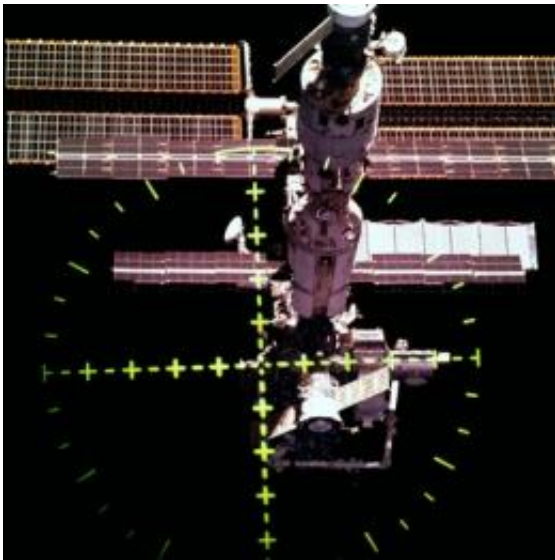


New international standard for spacecraft docking

October 19 2010



ISS seen from the Space Shuttle after undocking. This view was captured with a 70mm handheld camera through the Space Shuttle Discovery's crew optical alignment system (COAS) during separation operations. The undocking took place at 9:52 (CDT) on 20 August 2001. Credits: NASA

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The International Docking System Standard (IDSS) provides the guidelines for a common interface to link spacecraft together. It builds on the heritage of the Russian developed APAS system (Androgynous Peripheral Attachment System) used for the [Space Shuttle](#) for the 'hard docking' and the innovative soft-capture features of the new NASA and ESA systems. Other agencies will be free to choose specific features behind the interface.

“The IDSS is an outstanding example of international collaboration. We have developed a common language for docking systems to use the same 'words' in space when it comes to work together,” said Simonetta Di Pippo, ESA Director of Human Spaceflight.

“The Docking Standard sweeps away the boundaries for a truly global exploration endeavour. It will also make joint [spacecraft](#) docking operations more routine and eliminate critical obstacles to joint space exploration undertakings,” she continued.



STS-117 Pilot Lee Archambault (left) and Mission Specialist James Reilly (second from right) are looking at a part of the external airlock in the payload bay of Atlantis in the Orbiter Processing Facility at the Kennedy Space Center. NASA photo KSC-06PD-2839. Credits: NASA/Kim Shiflett

"Today, our future in space is more open-minded than ever. ESA has been committed to the development of this standard since the inception of the working group and has contributed to the document defining this standard interface. We have been working for a number of years on the development of the IBDM (International Berthing Docking Mechanism) and we are willing to make the IBDM compatible with this new international docking standard," Simonetta Di Pippo concluded.

Open and flexible standard

The initial IDSS definition document will be released into the public domain on 25 October. It will contain a preliminary description of the physical features and design loads of the standard [docking](#) interface.

The technical teams from the five ISS partner agencies will continue to work on additional refinements and additions to the initial standard. ESA, NASA, Roscosmos, the Japan Aerospace Exploration Agency and the Canadian Space Agency are represented on the Multilateral Coordination Board, which coordinates Station activities among the partners.

More information: The interface definition document will be available on 25 October at www.internationaldockingstandard.com

Provided by European Space Agency

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