

Technical Specifications for the Suit Simulators

The contract covers two (2) suit simulators for use in analog missions and simulations of living and working on the Moon and Mars. The suits are made of durable fabric, feature integrated rigid mechanical components such as a hard upper torso, helmet, and PLSS backpack, and visually resemble an astronaut suit.

The A criteria (see supplement 2) must be met; failure to meet them results in the exclusion of the bid in question. The B criteria (below) are factored into the evaluation based on the corresponding grade point values.

Technical criteria and grade points	criterion fulfilled, exceeding expectations (3 points)	criterion fulfilled (2 points)	criterion not fulfilled, but limitation is tolerable (1 point)	criterion not fulfilled (0 points)
Additional components				
sun visor/protective visor		protective visor present	no protective visor present, but can be added later	no possibility to attach protective visor
color strips for differentiation		3 different, easily distinguishable colors		
helmet light system				
Usability				
total mass	<20kg	<25kg	<30kg	>30kg
time of continuous usage	>6h	>4h	>3h	<3h
size adjustable within at least 165cm and 195cm		165cm < h < 195cm	170cm < h < 190cm	single size
donning time	<15min	<30min	<1h	>1h
donning assistance	no assistant required	single assistant	2 assistants	>2 assistants
Maintenance and repair				
duration of post-EVA clean-up	<30min	<1h	<2h	>2h
maintenance intervals	>50 cycles, or 6 months	>20 cycles, or 1 month	>5 cycles, or 1 week	<5 cycles, or 1 week
Validity and appearance				
professional, high-quality appearance		sturdy appearance, no loose ends, matching colors, no excessive folds and creases, etc.		
optical likeness to EVA suit		average likeness to EVA suit		
validated in field or analog campaigns		validated in field or analog campaigns	validated in laboratory	not yet validated