

News story: Plato mission brings opportunities for UK space sector

Plato (Planetary Transits and Oscillations of stars) was adopted at the European Space Agency's Science Programme Committee meeting today (20 June 2017), following its selection in February 2014. That means work to build the science instrument payload can begin and in the coming months industry will be invited to bid to ESA for the contract to supply the spacecraft.

The UK Space Agency is investing £25 million in the development of the novel scientific instruments on board.

Dr Katherine Wright, Head of Space Science at the UK Space Agency, said:

Investment in Plato builds on UK science and engineering strengths in this area and secures us a leading role on this pre-eminent space science mission for the next decade. Plato has the exciting potential to discover Earth-like planets around other stars, which may eventually lead to the detection of extra-terrestrial life.

Planned to launch in 2026, Plato will monitor thousands of relatively bright stars over a large area of the sky, searching for tiny, regular dips in brightness as their planets cross in front of them, temporarily blocking out a small fraction of the starlight.

Astronomers have so far found over 1,000 planets beyond our Solar System (exoplanets), but none as yet has been shown to be truly Earth-like in terms of its size and distance from a Sun similar to our own.

Plato's innovative design is set to change all that. Its suite of multiple small telescopes and cameras, reminiscent of the compound eye of an insect, will allow it to 'stare' at a large number of the nearest and brightest stars, with the aim of discovering Earth-sized planets orbiting Sun-like stars in the 'habitable zone' – the distance from the star where liquid water could exist at the surface.

This will allow them to be studied with unprecedented accuracy and assessed for their potential to host life. An important part of this investigation will be to perform an intricate study of the structure and properties of the host stars themselves, providing key complementary information needed for the proper characterisation of rocky Earth-like exoplanet worlds.

UK scientists and engineers in collaboration with the UK Space Agency are leading participants involved in all aspects of the mission. Prof Don Pollacco, of Warwick University, leads the Plato Science Management Consortium. Scientists and engineers at UCL's Mullard Space Science Laboratory are responsible for the design and manufacture of the electronics for the camera system that sits behind the telescopes, and for characterising

the camera detectors to optimise their performance.

The detectors are charge-coupled devices (CCDs), produced by the e2v company in Chelmsford under contract to ESA. A team of UK scientists, coordinated by Cambridge's Institute of Astronomy, is also developing the Exoplanet Analysis data processing system on the ground.

[News story: MHRA chair recognised in 2017 Queen's Birthday Honours](#)

Professor Sir Michael Rawlins, MHRA chair, honoured in the 2017 Queen's Birthday Honours List.

We are delighted that the chair of the Medicines and Healthcare products Regulatory Agency (MHRA), Professor Sir Michael Rawlins, has been appointed Knight Grand Cross of the Order of the British Empire (GBE).

The honour, which was announced in the 2017 Birthday Honours List over the weekend, is for services to the safety of medicines, healthcare and innovation and comes after more than three decades at the forefront of innovation, development and leadership in the public health sector.

Since taking up the position of chair at MHRA in 2014 Sir Michael has overseen the Agency's work as an effective regulator of medicines and medical devices across the UK. He has promoted the first-class science and research carried out in each of the Agency's centres; the National Institute for Biological Standards and Control (NIBSC), the Clinical Practice Research Datalink (CPRD) and MHRA.

Professor Sir Michael Rawlins said:

It is a tremendous honour to receive this prestigious award, and is a great recognition of the work the Agency carries out to protect public health.

Innovation has been a key focus for the Agency over the past few years with the launch of our Innovation Office and the early access to medicines scheme (EAMS), and I have been proud to have been part of this beneficial development in the health sector.

Background

1. Sir Michael Rawlins, currently chair of the Medicines and Healthcare

Products Regulatory Agency and also UK Biobank, was the founding Chair of the National Institute for Clinical Excellence. Under his leadership, NICE became an internationally renowned organisation, pioneering processes which have been copied the world over. It has facilitated faster NHS uptake of new technologies and procedures, offering opportunities to patients in a way not experienced before. He has previously served as Chair of the Advisory Council on the Misuse of Drugs and President of the Royal Society of Medicine.

2. The [Medicines and Healthcare products Regulatory Agency](#) is responsible for regulating all medicines and medical devices in the UK by ensuring they work and are acceptably safe. All our work is underpinned by robust and fact-based judgements to ensure that the benefits justify any risks. MHRA is a centre of the Medicines and Healthcare products Regulatory Agency which also includes the [National Institute for Biological Standards and Control \(NIBSC\)](#) and the [Clinical Practice Research Datalink \(CPRD\)](#). MHRA is an executive agency of the [Department of Health](#).

[Press release: Assault conviction for illegal angler](#)

Mr Steve Beckett, 30, of Lorna Road, Mexborough threatened and assaulted the [Environment Agency](#) enforcement officer who asked to see his fishing licence. He also refused to give his address.

Enforcement officers are considered in law to be the same as police constables. Assaulting and obstructing one – in addition to his fishing violations – has left Mr Beckett with ‘recordable offences’ on the police database, as well as penalties totalling £410.

Mr Beckett was initially approached on 2 October 2016, as part of routine checks on [fishing licences](#). He had been spotted using three rods at Caistor Fisheries in Lincolnshire.

A search of the Environment Agency’s database revealed Mr Beckett had no valid fishing licence, despite him insisting that he did. His refusal to give his address hampered further checks.

He became aggressive when challenged, physically pushing the enforcement officer away – and the police were called.

Strict penalties

Mr Beckett’s case was heard at Lincoln Magistrates’ Court on 5 June. He

pleaded guilty to fishing without a valid licence, assaulting and obstructing a constable, using threatening behaviour, and failing to give his address to an authorised officer.

He was ordered to pay penalties totalling £410. At the time of the offence, the licence he required would have cost just £54. Recent changes mean that it would now cost £45, or £30 for concessions.

[Other types of licence are available](#), including one-day for £6, eight-day for £12, and a free one for those aged 12 to 16.

Joanne Kay, Environment Agency fisheries team leader, said:

Not only was Mr Beckett fishing illegally, he also assaulted a law enforcement officer who was doing his duty to protect the sport, legitimate anglers and the environment.

It makes no sense to have the embarrassment of a court visit, a criminal conviction and a bill for potentially thousands of pounds when an annual licence is such value for money and so easy to buy.

Protecting angling

The [money from licence sales](#) supports fish, fisheries and fishing, and protects the future of the sport. A small number of anglers refuse to buy one, cheating the sport and their fellow anglers.

For the minority who flout the rules, the most common offence is fishing without a valid licence, which could land them with a fine of up to £2,500 and a criminal record.

Last year in England, the Environment Agency checked more than 62,000 rod licences and prosecuted more than 1,900 anglers for rod and line offences, resulting in fines and costs in excess of £500,000.

Buy a fishing licence

Any angler aged 12 or over, fishing on a river, canal or still water needs a licence. You can [buy a fishing licence online via gov.uk](#), by phoning 0344 800 5386, or from a local Post Office.

Report illegal fishing

To help crack down on unlicensed fishing, the Environment Agency urges people to report illegal activity by calling its incident hotline on 0800 80 70 60 or [Crimestoppers](#) on 0800 555 111.

[Press release: Government's clean energy drive invests £35 million in innovative projects](#)

Speaking today (Tuesday 20 June) at the Rushlight Showcase, Minister of State for Business, Energy and Industrial Strategy Claire Perry announced funding for 2 innovative clean energy projects which will create local investment opportunities across the country.

Rushlight, a leading provider of clean technology events in the UK, hosts the Summer Showcase which is sponsored by BEIS and Innovate UK. At the event, Claire Perry announced that £35 million funding, from the [BEIS Energy Innovation Programme](#), will go towards smart heating systems and innovation in using hydrogen as a potential heat source.

Under the new investment, £10 million will sponsor the second phase of work by the [Energy Systems Catapult](#) on its Smart Systems and Heat Programme. The programme will help develop local energy plans alongside Local Authorities, and bring down the cost of energy bills, while supporting the development of the UK's low carbon heating projects.

A further £25 million will be invested in potential uses of hydrogen gas for heating, testing the possibility of domestic gas pipes for hydrogen and developing a range of innovative hydrogen appliances such as boilers and cookers.

Minister of State for Business, Energy and Industrial Strategy Claire Perry said:

The UK government is committed to leading the world in delivering clean energy technology and today's investment shows that we are prepared to support innovation in this critical area.

Our aim is for the UK to be a global leader in innovation, science and research and our Industrial Strategy will help us to deliver our ambitious CO2 reduction targets while, creating jobs and opportunities for people across the country.

This investment follows the government's commitment to double energy innovation investments set out in the Industrial Strategy green paper, to £400 million per year by 2021.

Philip New, Chief Executive of the Energy Systems Catapult, said:

This is very welcome. It is a reflection of the Energy Systems Catapult's growing track record in delivering challenging and

innovative programmes that have impact on some of the most intractable questions in the transformation of the energy system. Phase 2 will see our team working with others, building the foundations for innovative energy service business models, encouraging a new generation of energy service providers and testing new offers for British households.

More details of the BEIS Energy Innovation Programme and funding are available from the [GOV.UK Energy Innovation page](#).

1. The government is investing £34.8 million in energy innovation projects: £25 million will be invested in hydrogen gas for heating and £9.8 million will be invested in the Energy Systems Catapult on its Smart Systems and Heat Programme.

Press release: Innovative flood defence engineering on show at Leeds Waterfront Festival

Visitors to this year's Leeds Waterfront Festival will get the chance to see the innovative technology being used to reduce the risk of flooding to the city.

The Leeds Flood Alleviation Scheme project team will be on hand at the event on Saturday 24 and Sunday 25 June, to explain what work has been done for phase 1 of the scheme in the city centre.

A model of a moveable weir will be demonstrated at the event, which is a replica of those installed in the River Aire at Crown Point next to Knightsway Bridge. The moveable weirs used for the project can be lowered in flood conditions to reduce river levels and the threat of flooding.

The Leeds Flood Alleviation Scheme team will be hosting a stand at Armouries Way, Leeds, LS10 1JP (next to Leeds Dock) between the hours of 10am to 4pm, Saturday 24 and Sunday 25 June.

The first phase of the Leeds Flood Alleviation Scheme, led by Leeds City Council in partnership with the Environment Agency, aims to reduce the risk of flooding from the River Aire and Hol Beck for residents and businesses in the city centre. The scheme also includes flood risk reduction at Woodlesford.

Leader of Leeds City Council Councillor Judith Blake said:

This year's Leeds Waterfront Festival promises to be a great event for people of all ages. With the first phase of the Leeds Flood Alleviation Scheme nearly finished, visitors to the festival will be able to get a unique insight into the technology involved through the virtual reality experience and the moveable weir to see how the system works to reduce the risk of flooding in the city centre. It is a simple but very clever approach and we look forward to seeing lots of people taking the chance to find out more about it as they enjoy the festival.

Rosa Foster, Strategic Partnerships & Projects Manager at the Environment Agency said:

This event is a great opportunity to demonstrate the moveable weirs before our work in the city centre comes to completion. This is the first time that moveable weirs are being used in the UK for a flood risk reduction scheme and we're excited to show everyone at this year's festival what's been achieved.

Visitors to the event will also get the chance to try out the virtual reality area, and wear headsets to view 360 degree footage from the construction phase of the project and see what it's like to work inside a cofferdam in the river. A cofferdam is a dry working area created in the river by driving in sheet piling. The last cofferdam is now in place while the final moveable weir is constructed.

The event will also see the launch of the 'Cones on the Waterfront' children's book written by Chris Madeley, a waterfront safety book following a group of cones characters as they navigate potential waterway hazards. The story includes waterway construction areas, and was written based on the work of the flood risk reduction scheme being built in Leeds.

Copies of the book, sponsored by Leeds Scheme contractors BAM Nuttall, will be available in exchange for a charitable donation for the Leeds Children's Charity. The author will also be there to sign copies of the book. There will also be live performances throughout the weekend event to explain the story behind the Leeds Flood Alleviation Scheme.

The site works for Phase 1 of the Leeds Flood Alleviation scheme commenced in January 2015 and are scheduled to be completed this coming September. It is one of the largest river flood risk reduction schemes in the country which when complete will provide an increased level of protection from flooding from the River Aire and Hol Beck for residents and businesses in the city centre. The scheme also includes defences at Woodlesford.

The project team is currently working on options for Phase 2 of the scheme, which will adopt a catchment-wide approach meaning the entire River Aire catchment area will be considered to help reduce flood risk in Leeds. Consultation on potential options is due to be carried out from September.