

// Case Study

Arralis



Connected
Arralis to Everything

We work with
Innovate UK

CATAPULT
Satellite Applications

ABOUT THE COMPANY

Arralis design and manufacture high frequency semiconductor chips up to and beyond 110GHz. Their expertise lies in Radio Frequency (RF), micro and millimetre-wave technology. Monolithic Microwave Integrated Circuits (MMICs), packaged component modules, proprietary antenna technology and integrated Radar and Communications front-end platforms form their core product portfolio. They develop solutions across a range of frequencies: W/C band, E band, Ka band. Their high frequency solutions (they are the world leader at 94GHz), allow the development of very high-resolution radar (applications include autonomous automotive, helicopter landing, space) and massive data rate wireless communications.

Arralis also create partnerships with other leading technology providers to build bespoke high performance, cutting-edge solutions.

RATIONALE FOR SELECTION

The Catapult first became aware of Arralis in the months preceding the Sprint through their attendance at our networking events and some initial engagement with the company to identify their support needs. They were identified as being an ideal candidate as they had secured a big investment round in 2017 and were at the cusp of commercialising a number of products across a range of frequencies. They are based in Belfast, Manchester and the Republic of Ireland, which meant that they meet the regional criterion. Initial discussions with Arralis led to the focus of the Sprint being the analysis of their current and future product portfolio and development of a technology and opportunities roadmap.

SPRINT FOCUS AND OUTCOME

The Arralis team have developed a range of MMICs across a number of frequencies to various TRLs; their core competency lies in the design of high frequency chipset and modules. However, market solutions tend to require additional components to offer a complete solution. Arralis have a number of chipsets that require additional resourcing to commercialise (either through building integrator relationships or developing complete solutions in-house). The support was focused on understanding the current portfolio and where to prioritise their technical and commercial resources across the portfolio.

- **Sprint focus**
 - Optimisation of resources to enable successful commercialisation
 - Product overview
 - Key opportunities
 - Market sizing and competitor landscape
- **Agreed Deliverables**
 - **Slide-deck capturing work done during the sprint**
 - Problem/Solution Statement
 - Analysis of product portfolio
 - Product positioning
 - Technology roadmap (opportunities and resources needed to capitalise on opportunities)
 - **Market research document**
 - Competitor landscape
 - Market sizing
 - Value chains

FOLLOW ON ENGAGEMENT

- Arralis have initiated discussions with the Catapult to deliver an In-Orbit-Demonstration (IOD) mission and have identified a small satellite manufacturer to partner with (Sept 2018).
- Arralis are developing a commercial roadmap, which builds on the Sprint work; they are presenting it to the Catapult for feedback (Sept 2018).
- Arralis have been identified as a potential consortium partner in a Low Earth Orbit (LEO) High-throughput satellite (HTS) project (Sept 2018).

IMPACT

- Arralis have decided to set up offices in Harwell (August 2018).
- Arralis have identified the need to employ an antenna designer, they are being supported by the Catapult to recruit (Sept 2018).

“

This Sprint activity has provided the Arralis team with the platform to continue our product and company scaling strategy and has helped alignment within the Senior Management Team. Emma and her team were extremely professional throughout the process and I look forward to working with the team at Catapult in the future. ”

*Eamonn Boland,
COO, Arralis Technologies*

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