Amicus evidence to the Select Committee on Science and Technology inquiry into UK Space Policy

Amicus is the UK's second largest trade union with 1.2 million members across the private and public sectors. Our members work in a range of industries including manufacturing, financial services, print, media, construction and not for profit sectors, local government, education and the health service.

Executive Summary

Amicus would make the following recommendations:

a) For the Treasury to reverse the cuts of 2005 and get back to a level of investment of £30 million plus per year for the Space sector, investing in projects that add value. ARTES is particularly vulnerable as it is outside the OSI.

b) That the UK government acknowledge the importance of the Space industry in creating jobs, new companies, innovative research and development and the full benefit to the wider population of these innovations.

c) That the UK government support a new national space innovation fund of £1 million per BNSC partner, this would then create an annual fund of £20 million per year.

d) Increase funds to the European Space Agency (ESA) by £15 million per year to sustain the UK's lead role in the Galileo and Global Monitoring for Environment and Security (GMES) projects.

e) Support a Prime Ministerial review into the UK Space industry.

f) Encourage further educational achievement and interest around space, science and technology by creating further initiatives and offering further funding to projects such as the Scottish Space School; which reached 25,000 schoolchildren, of which 83%[1] went on to take science courses at a higher level, and the Yorkshire Regional Development Agency who have invested £1 million in a new Space Education Office for the UK.

g) That the UK government encourage companies to develop and use innovation to address the challenges thrown up by modernity.

h) For education policy in the UK to actively encourage students to train for and take up careers in space, science and engineering, via bursaries, financial inducements and a re-direction of education funding and progressive marketing of the sector. This would further the UK's standing in the world as a centre of excellence for research and design and ensure that the most highly skilled workforce in UK manufacturing is retained and built upon.

i) To be build on the lead that the UK has developed in the global market for low-cost satellites and the global mobile satellite communication market to secure the creation of wealth for the UK economy and the creation of further jobs for the UK workforce. Without the initial investment from government into space related projects this lead would not have happened.

j) For UK Trade and Industry (UKTI) to prioritise a marketing strategy for the UK space industry, whereby the countries in the global market come to the UK first to see what we have to offer, thereby making UK plc even more profitable and successful; creating the opportunity for job creation that the highly skilled UK workforce will be able to encompass and achieve.

[1] The Case for Space – Britain's best kept secret, Bill Olner MP, in Environmental and Sustainable Technology, p 10

1. There are currently 115, 000[2] people employed in the Aerospace and Shipbuilding sector. Of these Amicus represents 63,000 workers. The significant employers within the Aerospace sector are Thales and BAE Systems. The UK has a thriving Space industry that employs over 16,000 people and has an annual turnover of £4.8 billion[3] the key employer here is Astrium, part of the European company EADS. The Space sector offers a diverse range of expertise including the manufacture of satellites, scientific instrumentation, battery technologies, software development and data analysis systems.

2. There are two key strategic industrial areas within the sector, 'upstream' representing the provision of technology and 'downstream' representing the exploitation of technology. The downstream sector dominates the overall industry turnover with a figure of £4.1 billion[4] and the upstream generated a turnover of £725 million, representing a 34% increase between 2003 and 2005[5]

3. The UK space industry has participated in many key missions to explore the solar system, including Giotto, Rosetta, Cassini, Mars Express and Beagle 2. UK companies have also participated in industrial studies for the robotic missions in the European Space Agency's Aurora Programme to explore Mars. UK companies are world leaders in the development of micro-satellites that provide low cost access to space for the public and private sectors. The UK also builds some of the largest and most powerful satellites in commercial use and is at the forefront of the satellite communications industry.

4. To enable the facilitation of this programme of innovation, development and research the workers within these companies are of the highest calibre, and have an enhanced level of education and training. At least 57%[6] of employees in the space industry have at least a first degree. However, in a report commissioned by the British National Space Centre (BNSC) a high number of companies in the sector reported a shortage of specific skills, these ranged from engineering disciplines to physics degrees.

5. Space industry employers are concentrated in the South East and Eastern regions for the upstream sector (90%) with London being the main location for downstream employers (82%)[7]. The sector has one of the highest added values in the UK; this measure of productivity has increased over the past two years and now represents £137, 000[8] per worker. This is four times the national average in the UK manufacturing sector. The sector also has increasingly high levels of research and

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[2] The British Council – Space Industry in the UK
[3] UK Trade and Investment – Aerospace Sector
[4] British National Space Centre – Size and Health of the UK Space Industry 2006, p 5
[5] ibid
[6] UK Trade and Investment – Aerospace Sector
[7] British National Space Centre – Size and Health of the UK Space Industry 2006, p10
[8] ibid

development (R & D) investment. £300 million was invested in R & D last year, with a 10% growth in the last 5 years, growth that is four times faster than the UK economy is growing. It is anticipated that the global market will be worth £1 trillion by 2020[9].

6. There are clear issues relating to Amicus members in relation to the present government's approach to the continued investment and support of the Space industry. The budget cuts by the DTI in December 2005 for the ARTES technology project, and the proposed cuts to the UK funding of the Galileo project meant there was an immediate threat to 400-500 jobs in the UK Space industry. With the capitulation of the cuts to the funding of Galileo this threat to jobs has been lessened slightly but there are still major concerns within the industry that the UK government does not recognise, nor accept the crucial role the Space sector has in the creation of jobs, wealth and highly skilled workers in the UK. We cannot leave the Space industry to our European neighbours, as Francois Auque (CEO for EADS) said "…if there is no change in this downshift in the UK, then there will be a shift to other countries, there are almost 500 UK jobs at risk here".

7. This however is only the tip of the iceberg where loss of jobs is concerned. Cuts to Galileo could mean 20,000 jobs cut in downstream markets, Global Monitoring for Environment and Security (GMES) would have 1,000 jobs in jeopardy in the downstream and there are 800 jobs directly at risk in the telecoms sector. The 'knock on' effects of any cuts in budget will be devastating for many key sectors linked to Space and also for investment in research, development and innovation. The UK cannot afford to ignore a sector as dynamic, innovative and lucrative as the Space sector.

8. The UK government needs to have the vision and commitment to continue and increase the financial investment in Space, acknowledging the dynamic and wide ranging products and services that come from the initial projects within the sector, and maximise the niche market for the UK.

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[9] British National Space Centre – Size and Health of the UK Space Industry 2006, p11