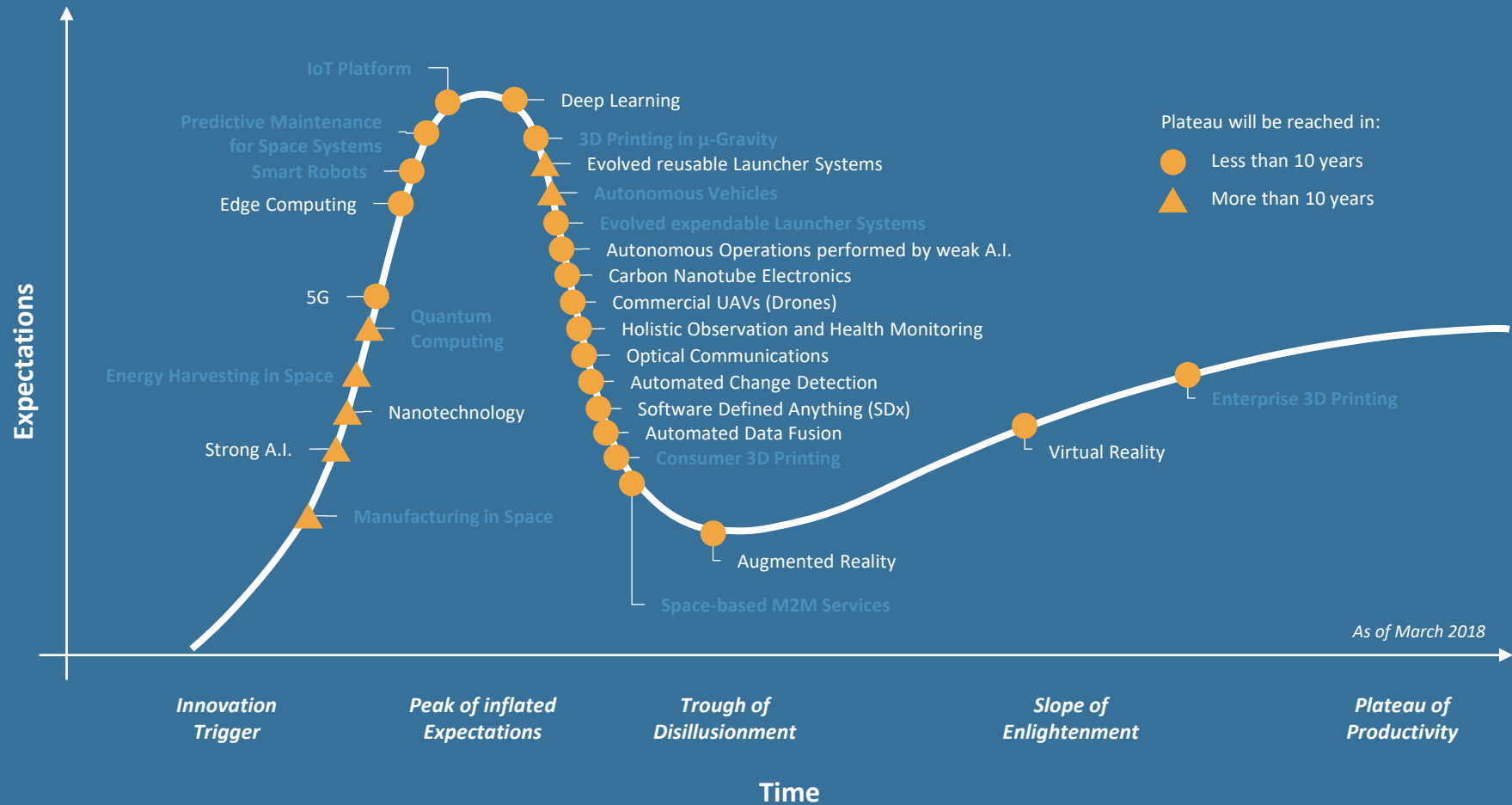


Mobile app for Outdoor

# NewSpace technology trends



# NewSpace technology trends relevant for GeoIntelligence



# GeoIntelligence is a key pillar in NewSpace

Ubiquitous  
Connectivity

Positioning

Autonomous  
motion

GeoIntelligence

- Number of Earth Observation **satellites tripling** vs last decade
- **Free open data sets** providing an enormous amount of data available for analysis
- **Near real-time and high resolution satellite** imagery heralding a new wave of services
- New modes of **data transmission and distribution** in the sky, air and on the ground
- Leaps in processing, **big data and grid computing** allowing petabytes to be analysed
- Innovative method for **weather forecasting**
- Earth observation a key **alternative data** for financial markets



# GeoIntelligence is mostly a complex B2B or B2G game

## Weather forecasting value chain and key players



PUBLIC SECTOR DRIVEN

PUBLIC SECTOR DRIVEN

PRIVATE SECTOR DRIVEN

**spire** EMERGING ACTIVITIES

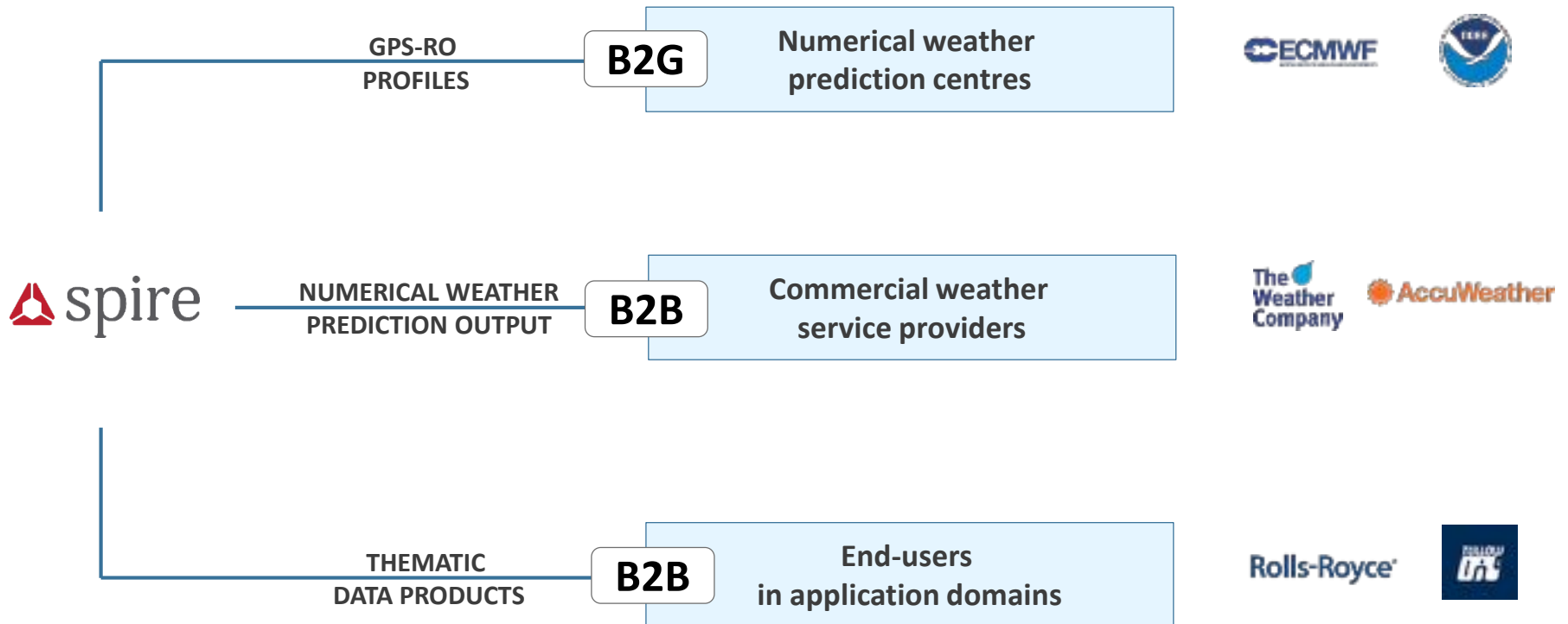
AND THEIR AMBITIONS

Source: SpaceTec Partners Analysis

# B2B or B2G Business Models for a player like Spire

## PRODUCT

## TARGET CUSTOMERS



# More GeoIntelligence examples – with European founders



Detect changes, gain insights and **make better decisions**

## RAPID NEW ACQUISITIONS

**SAR SATELLITE IMAGE TASKING**

- > Image Tasking Available Now
- > 3 Satellites, starting 2018
- > 10 x 10 Meter Resolution
- > X-Band SAR Imaging

Apply for pilot program

**AERIAL SAR IMAGING CAMPAIGNS**

- > Available Now
- > Selected Countries
- > 3 x 3 Meter Resolution
- > X-Band SAR Imaging

Request quotation

**SAR SATELLITE CONSTELLATION**

- > Starting 2019
- > Assigned Constellation Capacity
- > Image Tasking and Archive Access
- > 3 x 3 Meter Resolution

Pre-order inquiry



# SPACEKNOW

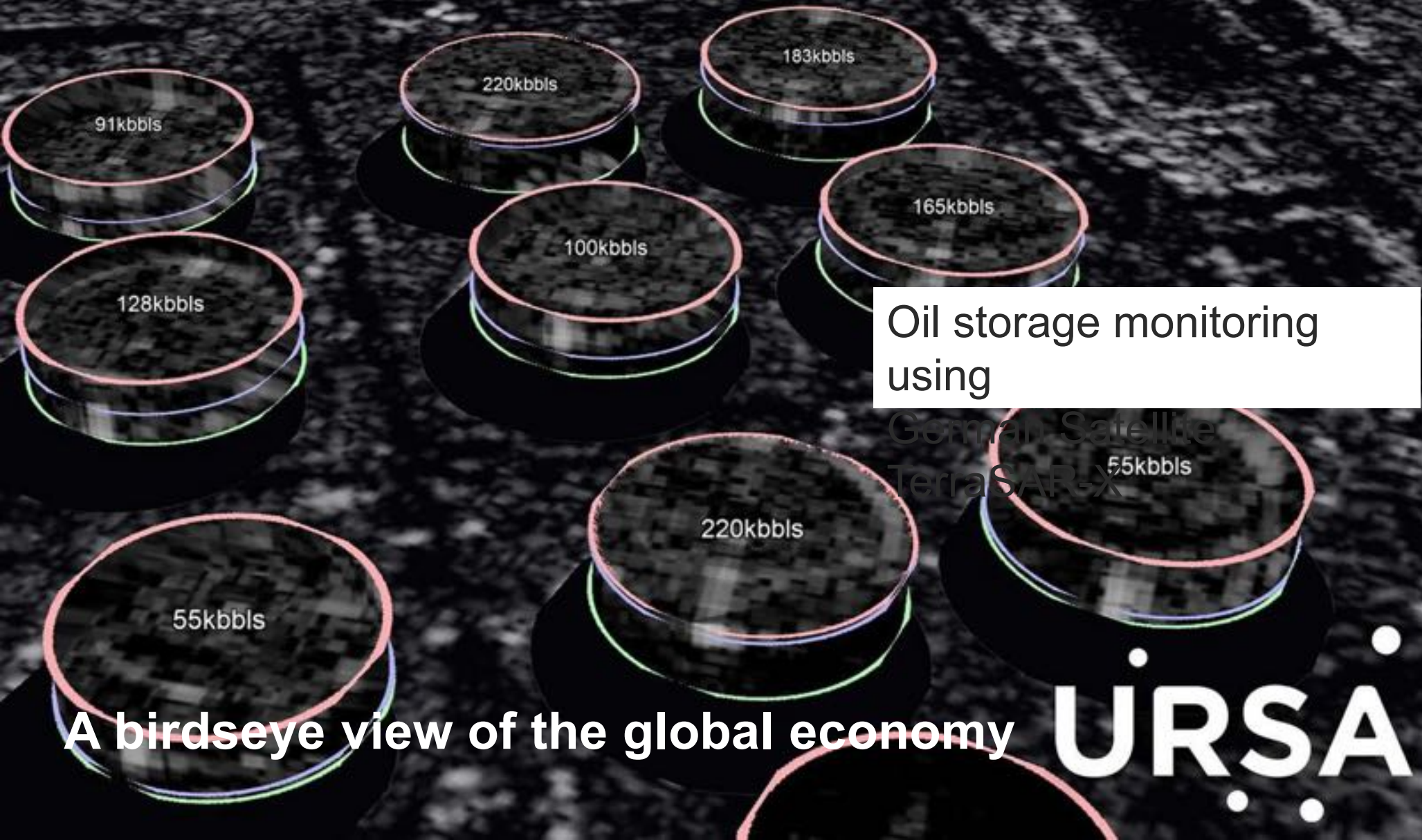
Transforming data from space into **actionable intelligence**



*Economic activity and resources feed into financial info terminals*

**Bloomberg**

# Natural resource management: Oil reservoirs

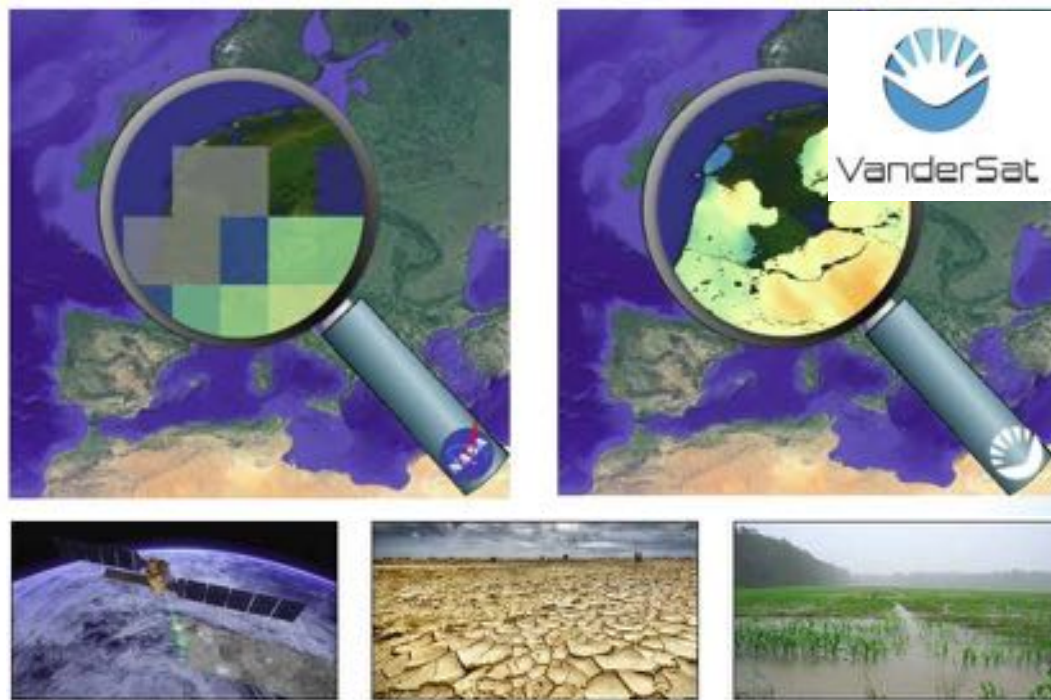


A birdseye view of the global economy

URSÄ

# Networking is key in B2B: A SpaceTec coaching example

VanderSat turns satellite--derived climate data into valuable information across all sectors with patented downscaling method to get higher granularity out of EO data.



Satellite observed water data. Globally, Daily

2015/16: SpaceTec Partners meets VanderSat at networking events



business  
incubation  
centre  
Noordwijk



DISRUPTSPACE

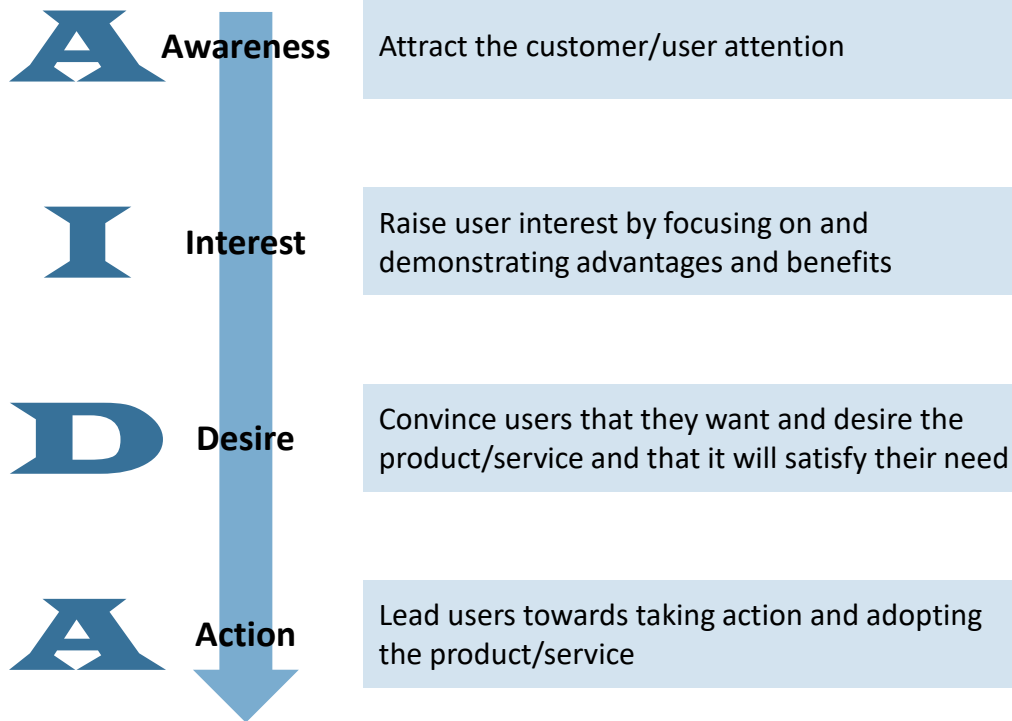


JUL '16: SpaceTec Partners visits VanderSat and discusses target customers

# How SpaceTec Partners works with Startups



## Real life example of “AIDA” in B2B market development



**JUL '16:** SpaceTec Partners introduces VanderSat to SwissRe using a 4 page concept teaser

**AUG '16:** SpaceTec- arranged teleconference with SwissRe experts

**SEP '16:** VanderSat capability demonstration at SwissRe HQ with SwissRe data

**OCT '16:** SpaceTec proposed exclusive R&D Contract

...

**MAR '18:** Press announcement: VanderSat included in opti-crop, the SwissRe farm management platform



# SpaceTec Partners work with GeoIntelligence entrepreneurs

## Services

- Refine business plans and value proposition
- Develop business strategy
- Identify potential customers and approach strategy
- Support licence and co-operation agreements
- Define staff requirements and support recruiting
- Link to extensive network in industry and institutions
- Support fundraising and liaison with investors

## Arrangement

**Mentoring  
in ESA-BICs or Phi-Lab**

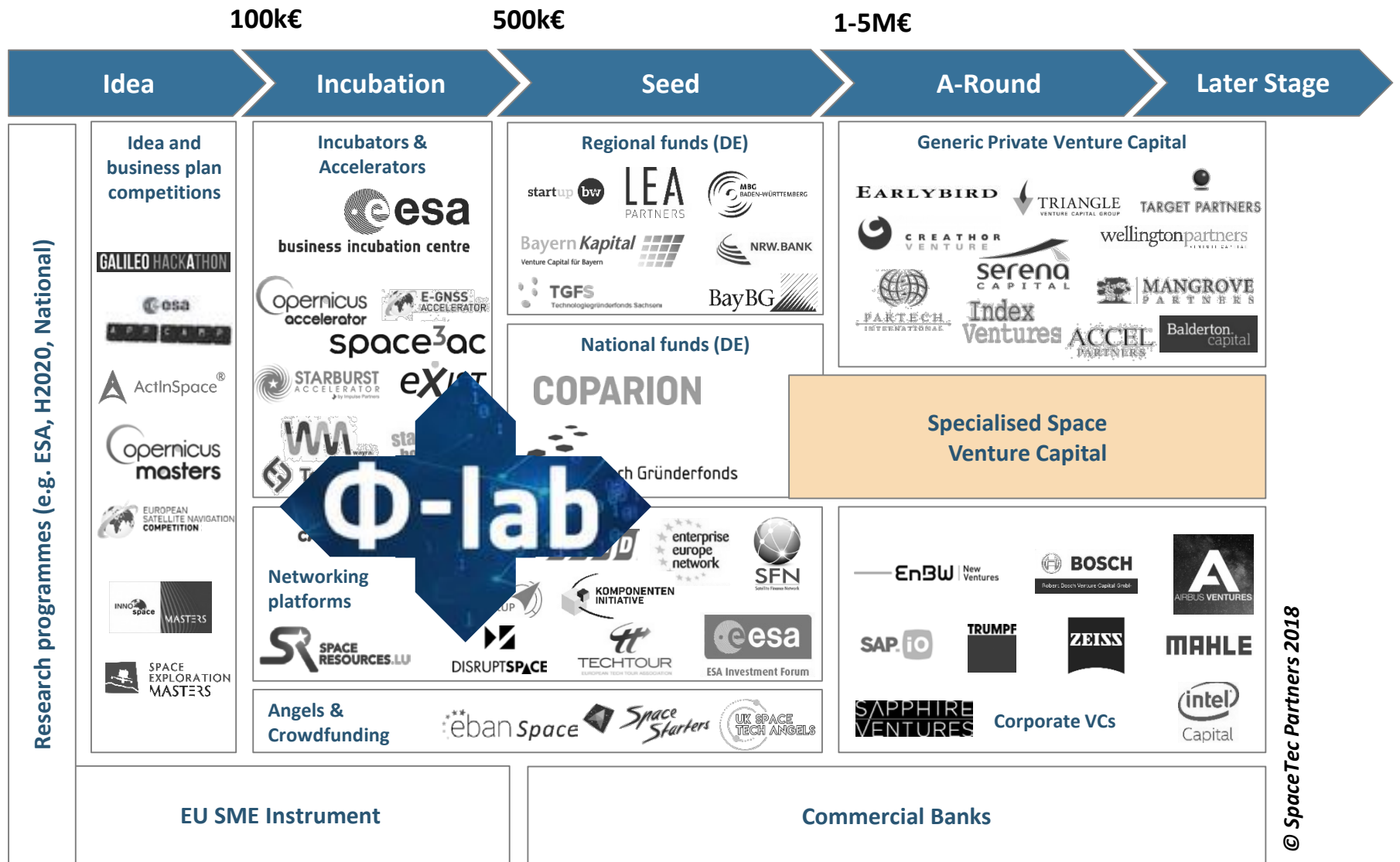
**SpaceTec-supported  
Accelerators**

**EIC coach under  
SME Instrument**

**Certified coach of  
selected seed funds**

**“Sweat Capital”**

# We can help you advance on the space financing chain



© Space Tec Partners 2018



# Talk to us during ESA Φ-week



**Rainer Horn**  
Managing Partner  
Geschäftsführer

SpaceTec Partners GmbH  
Rumfordstrasse 10  
D-80469 München

T +49 89 45 16 09 80  
M +49 171 377 5555  
horn@spacetecpartners.eu  
www.spacetecpartners.eu



**Annekatrien Debien**  
Senior Consultant

SpaceTec Partners SPRL  
Avenue Louise 66  
B-1050 Brussels

T +32 2 318 09 24  
F +32 2 502 60 49  
M +32 488 48 51 70  
debien@spacetecpartners.eu  
www.spacetecpartners.eu