At the INCOSE Workshop, held in Scottsdale, Arizona, in January 2000, an interest group was formed devoted to demonstrating the activities of systems engineering in the space industry, recognizing that many of the INCOSE members had careers in the space industry. This led to the initial creation of the Space Systems Interest Group on January 27, 2000.

The Charter for the INCOSE Space Systems Working Group (SSWG) was developed on April 28, 2000. The SSWG was voted by the Systems Engineering Applications Technical Committee (SEATC) Chairmen to be elevated from an Interest Group to a Working Group based on completion of the necessary elements cited in the Systems Engineering Organization Report. This vote was taken in a telecon on May 9, 2000.