Fish eye lenses: UK launches world's largest ocean monitoring system to protect wildlife and biodiversity

- the world's first network of underwater camera rigs is being rolled out across the British Overseas Territories
- the network will collect important biological information across the Caribbean, South Atlantic, Indian, Pacific and Southern Oceans, making it the world's largest ocean wildlife monitoring system
- information collected on marine life will support British Overseas Territories to protect their marine environment

The UK is to become the first country to pioneer a major network of underwater camera rigs, funding the world's largest ocean wildlife monitoring system to help protect life below water.

The network is being set up as part of the <u>UK Government Blue Belt programme</u> – which covers more than 4 million square kilometres of ocean.

The camera systems — known as BRUVS — will allow the UK's Overseas Territories to observe and manage ocean wildlife in their diverse ecosystems. The non-intrusive method of capturing information on species will be used to document the incredible marine biodiversity in 10 Overseas Territories: Pitcairn, Ascension, St Helena, Tristan da Cunha, British Indian Ocean Territory, Cayman Islands, the British Virgin Islands, Anguilla, Montserrat and within the British Antarctic Territory.

The rigs are being rolled out at a time when the health of the ocean is declining and will allow scientists to improve their understanding of the marine environment and restore our oceans.

UK Prime Minister Boris Johnson said:

The marine wildlife living along the coastlines of our Overseas Territories is some of the most spectacular in the world and we must do more to protect it.

Cutting-edge technology, such as these cameras, will be vital in our crusade against climate change. Our marine experts are worldleaders in protecting our ocean and the myriad of species that live within it.

UK Minister for the Environment, Lord Goldsmith, said:

Understanding and protecting marine life is essential to maintaining our world's biological diversity. The lack of

information on the variety and abundance of different species in large parts of the ocean makes it difficult for countries to protect them effectively.

The UK is committed to tackling the biggest global challenges, including climate change and loss of biodiversity. In addition to nurturing and growing the magnificent Blue Belt — 4 million square kilometres of marine protected areas around UK Overseas territories — we are building a strong network of international science and technology partnerships.

These UK-funded underwater video cameras will provide a wealth of information on the biodiversity in the seas around the Overseas Territories, including on globally threatened species of shark and migratory fish, like the bluefin tuna.

The 66 stereo-Baited Remote Underwater Video Systems (BRUVS) will be used to film and analyse data on many species, including white marlin, sailfish, silky sharks, black triggerfish, loggerhead turtles, Gould's squid, bottlenose wedgefish and sea snakes.

The 4-year programme — named the Global Ocean Wildlife Analysis Network — is expected to cost £2 million and will provide information on the ocean wildlife found in the vast maritime areas of the Overseas Territories, in the Atlantic, Indian and Pacific Oceans. It will also be used at the British Antarctic Survey Station, Rothera, in the Southern Ocean.

Project partner Blue Abacus, based in Perth, Western Australia, has pioneered the development of cutting-edge carbon fibre BRUVS.

Co-founder of Blue Abacus and Professor at the University of Western Australia, Jessica Meeuwig said:

The world's tunas, sharks and large reef fish continue to decline in numbers and this trend must be reversed. This programme will give decision makers the evidence they need to act decisively in support of their blue economies.

We are delighted that the UK Government and Overseas Territories support the drive for increased knowledge as we rebuild our oceans. Our refinements to conventional underwater cameras are what makes possible the rollout of this programme over four ocean basins, the largest single such government-supported initiative globally.

Blue Abacus will work with the 10 participating Territories to provide a benchmark of scientific understanding of the marine species and habitats within their maritime area, allowing the Territories to take more informed decisions about protecting and managing these diverse ecosystems.

Timothy Austin, Deputy Director, Research and Assessment, Cayman Islands

Department of Environment, said:

The Cayman Islands Department of Environment is very excited at the opportunity to participate in the network that will bring the BRUV network into the Caribbean region for the first time. The opportunity to take this technology further offshore will greatly enhance the Cayman Islands' ability to implement meaningful and effective conservation regimes for this data limited, poorly understood, but crucially important ecosystem.

Diane Baum, Director of Conservation and Fisheries, Ascension Island Government, said:

Ascension is committed to safeguarding its vast 445,000 square kilometre Marine Protected Area, but we recognise how challenging this will be. The support of the Blue Belt Programme and the opportunity to join this network will help us to meet that challenge. Our previous use of BRUVS has given us an insight into the amazing diversity of our open ocean ecosystems and enabled us to identify hotspots of biodiversity that need special protection. Being part of this initiative will provide Ascension with the information we need to take good local management decisions.

This initiative builds on significant progress to improve our understanding of the marine environment of the Overseas Territories through the Blue Belt programme, and ensure these diverse ecosystems are protected and managed for future generations. Through the Blue Belt programme, the Overseas Territories have put in place large-scale marine protection measures covering over 4 million square kilometres.

Video and still images from the Camera Network are <u>available from FCDO</u> <u>Communications Office</u>.

- The UK's Blue Belt programme aims to enhance marine protection in the Overseas Territories. Marine protection measures are in place across 4 million square kilometres of ocean around the Overseas Territories, and the programme has supported the Territories to ensure these waters are effectively managed, with environmental monitoring and enforcement ongoing. The programme has been supported by nearly £25 million of UK funding to date.
- <u>Blue Abacus</u> has pioneered a cost effective and easy-to-deploy carbonfibre stereo-baited remote underwater video system (BRUVS) that captures underwater imagery of marine wildlife from coastal reefs to the open ocean.
- Baited remote underwater video systems (BRUVS) are an effective nonlethal source of data to improve understanding of marine wildlife. Consisting of two small action cameras embedded within a base bar, a bait arm and a vertical upright, BRUVS record all animals that appear in the cameras' overlapping field of view. The first BRUVS were deployed in

the early 2000s to document the fish communities in shallow coastal waters, expanding in 2014 to open ocean monitoring. Since then Professor Meeuwig's University of Western Australia team has completed over 70 surveys in 35 international locations, obtaining records for more than 140,000 animals.

<u>Two visitors allowed in care homes to</u> reunite with loved ones

- Care home residents to be allowed a second regular visitor indoors to reunite families and friends
- Babies and toddlers will also be able to accompany visitors, allowing grandparents to meet grandchildren
- Visitors can hold hands, with tests required before entry and PPE

Care home residents in England will be able to receive 2 visitors indoors from Monday 12 April as Covid restrictions continue to be cautiously eased. Regular visits are being extended from one to 2 people under carefully designed conditions to prevent transmission of Covid-19.

Visitors will be asked to provide a negative test result and wear PPE during the visit to keep themselves, staff and residents safe.

In the coming weeks, as testing capacity continues to increase, some visitors will be able to conduct tests at home, rather than at care homes, to help manage the flow of visitors and allow more visits to take place.

Visitors who are parents will also be able to visit with babies and very young children, who will not count as one of the visitors.

This means grandparents and great-grandparents will be able to meet the newest members of their families for the first time.

Prime Minister Boris Johnson said:

"Reuniting family and friends has been a priority each time restrictions have eased, and the next step will be no different.

"I'm particularly pleased to allow residents to have more visitors, including grandchildren, given the isolation and concern felt by so many this past year.

"Thanks to the tireless work of care home staff, and the success of the vaccine rollout, we're able to increase the number of visits in a safe and controlled way."

The drop in community infection rates, and the successful rollout of

vaccinations in care homes, means the increase in visiting planned in the roadmap can go ahead as long as infection prevention and control measures remain in place.

Further opportunities for relatives and contacts to have outdoor, pod and screen visits will continue in line with the published guidance which has been in place during lockdown.

Minister for Care Helen Whately said:

"Increasing care home visiting is a top priority as we ease Covid restrictions. I know just how much these visits mean to residents and their loved ones.

"I'm pleased we were able to introduce more meaningful visits to care homes in March. Seeing friends and family reunited has been incredibly moving. Thank you to all of our amazing care workers for helping to make this possible.

"We want to go further, so we're allowing more visitors at this next stage of the roadmap — and our aim is to make visiting care homes as normal as possible by the summer. We know how cruel this virus can be in care homes so we must continue to follow the science and data, but things are looking up."

Arrangements for essential care givers for those residents who require the greatest support, and which have been welcomed by residents and care providers, will continue.

Some residents, such as those with advanced dementia, some autistic people, and people with a learning disability need a particular, trusted person to provide some aspects of their care, which is why the essential care giver scheme will also be extended.

Fiona Carragher, Director of Research and Influencing at Alzheimer's Society said:

"We're so pleased 2 named visitors will be able to have meaningful close contact visits with loved ones in care homes from 12 April.

"Visits are vital to care home residents with dementia, who have been isolated from their loved ones, without the essential care and support their families so often provide, and as a result experienced a devastating increase in their dementia symptoms over the past year.

"We've come a long way since the first lockdown, and soon we hope to see the benefits from people with dementia being reunited with their loved ones. As infection rates continue to drop, and more people get vaccinated, we hope care homes will be able to safely open up further.

"It's essential that an individual's circumstances are considered, and care homes do what they can to ensure the needs of all residents are met. If you are finding it difficult to visit a care home, please contact Alzheimer's Society for support."

All care home providers, not experiencing an outbreak, will be asked to follow the updated guidance and continue to work together with families, and local professionals, to ensure visits are possible, while continuing to limit the risk of transmission of Covid-19.

Vida Healthcare's Gil Chimon, home manager at Vida Grange, said:

"The reopening of care homes to one visitor per resident from 8 March was a fantastic morale boost which was welcomed by staff and families alike.

"We've seen some incredibly emotional scenes of families reconnecting with their loved ones which has been very humbling. The planned extension of the number of visitors to 2 per resident from 12 April is an exciting step in our journey back to normality, and we're really looking forward to more family members and friends being able to reunite with their loved ones."

We have recently announced a further £341 million to support continued rigorous infection and prevention control measures, and extended rapid testing and free PPE, to protect care homes and save lives.

This combined approach to protected visiting is based on the latest scientific evidence and data and represents a balance between the risk of infections and the importance of visiting for the physical and mental wellbeing of residents and their families.

- Free PPE will continue until March 2022.
- Extra support for carers will be provided with continued regular PCR testing and PPE arrangements, as care home workers further reduce the risk of infection to themselves and those for whom they provide vital care.
- Almost 94% of eligible older people's care home residents have received their first dose of vaccine and almost 78% of care home staff.
- Guidance to cover the new visiting arrangements and visits out of care homes will be published next week.

Extensive underwater camera network to monitor and protect ocean wildlife and blue economies launched across ten UK Overseas Territories

The ocean wildlife and diverse ecosystems of the UK Overseas Territories (UKOTs) will soon be more visible than ever thanks to pioneering work to establish a major network of underwater camera deployments.

Funded as part of the UK Government Blue Belt programme, scientists from Cefas, the University of Western Australia and partners in the UKOTs are working with Blue Abacus, in a world first to supply and analyse the data collected from 66 non-intrusive stereo-Baited Remote Underwater Video Systems (BRUVS), which will be deployed in open ocean and coastal habitats.

Together these BRUVS will form the Global Ocean Wildlife Analysis Network, which will provide information on ocean biodiversity and ecosystems found in the vast maritime and coastal areas of the UKOTs in the Atlantic, Indian, Pacific and Southern Ocean.

The UKOTs involved in the project are: Anguilla, Ascension Island, British Antarctic Territory, British Indian Ocean Territory, British Virgin Islands, Cayman Islands, Montserrat, Pitcairn, St Helena and Tristan da Cunha.

BRUVS will enable researchers to see below the surface and provide a benchmark of scientific understanding of the marine species within their maritime area, allowing the UKOTs to take more informed decisions about protecting and managing these diverse ecosystems.

The data the cameras collect will provide a standard measure of the status of both open ocean and reef species, letting scientists and the UKOTs set benchmarks for diversity and abundances. This will form valuable information on the many migratory species of open ocean and coastal reef fish species, assist in the management of data-poor fisheries and also improve our understanding of the functioning of pelagic and benthic ecosystems.

Co-founder of Blue Abacus and Professor at the University of Western Australia, Jessica Meeuwig said:

The world's tunas, sharks and large reef fish continue to decline in numbers and this trend must be reversed. This programme will give decision makers the evidence they need to act decisively in support of their blue economies.

We are delighted that the UK Government and Overseas Territories support the drive for increased knowledge as we rebuild our oceans. Our refinements to conventional underwater cameras are what makes possible the rollout of this programme over four ocean basins, the largest single such government-supported initiative globally.

We look forward to working with the communities in the Overseas Territories, building on their local knowledge and experience.

The Global Ocean Wildlife Analysis Network of underwater stereo-baited cameras supports ongoing work amongst the UKOTs, many of which are part of the UK Government Blue Belt Programme, which now covers more than 4 million square kilometres of ocean.

Cefas project lead, Dr Paul Whomersley said:

The UKOTs are taking a global lead on protecting their oceans and the wildlife and livelihoods that it supports.

Global Ocean Wildlife Analysis Network will provide UKOTs with a world-first network of stereo-baited remote underwater video systems which will enable us all to better understand the biodiversity, functioning and connectivity of these ocean areas, while providing valuable and necessary data to inform and develop UKOTs marine management and protection strategies.

The project has received support from UK ministers and UKOT representatives.

Timothy Austin, Deputy Director, Research and Assessment, Cayman Islands Department of Environment said:

The Cayman Islands Department of Environment is very excited at the opportunity to participate in the Global Ocean Wildlife Analysis Network that will bring the BRUV network into the Caribbean region for the first time.

Nearshore benthic BRUVs have been an important research tool for informing marine species and protected area management in the Cayman Islands. The opportunity to take this technology further offshore will greatly enhance the Cayman Islands' ability to implement meaningful and effective conservation regimes for this data limited, poorly understood, but crucially important ecosystem.

Diane Baum, Director of Conservation and Fisheries, Ascension Island Government said:

Ascension is committed to safeguarding its vast 445,000 square kilometer Marine Protected Area, but we recognise how challenging this will be. The support of the Blue Belt Programme and the opportunity to join Global Ocean Wildlife Analysis Network will help us to meet that challenge.

Our previous use of BRUVs has given us an insight into the amazing diversity of our open ocean ecosystems and enabled us to identify hotspots of biodiversity that need special protection. Being part of this initiative will provide Ascension with the information we need to take good local management decisions.

It will also strengthen the network of UK Overseas Territories that is driving improvements in marine conservation at a global scale. Ascension aspires to be the best MPA in the world by basing its management on sound evidence, adopting new technologies and seeking inspirational international partners; this project achieves all three.

Dr Simon Morley, British Antarctic Survey, representing British Antarctic Territory said:

Science is constantly striving to find innovative solutions to monitor the marine environment and these baited cameras offer a solution to help us better understand mid-water communities close to shore along the Antarctic Peninsula. This global network, gives us an excellent opportunity to compare different oceans and understanding the impact of our changing climate.

Over the next few months, complete sets of carbon-fibre stereo-BRUVS and associated equipment will be delivered to the UK Overseas Territories.

This initiative builds on progress to date through the Blue Belt programme to improve our understanding of the marine environment of the UKOTs, and to ensure these diverse ecosystems are protected and managed for future generations. Through the programme, the UKOTs have put in place large-scale marine protection and management measures which cover an area of over 4 million square kilometres.

<u>Statement from the Commission on Race</u> <u>and Ethnic Disparities</u>

On Wednesday we released <u>our report into race and ethnic disparities in the UK</u>. In it we stated categorically that "we take the reality of racism seriously and we do not deny that it is a real force in the UK". We also said our report sought to "approach the issues of racial and ethnic disparities in a balanced way, highlighting both the success stories that the data reveals as well as delving into what lies beneath some of the most persistent and enduring ones". We are pleased that so many people are engaging seriously with the ideas and evidence we have presented.

The facts and analysis we presented challenge a number of strongly held beliefs about the nature and extent of racism in Britain today. Sadly, however, in some cases fair and robust disagreement with the Commission's work has tipped into misrepresentation. This misrepresentation risks undermining the purpose of the report — understanding and addressing the causes of inequality in the UK — and any of the positive work that results from it. For that reason, it is necessary to set the record straight.

We have never said that racism does not exist in society or in institutions. We say the contrary: racism is real and we must do more to tackle it. That is why our very first recommendation to the Government is to challenge racist and discriminatory action and increase funding to the Equality and Human

Rights Commission (EHRC) to pursue investigations. We reaffirm the Macpherson definition of institutional racism, though we did not find conclusive evidence that it exists in the areas we examined. However, we said that "both the reality and the perception of unfairness matter", which is why our recommendations are underpinned by foue themes — to build trust, promote fairness, create agency and to achieve inclusivity.

There has also been a wilful misrepresentation by some people of the Commission's view on the history of slavery. The idea that the Commission would downplay the atrocities of slavery is as absurd as it is offensive to every one of us. The report merely says that in the face of the inhumanity of slavery, African people preserved their humanity and culture. The Commission's recommendation for Government to create inclusive curriculum resources is about teaching these histories which often do not get the attention they deserve.

The deeply personal attacks on many of us by politicians and other public figures are irresponsible and dangerous. For example, one MP presented commissioners as members of the KKK. Robust debate we welcome. But to depict us as racism deniers, slavery apologists or worse is unacceptable.

This is a wide ranging report, and we hope it will lead to further research and better understanding of the complex causes of inequalities in the UK. Our terms of reference were ambitious and, despite the disruption of COVID-19, we addressed them by drawing upon a wide range of sources and evidence, as well as the lived experience of people, including our own.

We hope that going forward, the report will be read carefully and considered in the round. Our experience since publication only reinforces the need for informed debate on race based on mutual respect. The 24 recommendations we have made will, in our view, greatly improve the lives of millions of people for the better if they are all implemented.

<u>Countries added to red list to protect</u> <u>UK against variants of concern</u>

- travel bans implemented for visitors from Philippines, Pakistan, Kenya, and Bangladesh from 4am Friday 9 April
- British, Irish and third-country nationals with residence rights (including long-term visa holders) arriving from these countries will be required to self-isolate in a government-approved hotel quarantine facility for 10 days
- move follows new data showing an increased risk of importation of variants of concern

Philippines, Pakistan, Kenya and Bangladesh have been added to England's red list to protect the country against new variants of coronavirus (COVID-19), at a critical time for the vaccine programme.

With over 30 million vaccinations delivered in the UK so far, the additional restrictions will help to reduce the risk of new variants — such as those first identified in South Africa (SA) and Brazil — entering England. So far, surveillance has found that few cases of the SA variant have been identified as being imported from Europe, with most coming from other parts of the world.

From 4am on Friday 9 April, international visitors who have departed from or transited through Philippines, Pakistan, Kenya and Bangladesh in the previous 10 days will be refused entry into England. Only British and Irish citizens, or those with residence rights in the UK (including long-term visa holders), will be allowed to enter and they must stay in a government-approved quarantine facility for 10 days. They will also be required to arrive into a designated port. No direct flight bans from these countries will be put in place, but passengers are advised to check their travel plans before departing for England.

During their stay, passengers will be required to <u>take a coronavirus test on or before day 2 and on or after day 8</u>, and they will not be allowed to shorten their quarantine period on receipt of a negative test result. They will also not be able to end their managed quarantine early through the Test to Release scheme.

The <u>Joint Biosecurity Centre</u> (JBC) produces risk assessments of the spread of variants of concern internationally. These risk assessments cover a range of factors for each country including:

- assessment of surveillance and sequencing capability
- available surveillance and genome sequencing data
- evidence of in-country community transmission of COVID-19 variants
- evidence of exportation of new variants to the UK or other countries
- travel connectivity with the UK

The government has made it consistently clear it will take decisive action if necessary to contain the virus and has added these destinations to the red list to protect public health.

The government continues to work with the hospitality sector to ensure it is ready to meet any increased demand.

British nationals currently in the countries on the red list should make use of the commercial options available if they wish to return to England. Commercial routes that will enable British and Irish nationals and residents to return to England continue to operate.

British nationals in these countries should check <u>Foreign</u>, <u>Commonwealth and Development Office (FCDO) travel advice</u> and follow local guidance. The FCDO will continue to offer tailored consular assistance to British nationals in

need of support overseas on a 24/7 basis.