UK Joins Next Stage of Aurora

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Prof. Ian Halliday, Chief Executive of the Particle Physics and Astronomy Research Council [PPARC], confirmed an investment of GBP 3.5M [5M EUR] on behalf of the UK to the European Space Agency's [ESA] European Preparatory Space Exploration Programme - 'Aurora'. In addition, PPARC has set aside a further GBP 1.5M [2M EUR] which will be used for either UK national preparatory activities for Aurora or as additional contributions to ESA. The total budget ascribed to the preparatory programme by PPARC will thus be GBP 5M [7M EUR].

Speaking at a press conference today Prof. Halliday said, "Aurora is an exciting programme of space exploration to unravel the mysteries of our immediate cosmos, initially focusing on Europe's robotic exploration of Mars".

Prof. Halliday added, "Importantly the UK can make a real contribution both scientifically and industrially to Aurora, particularly in the fields of

instrumentation, robotic surface rovers and entry, descent and landing systems technology. That is exactly why we have made a significant investment from our existing budget at this point in order to put the UK in a commanding position to shape and define a programme that meets our national scientific and industrial objectives".

This latest stage of ESA's Aurora programme will lead to a fully costed and defined programme by 2006, to include the first tranche of scientifically-orientated robotic missions which are likely to dominate the first ten years of the programme. Since Aurora is a long-term programme, potentially leading to a human mission to Mars circa 2033, the programme will be divided into 5-year periods allowing each country to revise its scope of participation, depending on actual outputs achieved at the end of each period and of national interests.

"The science case for Aurora is extremely strong as endorsed by PPARC's Science Committee," commented Prof. Halliday. "It will build on the excellent collaboration which already exists between UK academics and industrialists and will deliver new technologies and real industrial return. Ultimately it will be a decision for government whether or not the UK enters the full implementation programme. That will be the subject of future evaluation, decision making and investment. But by taking a leading role right now, the UK will be extremely well placed to make that judgement against a programme that aligns with our national goals."

ESA member states will announce their decision to participate in the full Aurora implementation programme at the next ESA ministerial-level Council meeting.

Commenting on the significance of today's announcement and its impact on current and future generations of scientists, Dr. Sarah Dunkin from the Rutherford Appleton Laboratory and Vice President of the Royal

Astronomical Society [RAS] said, "The decision to join this next phase of Aurora is welcomed by the RAS, reflecting our declared support for the programme earlier this year. It is good news and highlights the positive feeling of the community towards the programme, giving strong encouragement to young scientists and engineers in the UK. However, there is a need for a long term commitment to the programme otherwise these people will see their future in other countries".

Dunkin added," We need to secure our long-term future in science and technology - Aurora will provide an unprecedented training ground for our younger scientists and engineers, and in addition it's an accepted fact that space has an inspirational effect on children, enthusing them to pursue further education in science and technology and eventually full-time careers. Without that inspiration we stand to lose our next generation of scientists and technologists".

Prof. John Zarnecki of the Planetary & Space Sciences Research Institute at the Open University, a key member of the Task Group initiated by PPARC to evaluate the science case for UK involvement, said," Today's announcement by PPARC is really good news for the UK planetary space science community. We can now start to develop a credible programme that will help us to understand how readily life can evolve in the Universe and determine how common environments that could support life are. This is of profound scientific and philosophical importance".

"However, we are not out of the woods yet," added Prof. Zarnecki, "If we can mould Aurora to our UK science strengths then we need to sign-up to the full implementation programme and that will require new government money".

Prospects for UK industry were raised today as Dr. Mike Healy, Director Earth Observation, Navigation and Science at EADS Astrium

explained. "We can now begin to exploit our leadership in entry, descent and landing systems - key technologies required for Aurora - reprising the expertise that went into the Beagle 2 Lander".

Source: PPARK