The International Space Station, a test-bed for future space exploration

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Backdropped by the darkness of space, the International Space Station is seen from Space Shuttle Discovery as the two spacecraft begin their relative separation. Earlier the STS-124 and Expedition 17 crews concluded almost nine days of cooperative work on board the Shuttle and Station. (11 June 2008) Credits: NASA/JSC

The Heads of the International Space Station (ISS) Agencies from Canada, Europe, Japan, Russia and the United States met today at ESA Headquarters in Paris, France, to review ISS cooperation.

As part of their discussions, they noted the significantly expanded capability the ISS now provides for on-orbit research and technology development activities and as an engineering test-bed for flight systems and operations critical to future space exploration initiatives. These

activities improve the quality of life on Earth by expanding the frontiers of human knowledge.

The Heads of Agency also noted the Partners' significant accomplishments since their last meeting in January 2007, including the delivery of Node 2 (Harmony), two new laboratories (the ESA Columbus Module and the Japanese Experiment Module Kibo), and Dextre, Canada's two-armed special purpose dexterous manipulator.

In addition to the completion of six challenging ISS assembly missions with the U.S. Space Shuttle, the Heads of Agency recognised the successful maiden flight of the European Automated Transfer Vehicle, the establishment of the global ISS ground operation control centre network with the addition of new European and Japanese ISS operations centres and the successful flights of Russian Soyuz and Progress vehicles. The Partners emphasised the critical importance of expanded operations of Russian Soyuz and Progress vehicles for ISS total crew transportation, rescue and cargo delivery.

The Heads of Agency reviewed current ISS development, configuration and operations activities across the partnership. They considered implementing plans to maximise the benefits from the increase to a six-person crew in 2009 and discussed efforts to ensure that essential space transportation capabilities (both crew and cargo) will be available across the partnership for the life of the programme. The Partners acknowledged the need for the additional Russian modules to be provided in 2009 and 2010 that will maximise six-person ISS operations and utilisation.

The Heads of Agency discussed their respective ongoing activities to enhance upmass and downmass transportation capabilities required for a robust utilisation of the ISS and to prepare capabilities for the future. These include Japan's H-2 Transfer Vehicle in the coming year, the U.S.

Commercial Orbital Transportation Services and the U.S. Orion Crew Exploration Vehicle; together with the current operational vehicles, the U.S. Shuttle (up to 2010), Russian Soyuz and Progress, and ESA ATV. These capabilities will respond to the ISS operations and utilisation requirements.

They also noted new initiatives such as the ESA plan for an Automated Transfer Vehicle-Advanced Return Vehicle system for downmass from the ISS and the Russia-ESA joint preparatory activities on an advanced Crew Space Transportation System. The Heads of Agency expressed their interest in making these capacities available for the benefit of the whole partnership and can provide ISS sustainability and prepare for future exploration endeavours.

As the partnership moves closer to completion of ISS assembly, the Heads of Agency reaffirmed their common interest in utilising the space station to its full capacity for a period meaningful for stakeholders and users. The Partners noted that a continuation of operations beyond 2015 would not be precluded by any significant technical challenges. Recognising the substantial programmatic benefits to continued ISS operations and utilisation beyond the current planning horizon, the Heads of Agency committed to work with their respective governments to assess support for such a goal.

Source: European Space Agency