SPACE 101 PROGRAMME TUESDAY 30 MAY

TUESDAY	30 MAY 2017			
10:00 - 13:00	Space 101		a	
	CHARTER 1	CHARTER 2	CHARTER 3	CHARTER 4
10:00 – 10:30	SPACE FOR DUMMIES – AN OVERVIEW OF THE INDUSTRY AND UPCOMING SESSIONS The A to Z of Space 101.	ENGAGING WITH PRIMES Looking to hitch a ride? Use this session to learn about the key players in the industry.	INTELLECTUAL PROPERTY Don't let your hard-earned knowledge end up as money in someone else's pocket. Learn how to protect your ideas.	INTERNATIONAL PARTNERSHIP PROGRAMME Do you have an idea that could make a global impact? Learn about the International Partnership Programme.
10:30 – 11:00	THE UK NATIONAL LANDSCAPE Learn how to navigate the UK landscape.	ENGAGING WITH PRIMES - COACHING SESSION A follow-on from the 'Engaging with Primes' session. Get tailored advice on engaging with the Primes.	ENGAGING WITH ACADEMICS Academia can be an asset. Learn the best way to engage with the bright minds of the future.	SPACE STANDARDS The only way to guarantee that your product is up to scratch. Learn about the space-specific standards.
11:00 – 11:30	THE UK SPACE AGENCY'S INCUBATION PROGRAMME Send your company skyward. Learn about the UKSA incubation programme, past successes, and how you can get involved.	HORIZON 2020 An insight into the biggest EU Research and Innovation programme ever.	SPACE DATA AND PRODUCTS (INTRODUCTION) Space data is everywhere! An introduction to the vast number of applications using space data.	THE LEGAL SIDE OF SPACE How do you make sure the thing you plan to send to space is legal? Come and find out.
11:30 – 12:00	Space 101: Break with tea and c	offee		
12:00 - 12:30	HOW TO WRITE A SUCCESSFUL INNOVATE UK PROPOSAL Learn how to write that superstar proposal.	COPERNICUS PROGRAMME Everyone loves free stuff. Learn about the vast amount of data freely available through the Copernicus programme.	THE EUROPEAN SPACE AGENCY AND ITS PROGRAMMES The big picture. Learn about the European Space Agency and all its multitude of funding programmes.	FINANCE IN THE INDUSTRY Money troubles? The inside scoop on finance available within the sector.
12:30 – 13:00	TECHNOLOGY TRANSFER What benefits can space technology provide to your business? Come and find out how we can help your business in accessing space technology, securing funding, and providing technical support to give you a competitive advantage.	SPACE DATA AND PRODUCTS (ADVANCED) Tech talk. Learn about the space technology required to deliver novel Earth applications.	ENGAGING WITH THE EUROPEAN SPACE AGENCY New to ESA funding? Learn how to engage with the agency in an efficient and effective manner.	GOVERNMENT ENGAGEMENT Do you have an idea that could benefit the UK? Learn how to interact with the government to make it reality.
13:00 - 14:00	Space 101: Q&A with speakers			
13:00	Main conference and exhibition opens			

PROGRAMME DAY 1 TUESDAY 30 MAY

TUESDAY	30 MAY 2017			
13:00	Main registration and exhibition opens			
14:00 - 15:00	WELCOME AND LATEST DEVELOPMENTS IN THE UK SPACE SECTOR Welcome to the UK Space Conference 2017 from leading members of government and the space sector Speakers: Elizabeth Seward, Conference Programme Committee Chair Graham Turnock, UK Space Agency Professor Johann-Dietrich Wörner, European Space Agency Dr Ruth McKernan, Innovate UK Richard Peckham, UKspace Professor Gerry Gilmore, Institute of Astronomy, Cambridge University			
15:00 – 15:45				
	CHARTER 1	CHARTER 2	CHARTER 3	CHARTER 4
15:45 – 16:45	TECHNOLOGY CHALLENGES FACED BY THE SPACE SECTOR What are the current and future challenges faced by government and business, and what technologies are needed from the space sector to address those challenges? Speakers: Mike Lawton, Oxford Space Systems (Chair) Michael O'Callaghan, Defence Science and Technology Laboratory Dr Mark Woods, SciSys Dr Torrey Radcliffe, Aerospace Corporation Dr Daniel Oi, University of Strathclyde	THERE IS NO SKILL SHORTAGE DISCUSS Sponsored by Sapienza Consulting The UK space sector is growing and we hear that the UK has more people graduating in STEM or other relevant subjects than ever before, but there are too few people who already have 5-10 years experience who will ensure that growth continues. Is there really a skills shortage or is something else wrong? Speakers: Kathie Bowden, Institute for Environmental Analytics and UK Space Agency (Chair) Dr Lucy Berthoud, University of Bristol Mike Bearman, Sapienza Betty Bonnardell-Azzarelli, AB5 Consulting Dr Andy Wells, Sterling GEO	ENABLING NEW APPROACHES FOR APPLICATIONS AND SERVICES Showcasing imaginative and innovative ways in which space assets can be used to solve problems, create new business opportunities and support successful business models. Speakers: Stuart Martin, Satellite Applications Catapult (Chair) Richard Flemmings, Bathmetrics Andrew Richardson, Realsafe Technologies Ltd Tony Hartwell, Sustainable Materials Engineering Ltd Dr Danielle Wood, Goddard Space Flight Center, NASA	TRADE AND EXPORTS - THE NEW CHALLENGE Inward investment and exporting are vital to the health and growth of the space sector. The UK is gearing up to become stronger, to build on past success and take advantage of new opportunities in the growing global market. Speakers: Dr Jaime Reed, Airbus Defence and Space (Chair) Nick Shave, Inmarsat Graham Peters, Avanti Applied Technologies Terry Coxall, Space Industry Expert Ismael Lopez, Deimos
17:00 – 18:00	PLENARY SESSION, EXCHANGE AUDITORIUM CONNECTING INTERNATIONALLY FOR GROWTH A panel discussion with international partners discussing developing collaboration and growth opportunities Speakers: Professor Sir Martin Sweeting, Surrey Satellite Technology Ltd (Chair) Professor Johann-Dietrich Wörner, European Space Agency Khaled Al Hashmi, UAE Space Agency Professor Michele Dougherty, Imperial College London Colin Paynter, Airbus Defence and Space Dr Miguel Belló Mora, Deimos Phil Balaam, Inmarsat			
18:00 - 21:00	Networking evening in exhibition hall			

PROGRAMME DAY 2

WEDNESDAY 31 MAY

08:00	Registration and exhibition oper	ns .		
	CHARTER 1	CHARTER 2	CHARTER 3	CHARTER 4
09:00 - 10:00	Exploring the technologies driving the demand for low cost launch services, the evolution of new launch vehicles and the long-term opportunities for the UK. Speakers: Elizabeth Quintana, RUSI (Chair) Stuart Martin, Satellite Applications Catapult Stuart McIntyre, Orbital Access Mark Thomas, Reaction Engines Professor Sir Martin Sweeting, Surrey Satellite Technology Ltd	ENSURING A SUPPORTIVE ENVIRONMENT IN THE UK FOR START-UPS Showcasing the current support available for start-ups and some success stories. Speakers: Joanne Wheeler, Bird & Bird, Satellite Finance Network Antonia Jenkinson, Satellite Applications Catapult Andy German, InnovateUK Callum Norrie, Space Network Scotland Terry Coxall, Space Industry Expert Robert Hill, First Derivatives Mark Boggett, Seraphim Capital	PAPER SESSION: NEW MISSION CONCEPTS New mission proposals are the key to an exciting future in space exploration. This session is an opportunity to hear about these new ideas across the broad range of astrophysics, planetary and Earth observation science, selected from an open call for papers. The oral contributions will be complemented by poster presentations of mission concepts located in the Gallery. Speakers: Dr Christopher Mutlow, STFC RAL Space (Chair) Dr Damien Weidmann, STFC RAL Space Professor Martin Barstow, University of Leicester David Riley, Deimos Space UK Ltd. Dr Marcell Tessenyi, Blue Skies Space Ltd. Luis Gomes, Surrey Satellite Technology Ltd Dr Daniel Gerber, STFC RAL Space	SPACE FACILITIES FOR SPACE RESEARCH - SPACE ENVIRONMENTS, LIFE SCIENCES An overview of ISS exploitation, microgravity research and new commercial models, highlighting a range of research areas conducter on the ISS and ways in which this can be expanded and facilitated on both the ISS and future LEO space environments. Speakers: Dr Iya Whiteley, Mullard Space Science Laboratory, UCL (Chair) Colleen Boggs, Telespazio Dr Bernhard Hufenbach, Europear Space Agency Professor Orkun Soyer, University of Warwick
10:15 – 11:15	SPACE FOR INTERNATIONAL DEVELOPMENT The early achievements of the UKSA International Partnership Programme and how the UK is working on the UN sustainable development goals. Speakers: Philip Briscoe, Rezatec Dr Valanathan Munsami, South African National Space Agency (SANSA) Alvaro Samayoa, Guatemalan National Institute of Forestry Dr Richard Tipper, Ecometrica	Presenters have been selected following an application process and will pitch their products/ideas to a panel of UK Primes with a view to entering the UK space supply chain. Primes: Richard Peckham, UKspace (Chair) Mike Healy, Airbus Defence and Space Steve Smart, CGl Craig Clark, Clyde Space Richard Blain, Earth-i Yasrine Ibnyahya, Inmarsat Luis Gomes, Surrey Satellite Technology Ltd Luc Verstraeten, Thales Alenia Space Please see UK Space Conference website for speaker details: www.ukspace2017.co.uk	PAPER SESSION: NEW INSTRUMENT CONCEPTS New instrument designs are the key to enabling new space science missions. This session will present new developments in instrumentation for a range of applications, selected from an open call for papers. The oral contributions will be complemented by poster presentations of new instrument designs located in the Gallery. Speakers: Professor Martin Barstow, University of Leicester (Chair) Vincent Fraux, Oxford Space Systems Dr Ross Williams, National Physical Laboratory Paul Jerram, Teledyne e2v Paul Eccleston, STFC RAL Space Professor Mick Johnson, UK Centre for Earth Observation Instrumentation Dr Jon Lapington, University of Leicester	MULTI-DISCIPLINARY RESEARCH IN SPACE ENVIRONMENTS Examples of multi-disciplinary research undertaken in a variety of space environments, highlighting significant results and opportunities for future research and exploitation. Speakers: Dr Nick Scott-Ram, Oxford Academic Health Network (Chair) Professor Maria Stokes, University of Southampton Dr Yespal Singh, University of Birmingham Richard Whittle, Cranfield University

WEDNESDAY 31 MAY 2017 Poster session 1 in the Gallery 11:15 -12:00 12:00 -PLENARY SESSION, EXCHANGE AUDITORIUM 13:00 **DEFENCE, SECURITY AND RESILIENCE** A view of the changing balance of civil, commercial and defence activities Speakers: Elizabeth Quintana, RUSI (Chair) Neil Fraser, Chair of the UK Space Security and Defence Committee Nick Ayling, Ministry of Defence Major General Clinton E. Crosier, United States Strategic Command Lunch and networking in the exhibition hall 13:00 -14:15 **CHARTER 3 CHARTER 4 CHARTER 1** CHARTER 2 14:15 -**PARADIGM SHIFTS IN SPACE INSPIRING SPACE: NEW** PAPER SESSION: MISSION **SOAPBOX SESSION** 15:15 **TECHNOLOGIES AND BUSINESS MARKETS THAT ARE USING** RESULTS Speakers will have a maximum **SPACE** Opportunities and risks on the This session is an opportunity of five minutes to present their UK space sector from disruptions How space-based applications for conference delegates to hear innovative ideas, projects and created by new constellations and using satellite data and services about the exciting results from a products to the audience of Very High Throughput Satellite are opening up new markets, with range of recent space missions. delegates. The aim of this session four case studies from the health, systems (VHTS), across all parts selected from an open call for is to foster collaborations and of the value chain, including local government, blue economy papers. The oral contributions to share new concepts and technological, operational and and transport sectors. will be complemented by poster ideas among those using space, business impacts. presentations of mission results particularly start-ups and SMEs. Speakers: located in the Gallery. The best speaker will be selected Speakers: Colin McKinnon, Institute of by the judging panel to be Speakers: Mike Lawton, Oxford Space Environmental Analytics (Chair) presented with an award by Tim Systems (Chair) Professor Monica Grady, Open Peake at the Gala Dinner. Viv Barrett, DEOS Consultancy Ltd University (Chair) Greg Sadlier, London Economics Further information on the Dr Andy Wells, Sterling GEO Kirsten Fletcher, Getech Sean McCarthy, Satellite presentations can be found at the Dr Estel Blay, Satellite Applications Dr Karsten Spaans, University of Applications Catapult UK Space Conference website: Catapult Leeds www.ukspace2017.co.uk. Siobahn Rieley, Spire Owen Hawkins, EARTH-i Tony Holt, In-Space Missions Panelists: Ed Stone, Met Office Dr Robert Massey, Royal Dr Floor van Leeuwen, University Astronomical Society (Chair) of Cambridge Robert Waters, UK Space Agency Dr David Robertson, Glasgow Andy German, Innovate UK University 15:15 -Refreshments and networking in the exhibition hall 16:00 16:00 -**AGILE SPACE: THE SMALL** CYBER SECURITY FOR SPACE THE EVOLVING SPACE DOMAIN **SOAPBOX SESSION** 17:00 SATELLITE REVOLUTION AND FUTURE CHALLENGES Securing space as a critical Speakers will have a maximum The agility of small and nanonational infrastructure from Space Situational Awareness of five minutes to present their satellites are proving increasingly growing cyber security threats. how is the UK monitoring and innovative ideas, projects and disruptive across a range of areas, mitigating space debris, methods products to the audience of **Speakers:** from commercial business to delegates. The aim of this session and regulatory issues. is to foster collaborations and training the next generation of Mark Roberts, Atkins **Panellists:** space sector experts. Join the to share new concepts and A representative from the National discussion on opportunities and Wg Cdr Rayna Owens, Ministry of ideas among those using space, Cyber Security Centre challenges. particularly start-ups and SMEs. Defence (Chair) Paddy Francis, Airbus The best speaker will be selected Carissa Christensen, Bryce Space Speakers: by the judging panel to be and Technology Dr Malcolm Macdonald, University presented with an award by Tim Squadron Leader Dinsley, HQ Air of Strathclyde - SoXSA (Chair) Peake at the Gala Dinner. Command Alex da Silva Curiel, Surrey Further information on the Satellite Technology Ltd presentations can be found on the UK Space Conference website Andy Bradford, UK Launch www.ukspace2017.co.uk. Services Ltd Dr Chris Bridges, Surrey Space **Panellists:** Centre, University of Surrey Dr Robert Massey, Royal Siobahn Rieley, Spire Astronomical Society (Chair) Robert Waters, UK Space Agency Andy German, Innovate UK 19:00 -**UK Space Conference Gala Dinner and Sir Arthur Clarke Awards** 23:00

PROGRAMME DAY 3 THURSDAY 1 JUNE

THURSDA	THURSDAY 01 JUNE 2017				
09:00	Registration and exhibition oper				
	CHARTER 1	CHARTER 2	CHARTER 3	CHARTER 4	
09:30 - 10:30	IN ORBIT DEMONSTRATIONS FOR LOW COST ACCESS TO SPACE The UK offers various methods for flight of new technologies in space and, in particular, focuses on those that show strong opportunities for both scientific return and also commercial exploitation, driving development of new IP and downstream services. Panellists: Emma Jones, Thales Alenia Space (Chair) Florian Deconinck, Satellite Applications Catapult Rafel Jorda Siquier, Open Cosmos Professor Becky Parker, Institute for Research in Schools	REGULATION AS AN ENABLER Creating an appropriate and enabling regulatory environment for innovation and business. Speakers: Joanne Wheeler, Bird & Bird, Satellite Finance Network Colin Thomson, Access Partnership Dr Jennifer Roberts, AON Risk Solutions Daniel Campbell, Effective Space Systems	NEW APPLICATION DEVELOPMENT PROGRAMMES An overview of the new and enhanced programmes that have been introduced to support the development of space-enabled applications and services, including those in telecoms, navigation and Earth observation. Speakers: Ian Downey, European Space Agency (Chair) Dr Nick Appleyard, European Space Agency Tim Just, Innovate UK Dr Geoff Buswell, Telespazio VEGA UK Kirsten Robinson, Satellite Applications Catapult Dr Pierluigi Mancini, European Space Agency	Transport for Greater Manchester is proposing a 5-year programme to transform their transportation system. The programme will increase mobility and transport services as well as create new jobs and economic growth for the North-West region. Speakers: Amy Harhoff, Transport for Greater Manchester (Chair) Stuart Millward, Satsafe Technologies Wendy Alison, Satellite Applications Catapult Izaro Arbelaiz, HCT Group	
10:30 - 11:15	Refreshments and networking in the exhibition hall				
10:30 - 11:15	Poster session 2 in the Gallery				
11:15 – 12:15	PLENARY SESSION, EXCHANGE AUDITORIUM ENABLING NEW MARKETS AND ECONOMIC GROWTH Enabling and developing new markets by connecting with other sectors Speakers: Andy Green, UKSpace (Chair) Emma Pinchbeck, RenewableUK Stuart Martin, Satellite Applications Catapult Corentin Guillo, Bird.i Simon Bond, SETsquared				
12:15 – 13:15	Lunch and networking in the ex	hibition hall			

	CHARTER 1	CHARTER 2	CHARTER 3	CHARTER 4
13:15 – 14:15	NOVEL SPACE MISSIONS FOR NEW SERVICES Innovative novel technologies that are being developed in the UK, which may have a game-changing effect on our space industry in years to come. Speakers: Tony Holt, In-Space Missions Dr Peter Roberts, University of Manchester Daniel Campbell, Effective Space Systems Martin Unwin, Surrey Satellite Technology Ltd	EDUCATION SUCCESS STORIES - YOUR PART IN THE PLAN Showcasing inspiring educational projects in the UK - examples and lessons from successful educational projects and schemes. How can industry and academia get involved to get young people to consider joining the space sector? Speakers: Dr Matthew Hickman, Wellcome Trust (Chair) Dr Kierann Shah, National Space Academy Dr Chris Bridges, Surrey Space Centre Libby Jackson, UK Space Agency Dr Ajay Sharman, STEM Learning	DEVELOPING BIG DATA SERVICES AND THEIR APPLICATIONS Exploring the opportunities provided by Big Data - understanding the barriers to data access and the solutions available to overcome them. This will unlock the potential of innovative analytics for business growth, science and efficient public services. Speakers: Jacquie Conway, Airbus Defence and Space (Chair) Nick Hanowski, European Space Agency Thibaud Delourme, European Commission Paul Febvre, Satellite Applications Catapult Adrian Smith, Wolfram	TRANSFERRING SPACE TECHNOLOGY TO EARTH- BOUND USES Showcasing different space technologies that have successfully been transferred into use within a variety of markets here on Earth. Speakers: Andy Bowyer, Magnaparva (Chair) Donna Lyndsey, EarthSense Ben Jensen, Surrey Nanosystems Aron Kisdi, RAL Space/STFC Dr Mark Woods, SciSys
14:30 - 15:45	PLENARY SESSION, EXCHANGE AUDITORIUM INSPIRING THE FUTURE THROUGH EXPLORATION International Space Station, Mars and Beyond - the future of human spaceflight and exploration Speakers: Liz Seward, UK Space Conference Programme Committee Chair (Chair) Tim Peake, Astronaut, European Space Agency Dr David Parker, European Space Agency Dr Penny Fidler, The UK Association for Science and Discovery Centres Minoo Rathnasabapathy, Space Generation Advisory Council			