

TransDIm ARTES Business Applications & Space Solutions (1/1)



BASS programme accelerates adaptation of space technology in mobile 3D X-ray scanners

- Saving time and cost in healthcare by improving patient assessment outside of hospitals



Project overview

- 3D CT scans provide much clearer information than 2D X-rays, but CT is expensive, immobile and has much higher radiation doses
- Utilising miniaturisation of electron emitters designed for space missions, Adaptix developed a mobile, low-dose, affordable 3D X-ray scanner

"The image quality is superb and makes dental radiography in particular, so much easier and faster. I suspect it will make my existing machine redundant."

Dr. Michael E - UK Vet

Benefits

- Affordability, mobility and simplicity make the scanner ideal for use in many environments e.g. ambulances, ski resorts, care homes and even space, reducing requirement for transport to hospitals
- Improved detail with similar radiation dose compared to 2D X-ray for assessment of fractures, with dose 10-45x lower than equivalent CT scans
- Technology adapted for use in NDT and veterinary use cases, with proposed use in osteoporosis assessment and monitoring bone aging in astronauts



Project success



€2.87M
ESA + Industry funding



DURING

20
Jobs created in the UK

7
Partnerships developed

BEYOND

€300K
Revenues from veterinary product

CCN to enable live human clinical trials

Unlock new use cases (dental & chest imaging)

FUTURE GROWTH

Adapt for bedside chest imaging: save costs and reduce risk

Extend reach into aerospace composites market

Expansion into US market

CCN for human clinical trials and enlargement of device



THEMATIC AREA

HEALTH



→ THE EUROPEAN SPACE AGENCY