

Continuous structural condition tank integrity monitoring of Above Ground Storage Tanks, aka “SafeAST, no entry: no empty.”

HORIZON
2020

Continuous structural condition tank integrity monitoring of Above Ground Storage Tanks, aka “SafeAST, no entry: no empty.”

Fact Sheet

Project Information

SafeAST

Grant agreement ID: 691497

[Project website](#) 

DOI

[10.3030/691497](https://doi.org/10.3030/691497) 

Project closed

EC signature date

6 November 2015

Start date

1 December 2015

End date

30 November 2017

Funded under

Horizon 2020 Framework Programme

Total cost

€ 2 827 141,25

EU contribution

€ 2 201 214,50

Coordinated by

PLANT INTEGRITY LTD

 United Kingdom

Objective

The purpose of this action is to assist the €2.8bn European and global liquid storage and distribution industry in reducing the costs involved in ensuring that leaks do not occur from 500,000 above ground storage tanks (ASTs), thus avoiding avoid damage to the environment and the loss of revenue from the unscheduled outages of

leaking tanks, currently estimated at €132m. At its core is the exploitation of Plant Integrity's proven non-invasive storage tank floor monitoring technology capable of detecting defects as small as 25mm.

Plant Integrity's SafeAST system provides continuous structural condition monitoring of ASTs, detecting any corrosion hotspots in the internal tank floor without the need to empty the tank and manually inspect the welds. Plant Integrity provides this continuous monitoring by integrating its long range ultrasonic testing (LRUT) with sophisticated sensors and systems in order to detect defects in the annular ring and bottom plates.

The principal aim of this action is to provide final pre-launch confirmation of performance data to demonstrate the capability of SafeAST in detecting time-dependent degradation of the AST tank floor. The secondary aim is to provide a package of comprehensive launch material (including validated Technical Reports, supportive marketing material, final hardware specification and software sign-off) to aid a successful launch.

The five-strong SafeAST consortium comprises the Tüpras oil and gas company which operates tank farms, research and academic organisations, plus client-facing industrial product development consultancies. Its Vision is to create a highly profitable, sustainable company (cash positive in 2 years, turnover €24m in four years) capable of delivering both hardware and services worth €80k pa to the AST condition monitoring sector (t/o €800m in Europe alone) and for its core technology to be recognised as the global primary on-line monitoring method in the world's 7600 live plants.

Fields of science (EuroSciVoc) i

[natural sciences](#) > [computer and information sciences](#) > [software](#) > [software development](#)

[engineering and technology](#) > [electrical engineering, electronic engineering, information engineering](#) > [electronic engineering](#) > [sensors](#)

[natural sciences](#) > [earth and related environmental sciences](#) > [environmental sciences](#) > [pollution](#)

[natural sciences](#) > [physical sciences](#) > [acoustics](#) > [ultrasound](#)



Programme(s)

[H2020-EC - Horizon 2020 Framework Programme](#)

MAIN PROGRAMME

[H2020-EU.3. - PRIORITY 'Societal challenges'](#)

[H2020-EU.2. - PRIORITY 'Industrial leadership'](#)

Topic(s)

[FTIPilot-1-2015 - Fast Track to Innovation Pilot](#)

Call for proposal

[H2020-FTIPilot-2015-1](#)

[See other projects for this call](#)

Funding Scheme

[IA - Innovation action](#)

Coordinator



PLANT INTEGRITY LTD

Net EU contribution

€ 451 423,00

Total cost

€ 644 890,00

Address

GRANTA PARK GREAT ABINGTON

CB21 6GP CAMBRIDGE

United Kingdom

Region

East of England > East Anglia > Cambridgeshire CC

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#) [Website](#)

[Participation in EU R&I programmes](#)

[HORIZON collaboration network](#)

Participants (4)



BRUNEL UNIVERSITY LONDON

United Kingdom

Net EU contribution

€ 740 720,00

Address

KINGSTON LANE
UB8 3PH Uxbridge

Region

London > Outer London — West and North West > Harrow and Hillingdon

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#) [Website](#)

[Participation in EU R&I programmes](#)

[HORIZON collaboration network](#)

Total cost

€ 740 720,00



INNOVATIVE TECHNOLOGY AND SCIENCE LIMITED - INNOTECKUK

United Kingdom

Net EU contribution

€ 365 102,50

Address

HILDERSHAM ROAD NORTH WING THE OLD LIVERY
CB21 6DR CAMBRIDGE

SME

Yes

Region

East of England > East Anglia > Cambridgeshire CC

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#)

[Participation in EU R&I programmes](#)

[HORIZON collaboration network](#)

Total cost

€ 521 575,00



Turkiye Petrol Rafinerileri Anonim Sirketi

Türkiye

Net EU contribution

€ 243 614,00

Address

GULBAHAR MAH BUYUKDERE CAD 101A

34394 ISTANBUL

Region

İstanbul > İstanbul > İstanbul

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#)

[Participation in EU R&I programmes](#)

[HORIZON collaboration network](#)

Total cost

€ 348 020,00



IKNOWHOW SA

Greece

Net EU contribution

€ 400 355,00

Address

LEOFOROS KIFISIAS 340

154 51 ATHINA

SME

Yes

Region

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

Total cost

€ 571 936,25

Last update: 16 August 2022

Permalink: <https://cordis.europa.eu/project/id/691497>

European Union, 2025