



Small Satellites – Huge Opportunities

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- MSc Aerospace Engineering
- Co-Founder of ISIS
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- Treasurer of Delfi Foundation
- ...and a few more



Small is beautiful...



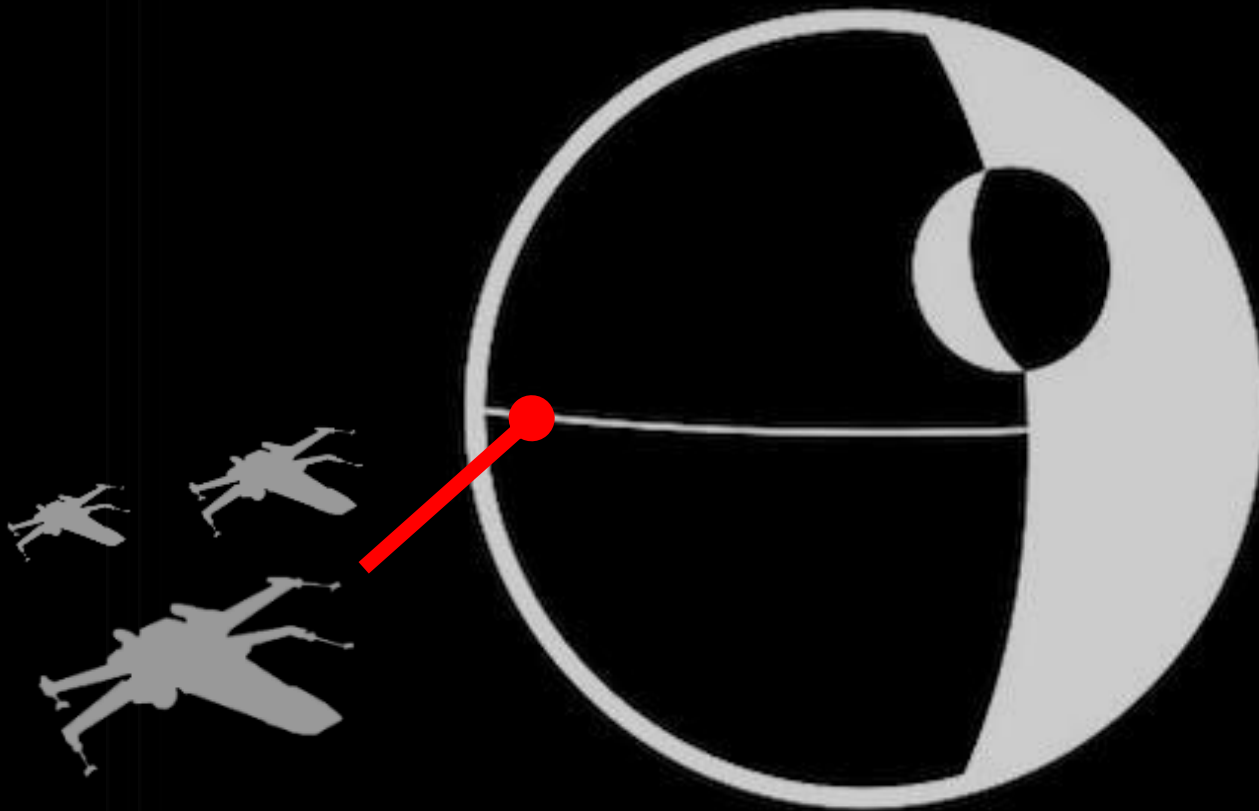
Delfi-C3



Envisat (ESA)



What did we want to change?

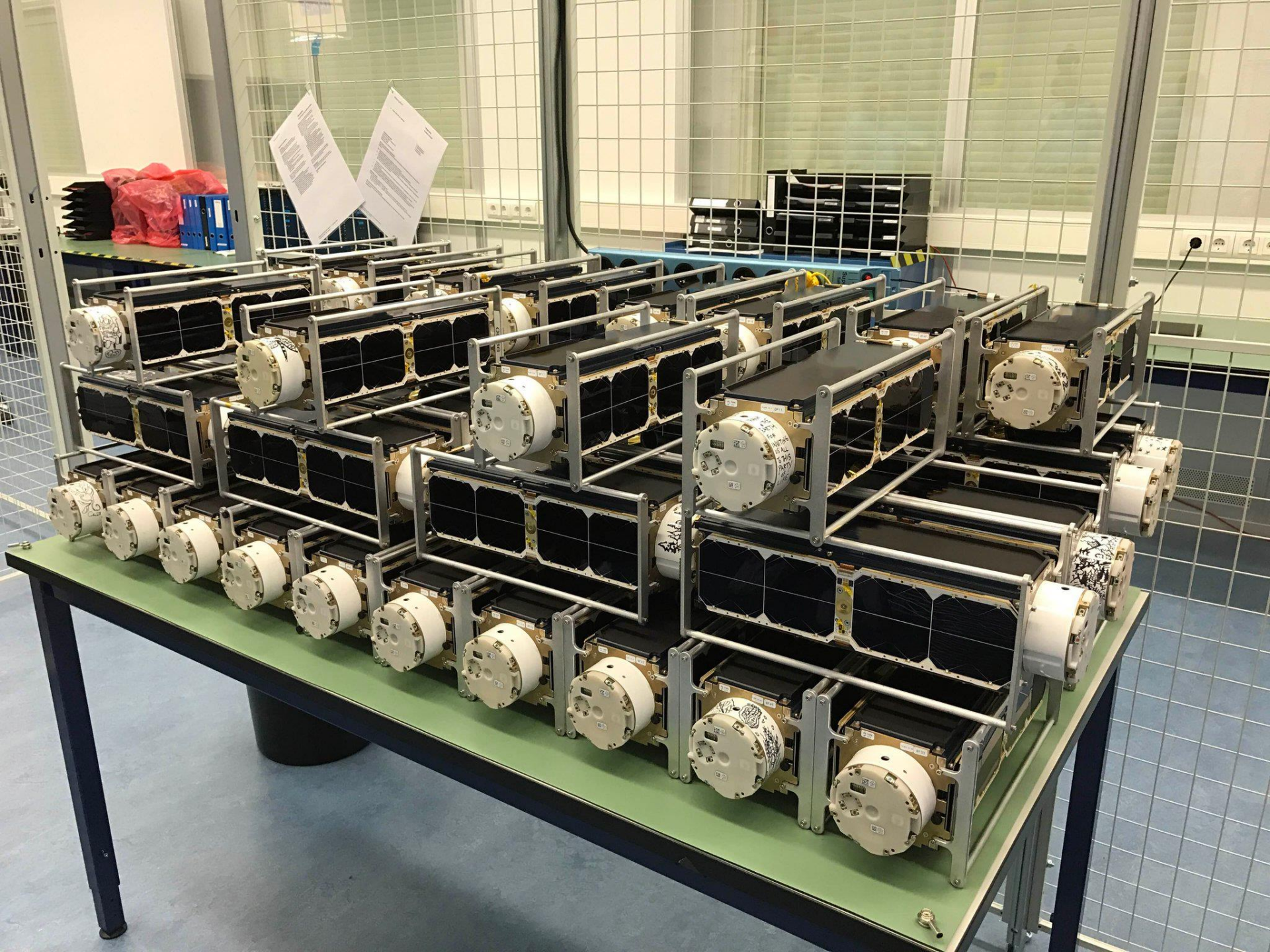


TOO BIG TO FAIL

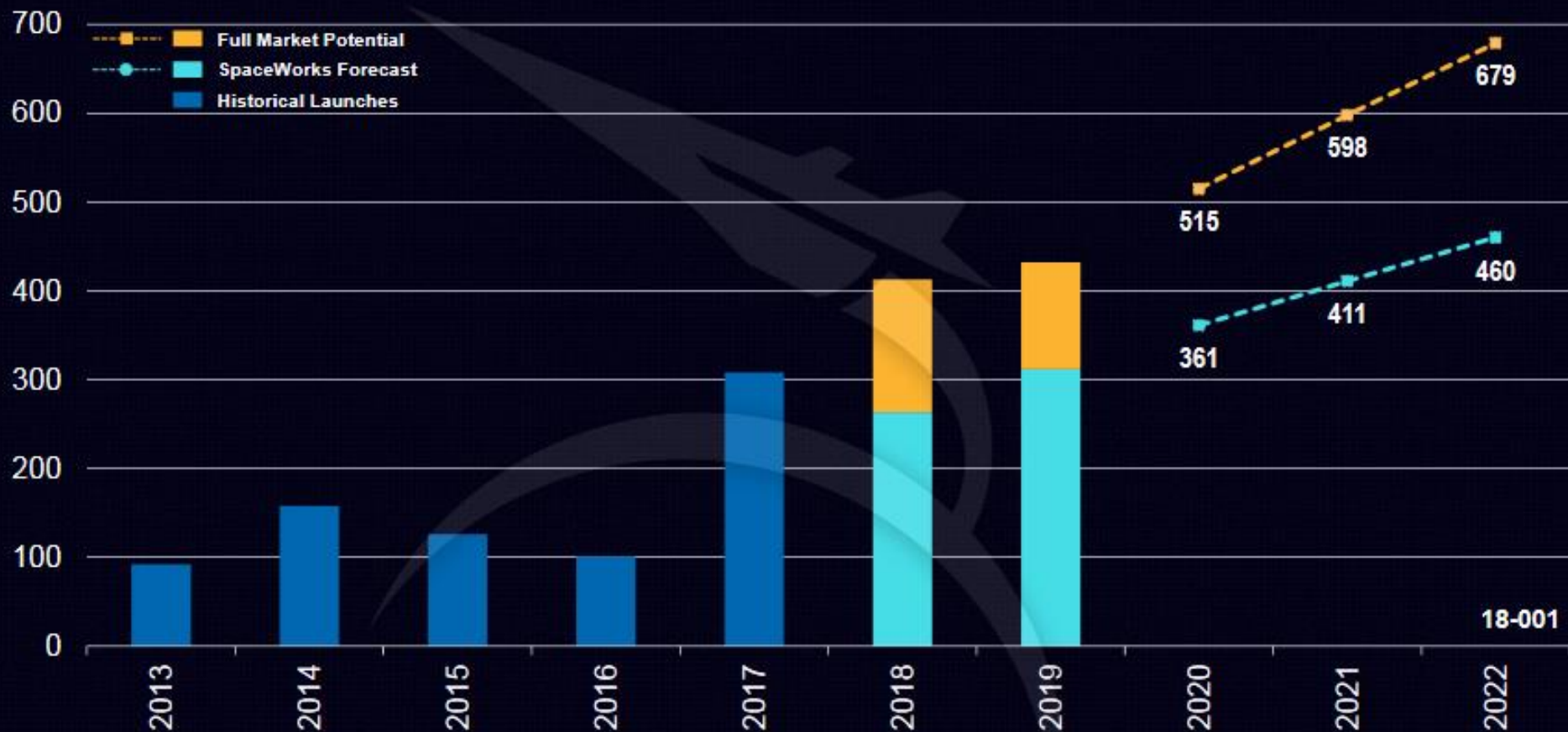








A growing market



ISIS - Innovative Solutions In Space



Vertically integrated small satellite company

12 

YEARS IN SPACE

90 

EMPLOYEES

76 

CUBESAT PRODUCTS AVAILABLE

2 

SPIN-OUT COMPANIES

260 

SATELLITES LAUNCHED



13 LAUNCHES FROM 5 LAUNCH SITES

6 JAN 2006 TO DATE

11 

NUMBER OF SATELLITES CURRENTLY
OPERATED/MONITORED FROM OUR CONTROL ROOM


 1kg
 25kg

LIGHTEST SAT

HEAVIEST SAT

3 

LONGEST DURATION ISIS
SATELLITE IN ORBIT (YEARS)

250 

ANTENNAS DELIVERED

25 

GROUND STATIONS
DEPLOYED



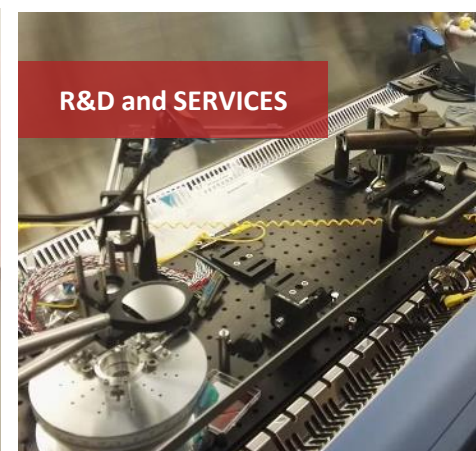
SATELLITE SOLUTIONS



LAUNCH SERVICES



CUBESAT PRODUCTS



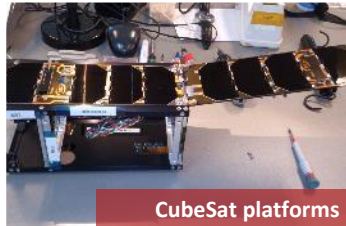
R&D and SERVICES



The Future

NEXT EXIT

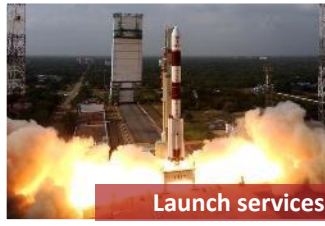
Our turn key business model



CubeSat platforms



Payload development & integration



Launch services



Ground stations



Commissioning & operations support

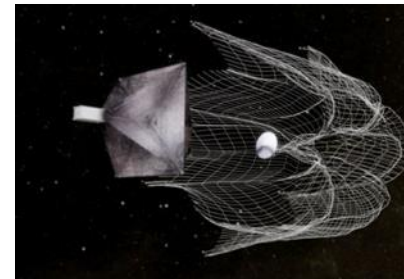
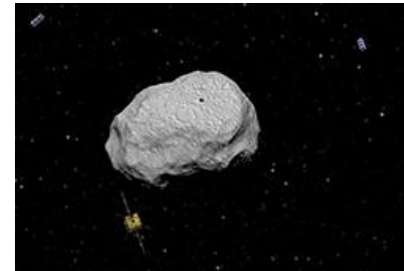
- Chosen because of lack of supply chain
- ‘Super’-niche also forced internal development
- Embedded to the core of the company
- Now need to broaden the supply and development partnerships to maintain speed of innovation

Technology Trends

For the SmallSat market



- Constellations
 - Propulsion
 - Navigation
 - Intersatellite links
- Higher quality
 - Non-LEO missions
 - More at stake (serious science)
 - Need for lower infrastructure cost (longer lifetime)
- Systemlevel series production
 - Mixed product line with multiple small series in parallel
 - Finetuned supply chain vs. further vertical integration



A new era for space technology



If we can team up for new ideas, the space sector can truly transform!





Thank you for your attention!

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