



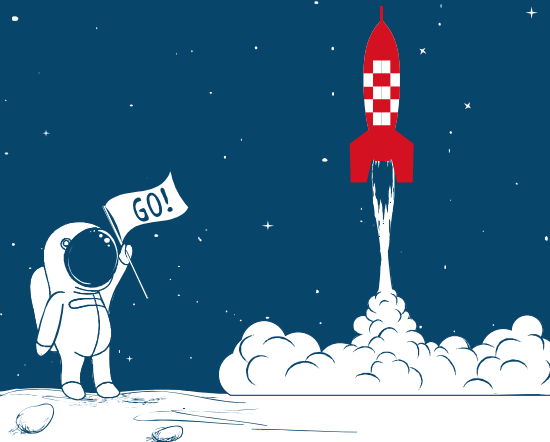
BUSINESS
INCUBATION
CENTRE

Switzerland

ESA BIC Switzerland – online Info Event

29 August 2023

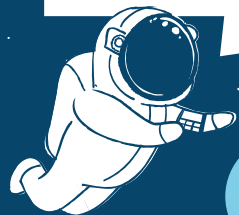
Agenda



- 01 Welcome
- 02 Introduction to ESA BIC CH
- 03 ESA BIC CH start-up TerraRad Tech and their experience in the program
- 04 Q & A

ESA business incubation

Network of **60 centers in 18 ESA countries** supporting space-related start-ups to get their business off the ground.



150+

Yearly start-ups supported across Europe

1000+

Start-ups supported to date



● ESA Business Incubation Centre

ESA BIC Switzerland – at a glance

What?



Switzerland-wide start-up program in cooperation with the European Space Agency (ESA)

For whom?



High-tech start-ups with “space connection”, <5 years old, registered in CH

How?



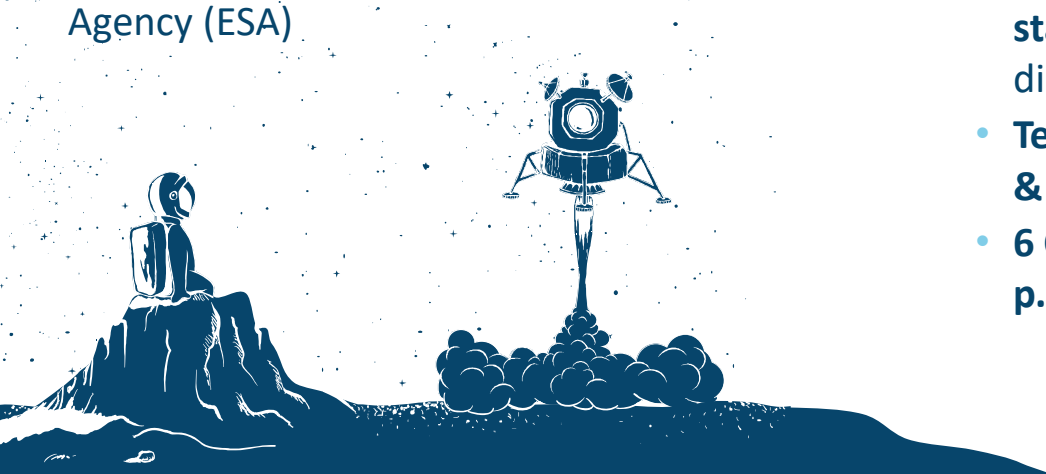
Two year program for **up to 10 new start-ups per year**

- **Up to 200k € per start-up** (non-dilutive funding)
- **Technical (80h) & business support**
- **6 Community Events p.a.**

When?



Open call with **2 selection rounds per year – in March and November**



The process – how does it work?

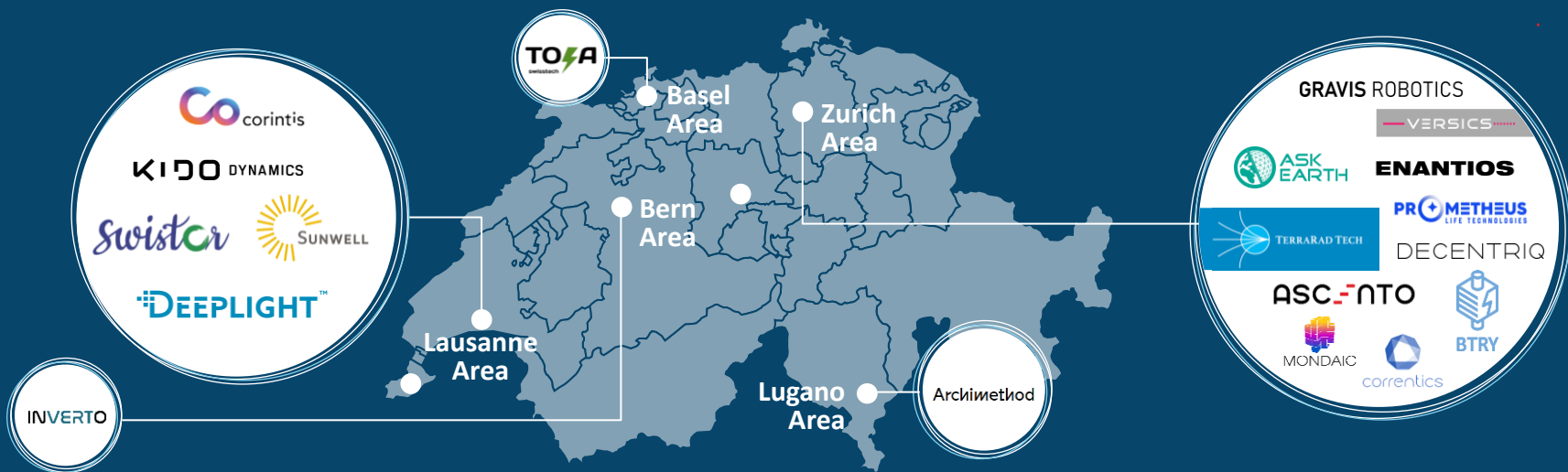


- Registration on esabic.ch/application
- “Two-pager”
- Full application
- Open Call with two deadlines: end of February & end of October



¹ All grants without equity; however requiring matching funds

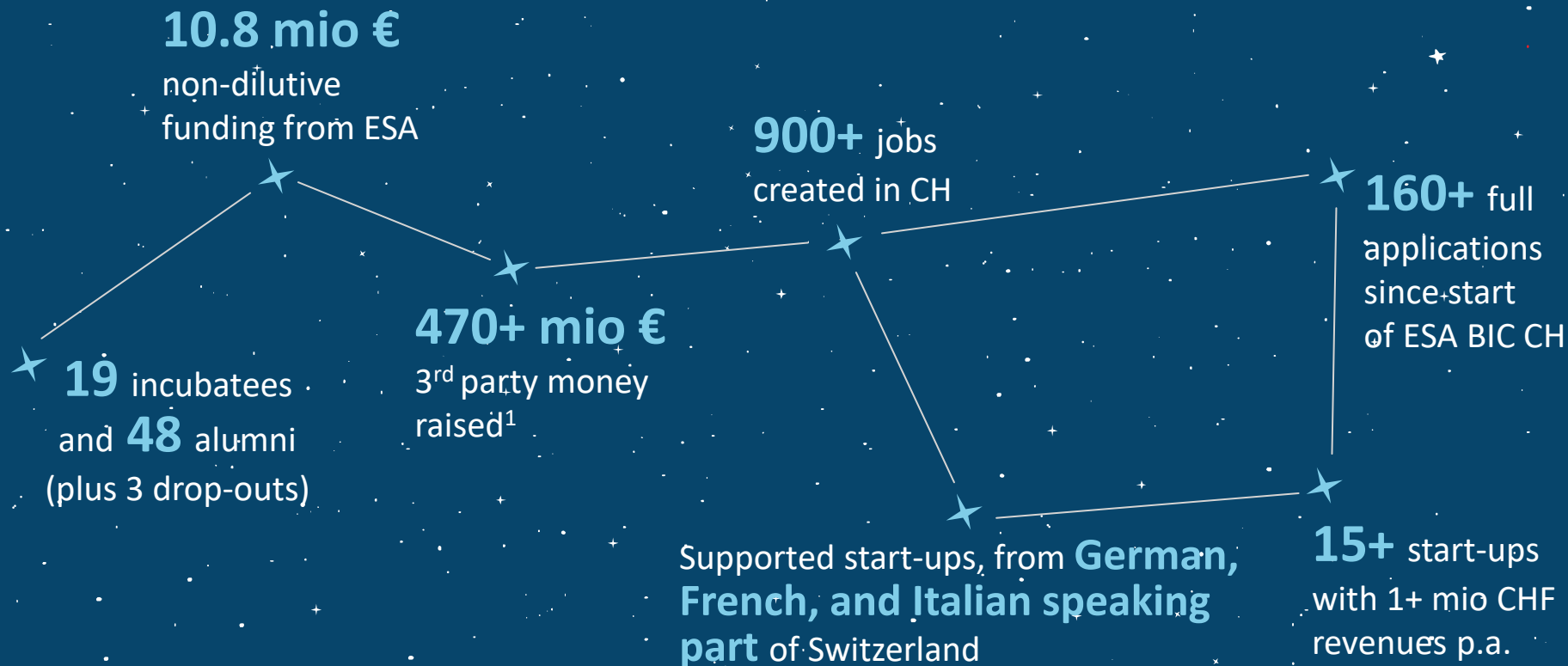
ESA BIC Switzerland: 19 incubatees and 48 alumni from all over Switzerland



Alumni



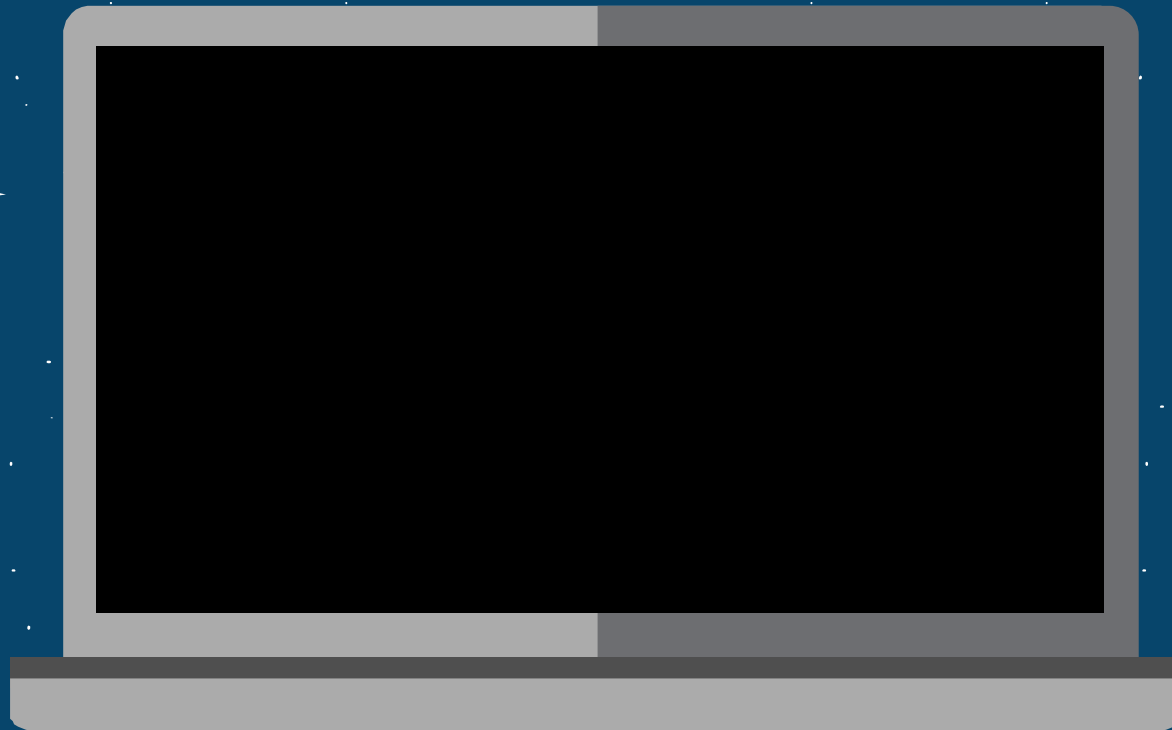
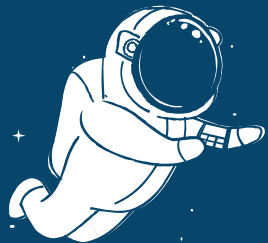
ESA BIC Switzerland – results to date



Source: ESA BIC CH team and annual survey.

¹ This includes an ESA project ESA BIC CH supported start-up ClearSpace secured worth 86 mio €, at the ESA Ministerial19.

What is a space connection?

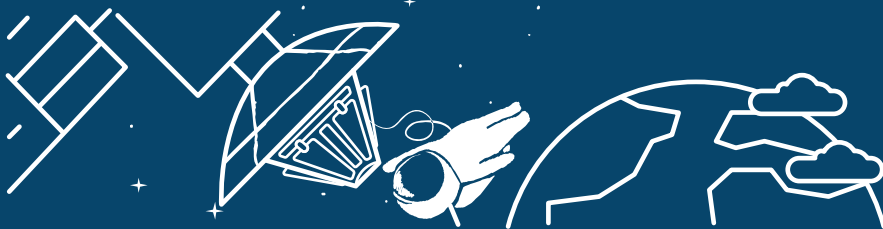


What is a space connection?

Space data



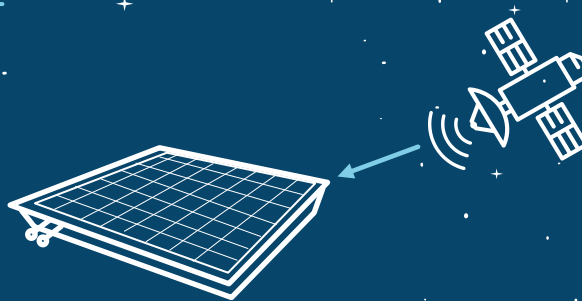
Purely for space



From earth to space



From space to earth



Start-ups in different space business segments (examples)

Exploration & cleaning



Sensing in space & on earth



Telecommunication & security



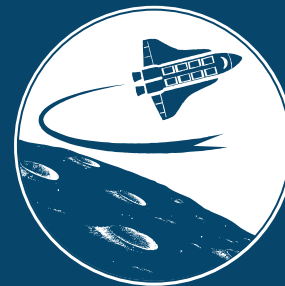
Space infrastructure
(e.g. satellite components)



Materials & processes



Space data applications



Key benefits for start-ups of ESA BIC CH:

No. 1: _____
Network & contacts

No. 2: _____
Funding

No. 3: _____
Technical &
business support

No. 4: _____
ESA brand &
visibility/events




 Start-up
 satisfaction
9.6/10

Strong collaboration between
ESA BIC CH partners and start-
ups over first 5 years:

- 370+ interactions during past years
- 1400+ hours of support provided

Technical & business support: overview



What?



Technical & business support via partner network →



Individual business support sessions by ESA BIC CH team or external experts →



Special offers from diverse service providers (e.g. software licenses, cloud services, comm./marketing services) →

How?

- Technical: via Michael
- Business: via KAM¹

- To be initiated via KAM¹

- All on shared dropbox folder

¹ KAM = Key Account Manager, either Christof or Nanja

ESA BIC CH community events: meet, leverage & learn

Topics, e.g.

- (New) space and ESA
- EU and other ESA funding
- Intellectual property
- Product development
- Certification
- Digital marketing
- Branding
- Sales and biz. dev.
- Negotiating
- Supply chain mgmt.
- HR topics
- Best practice exchange



Involved partners/experts, e.g.

- Art of Technology
- Apco
- maxon
- beyond gravity (ex Ruag)
- Sofo Consulting
- Swiss Post
- Swiss Re
- u-blox
- Unit9
- Walder Wyss
- Zühlke
- ... and many alumni!

...followed by an apéro & socializing!

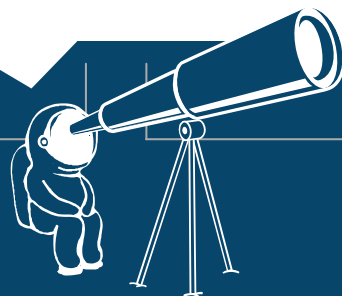
Location

- Every second month at different locations around Switzerland 2023:
06.07., 17.8., 12.10., 07.12.





Thanks to ESA and other ESA BICs, start-ups gained attractive international exposure.



Benefits – feedback from start-ups



Amael Cohades
CompPair



The **structure of the program helped us to be more organized**, e.g. the requested reportings and progress reviews gave us an overview of where we were standing and was also valuable for our advisory board.



Without ESA BIC CH we would not have been able to get to where we are today.
The absolute best incubation program in Europe!



This is a great program to be part of. It has **helped us to grow our network and credibility and opened many doors for us**. The support we received, and the focused business development approach are perfect.

ESA BIC Switzerland: operational set-up

Dr Nanja Strecker, Ina Schultz, Michael Gschweitl, Christof Bötschi

ETH Zürich (VPWW, Prof. Dr. Vanessa Wood)

General Management, Project and Technical Lead



Merle Zur

Impact Hub

Community Management



Philip Hassler

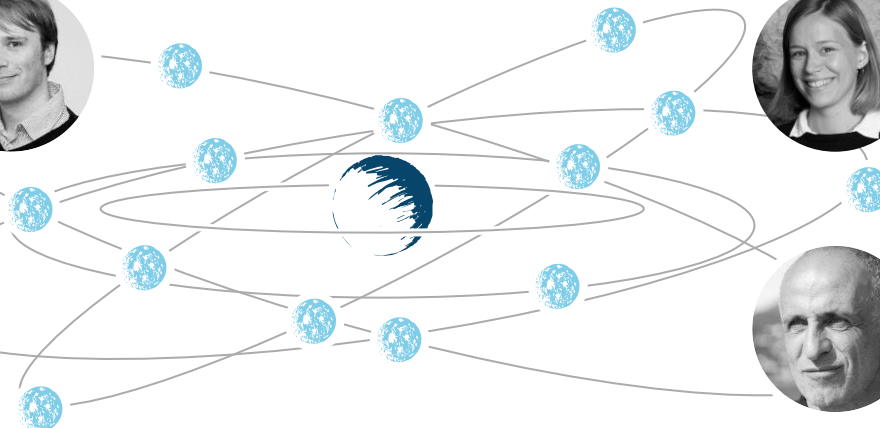
Venture Kick

Startup Management



Dr Jose Achache

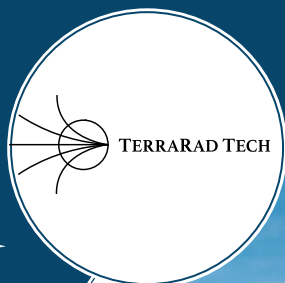
Space Expert & IAP Management



★ Note: all part-time on ESA BIC Switzerland

ESA BIC CH start-up: TerraRad Tech

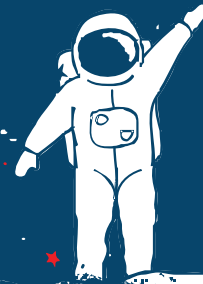
Earth Observation satellite tech for saving water
Soil moisture mapping for irrigation



We bring efficiency to agriculture and golf by applying groundbreaking innovations in the field of microwave remote sensing

ESA BIC is supporting us with the relevant network, business coaching and insightful events

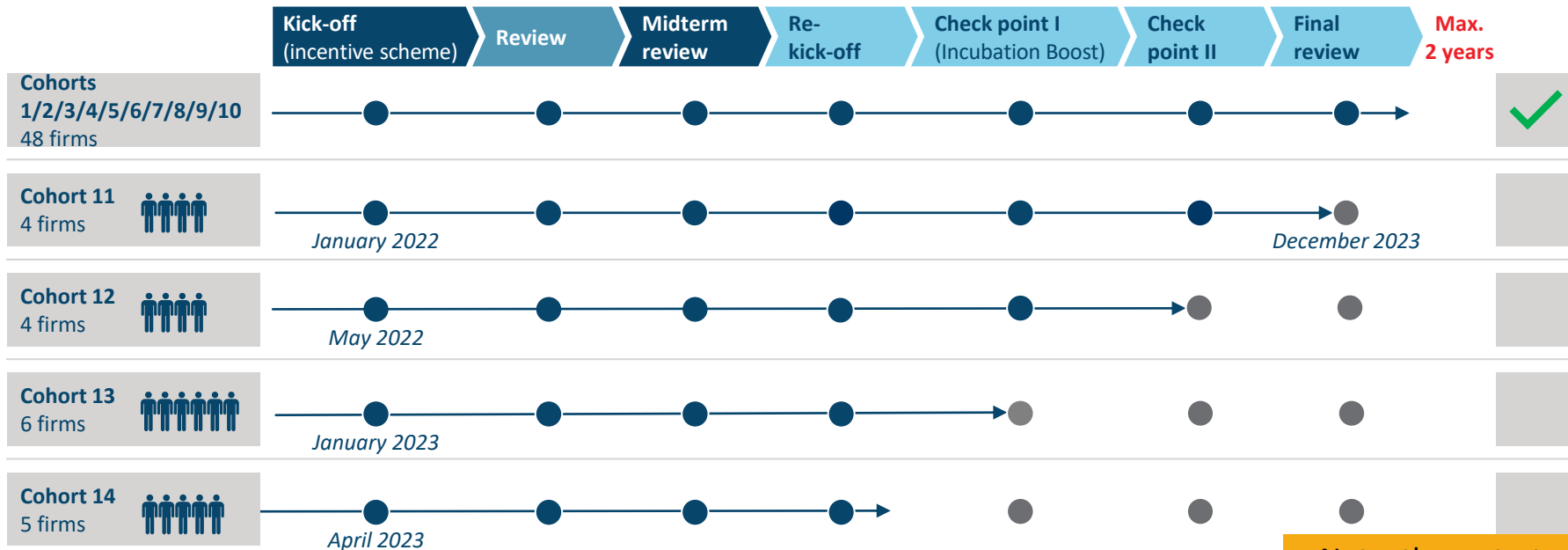
Any questions?
www.esabic.ch



Benefits – feedback from our start-up Menhir Photonics



Start-ups are at different stages of the incubation period (2y)



● Meeting took place/Incentive Scheme ● Future meetings

Note: three start-ups have not completed the full program (and are not shown here).

ESA BIC CH technical support: 2 more examples

Synthara & CSEM

- *CSEM: academic partner*
- Synthara requested technical support from CSEM's micro-control experts (technology development and breadboard testing)
- Collaboration was very successful and a joint Innosuisse project was granted
- Joint IP was developed

Zühlke Engineering & Botas Systems

- *Zühlke Engineering: industrial partner*
- Bota Systems was looking for a test bead to understand the EMC signature of their device before entering any costly certification testing
- Zühlke has an in-house test chamber (to assess EMC signature of Zühlke's own developments)
- Zühlke granted Botas Systems access to the test facility in the frame of ESA BIC CH tech. support



ESA BIC CH start-ups

From space to earth: INSOLIGHT

Developed industrial prototype with world-record breaking solar cell efficiency

Insolight started within ESA BIC CH as a team of three with lab results using space-grade solar cells on earth



Are nowadays team of 20+, closed two financing rounds, and have the technical lead in an EU project of 10+ Mio €

ESA BIC CH start-ups

From earth to space: CYSEC

Vast majority of satellites are currently not secured where Cysec has identified an attractive market

Cysec has developed an all-in-one cybersecurity solution already in use within the financial sector

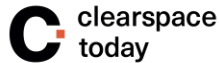


Just started a cooperation with Spacebelt to secure a constellation of satellites for cloud services

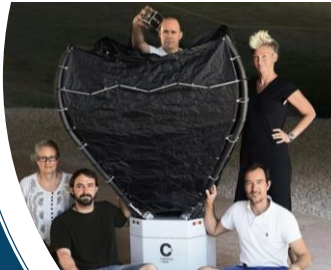
ESA BIC CH start-ups

Purely for space: ClearSpace

ClearSpace: the first garbage collection service for space!



Design agile satellites able to find, capture and remove non-functioning satellites from their orbits in space



Are the first Swiss and first start-up led consortium commissioned for ESA's first space debris removal mission with a € 80+ million in financing by ESA member states