



Socio-economic impact assessment of the ARTES 4.0 programme

Case study portfolio

European Space Agency

13th December 2024

ASPEN ARTES Business Applications & Space Solutions (BASS)

Improving Polish road safety and infrastructure quality through innovative smartphone application

- Combining satellite and smartphone technology for cheaper and simpler evidence-based road management



LEVERAGING ESA'S SUPPORT

- Provided technical advice on the use of GNSS/GPS
- Utilised ESA's network, facilitating conversations with end-users and customers
- Support from ESA to provide a solution that meets the needs of the market
- ESA provided 75% funding through three stages up to demonstration with a total of ~ €850K



"The project with ESA enabled us to build a solution to meet the needs of the market"

COMMERCIAL SUCCESS & GROWTH



>5 commercial contracts

>3200km assessed

Operational in ~10 cities

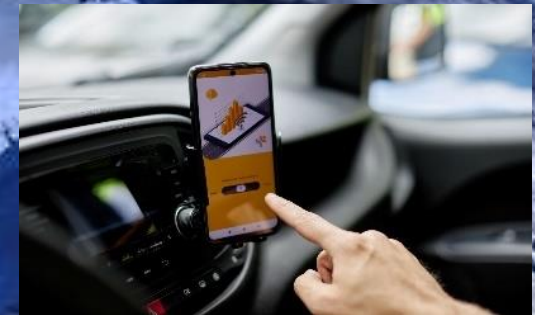
€55,800 from sales

~6 FTEs generated annually



THE FUTURE OF INFRASTRUCTURE MANAGEMENT

- Profiles of road roughness generated through spatial localisation of measurements recorded through the App
- Enables cost-effective monitoring of roads, sidewalks, and bicycle paths by local authorities
- Significant reduction in cost and complexity of data collection for road management



TECHNOLOGY

APPLICATION

END-TO-END SYSTEM



→ THE EUROPEAN SPACE AGENCY



