

Allegato 1 al Disciplinare di Gara – II Parte (Fase Offerta) – Annesso 2 – Appendice 1

ID REQUISITO	REQUISITO BASE (SE ASTERISCATO)	DESCRIZIONE REQUISITO BASE O PREMIALE	PUNTEGGIO POTENZIALE MASSIMO Puny (PER REQUISITI PREMIALI)
001	*	The fleet SHALL consist of a total of 6 aircraft by the year 2030.	
002a	*	The entire fleet SHALL reach completion by the end of 2030; THRESHOLD: at least 2 aircraft delivered by the year 2029 and the remaining by the year 2030	
002b		The entire fleet SHALL reach completion by the end of 2030; OBJECTIVE: 2 aircraft delivered by 2028, 2 in 2029, 2 in 2030.	2
002c	*	In case of pre-owned aircraft, the Company SHALL procure them under its own processes and liability.	
003	*	The Tanker SHALL have been employed in AAR operations for at least 2 years	
004		Air conditioning system SHOULD be equipped with High-Efficiency Particulate Air (HEPA) filters.	0,25
005	*	The Aircraft SHOULD be equipped with a 2 engines turbofan propulsion system	
006		Workstations SHOULD be compliant with MIL-STD-1472 (Human Engineering) or equivalent standard for ergonomic design	0,25
007	*	Crew rest spaces SHALL be soundproofed and physically separated from operational areas, compliant with MIL-STD-1472 and MIL-HDBK-759 (Human Factors Engineering Design for Military Systems, Equipment, and Facilities) or equivalent standard	
008	*	The aircraft SHALL adhere to FAR/EASA technical standards ensuring survival in all operating environments and emergencies (as in the event of an accident or forced landing)	
009	*	The aircraft design SHALL meet MIL-STD-1791 (Aircraft Transportability) and MIL-STD-810 (Environmental Engineering Considerations and Laboratory Tests) or equivalent standard for structural integrity and survivability in various environments	

010	*	The installation of emergency equipment and the implementation of procedures SHALL comply with MIL-STD-1472 and FAR/EASA Part 25 (Airworthiness Standards: Transport Category Airplanes) for civilian standards	
011a	*	Floor covering SHALL be antiskid	
011b		Antiskid floor covering without carpet	0,25
012	*	The galley section SHALL contain food trolleys, oven, refrigerator, espresso coffee machine	
013a	*	The aircraft SHALL be equipped with toilet suitable for passenger transport	
013b		and SHOULD be serviceable from external integrated ports	1
014	*	The aircraft SHALL have external painting in accordance with ITAF applicable directives	
015a	*	English markings and placards	
015b		All markings and placards SHOULD be written in both English and Italian.	0,25
016		A Mission Planning System (MPS) capable of operating in all types of missions requirements SHOULD be provided	1
017		In particular the system, if provided, SHOULD be capable of planning, establishing, maintaining and monitoring areas and patterns for in-flight refueling according to national and NATO standards	0,5
018		The MPS SHOULD be operable both on ground and in-flight to change the flight mission parameters	0,25
019		The MPS SHOULD be capable of transferring mission data, unclassified and classified (up to NATO Secret) with external device.	0,5

020	*	The aircraft SHALL have a cruise speed of at least Mach 0.75	
021		The aircraft SHOULD have a cruise speed of Mach 0.85 to efficiently match the speed profiles of various receiver aircraft (see as reference standard MIL-STD-1791 for interoperability and efficiency in various operational contexts).	1,5
022	*	The aircraft SHALL (THRESHOLD) reach a maximum speed $\geq$ Mach 0.82	
023		The aircraft SHOULD (OBJECTIVE) reach a maximum speed $\geq$ Mach 0.87, for rapid repositioning and tactical flexibility i.a.w. applicable criteria of MIL-HDBK-516 for safety and performance during high-speed operations.	1,5
024a	*	The aircraft SHALL (THRESHOLD) have a service ceiling $\geq$ 38.000 feet to operate above commercial air traffic and in various operational scenarios i.a.w. applicable criteria of FAA Part 25 and EASA CS-25 for operational safety at high altitudes	
024b		The aircraft SHOULD (OBJECTIVE) have a service ceiling $\geq$ 43.000 feet	1,5
025a	*	The aircraft SHALL (THRESHOLD) have a minimum unrefueled range $\geq$ 5,000 nautical miles to cover strategic distances without the need for refueling i.a.w. MIL-STD-3013 (Aerial Refueling Aircraft) for long-range mission capability.	
025b		The aircraft SHOULD (OBJECTIVE) have a minimum unrefueled range $\geq$ 8,000 nautical miles	1,5
026a	*	The aircraft SHALL (THRESHOLD) be capable of extending its range to a minimum of 8.000 nautical miles through aerial refueling, supporting extended mission durations and remote operations in adherence to NATO STANAG 3971 for interoperability and strategic reach.	
026b		The aircraft SHOULD (OBJECTIVE) be capable of extending its range to a minimum of 14.000 nautical miles through one aerial refueling	1,75
027a	*	The aircraft SHALL (THRESHOLD) remain airborne for a minimum of 10 hours without refueling, providing extended loiter times for support operations in adherence with the MIL-STD-3013 for mission endurance and operational flexibility	
027b		The aircraft SHOULD (OBJECTIVE) remain airborne for a minimum of 14 hours without refueling	1,5
028		The maximum takeoff distance at Maximum Takeoff Weight (MTOW) SHOULD not exceed 10.000 feet on an ICAO standard day at sea level.	1,5

029		The landing distance at Maximum Landing Weight (MLW) SHOULD not exceed 9.000 feet on an ICAO standard day at sea level.	0,75
030	*	The aircraft SHALL grant transit to/from the operation areas with speed $\geq$ 290 Knots-Indicated Air Speed (KIAS)/0.78-0.80 MACH above FL200.	
031	*	The aircraft SHALL support aerial refueling operations at speeds between 180 KIAS (Knots Indicated Airspeed) and 320 KIAS at FL180, in compliance with NATO STANAG 3971 (Air-to-Air Refueling Equipment) for interoperability with allied forces.	
032	*	The aircraft SHALL support aerial refueling operations at altitudes between 10.000 feet and 35.000 feet to accommodate a wide range of receiver aircraft i.a.w. MIL-STD-1791 for compatibility with multiple receiver aircraft types and mission profiles.	
033a	*	The tanker SHALL have a substantial fuel load to support extended missions and multiple receiver aircraft i.a.w. MIL-STD-1791 for fuel capacity and distribution. THRESHOLD: 170.000 pounds	
033b		The tanker SHALL have a substantial fuel load to support extended missions and multiple receiver aircraft i.a.w. MIL-STD-1791 for fuel capacity and distribution. OBJECTIVE: 250.000 pounds	1,5
034a	*	The aircraft SHALL be capable of offloading the following fuel quantities at different mission radii (out and back): - Range of 500 NM: Threshold: 100.000 pounds of fuel offload; - Range of 1.000 NM: Threshold: 75.000 pounds of fuel offload; - Range of 2.000 NM: Threshold: 50.000 pounds of fuel offload.	
034b		The aircraft SHALL be capable of offloading the following fuel quantities at different mission radii (out and back): - Range of 500 NM: Objective: 200.000 pounds of fuel offload; - Range of 1.000 NM: Objective: 150.000 pounds of fuel offload; - Range of 2.000 NM: Objective: 110.000 pounds of fuel offload.	2
035	*	The aircraft SHALL be capable of refueling through Boom and Probe-and-Drogue systems.	
036	*	The aircraft SHALL be capable of simultaneous refueling up to one aircraft from the boom and one from the drogue or two from probe-and-drogue refueling points.	
037	*	The aircraft SHALL feature an advanced digital fuel management system to monitor and control fuel distribution precisely.	

038	*	The AAR capacity SHALL be granted by means of a boom system with fuel lift (900 US GPM) and the possibility of adapting, by automatically/manually modulating pressure (max 55psi) and fuel flow, to the specifications of the different types of receivers. The system as a whole (boom system, signage system, communication, etc.) must meet the requirements indicated by the reference STANAG (7191).	
039		The aircraft SHOULD have a centerline drogue system	1,25
040	*	AAR capacity SHALL be granted through the H&D system on 2 Wing Air Refueling Pods (WARP), one for each wing, with high fuel output (400 US GPM) and the possibility of adapting, automatically/manually modulating pressure (max 55psi) and flow rate of fuel, to the specifications of different types of receivers. The system (H&D system, signal system, communication, etc.) must meet the requirements of the reference STANAGs (3447 and 7215).	
041	*	The aircraft SHALL be equipped with a STANAG compliant aerial refueling receptacle which allows the aircraft to receive fuel from a boom-type tanker aircraft (such as the Universal Refueling Receptacle Slipway Installation (UARRSI) System).	
042	*	The system SHALL grant unobstructed view of the refueling process through an advanced camera system for day and night operations.	
043	*	The operator station SHALL grant: - precise control mechanisms for the boom or hose-and-drogue refueling systems through joysticks, control levers, and other control interfaces; - reliable communication links with the flight crew, receiver aircraft, and ground control through radios, intercom systems, and data links; - advanced digital fuel management system to monitor and control fuel distribution precisely.	
044a		The operator station SHOULD: - have an Automatic Air Refueling operations and 3D camera system	0,5
044b		The operator station SHOULD: - be located in the cockpit flight station in order to grant an increase CRM in case of abnormal operations.	1
045	*	The Tanker fleet SHALL be compatible and certifiable to operate with the greatest number of national and NATO receivers.	
046		Compatibility with all NATO receiver aircraft SHOULD include but not be limited to:	

046a		Fast Jet (e.g., F-35, F-2000, A-200 etc.)	0,75
046b		Transports (e.g., C-17, C-130J, C-27J etc.)	0,25
046c		Special mission aircraft (e.g., AWACS, JSTARS etc.)	0,25
047a	*	The aircraft SHALL (THRESHOLD) be capable of loading at least 3 standard NATO 463L pallets totaling no less than 15.000 pounds combined with no less than 50 passengers. The cargo SHALL be able to load 3 civilian containers (e.g. ULD4)	
047b		The aircraft SHOULD (OBJECTIVE) be capable of loading at least 8 standard NATO 463L pallets totaling no less than 40.000 pounds combined with no less than 50 passengers.	1,75
048a	*	The aircraft SHALL (THRESHOLD) have a payload capacity of at least 60.000 pounds.	
048b		The aircraft SHOULD (OBJECTIVE) have a payload capacity up to 100.000 pounds.	1,5
049		AC Power Supply: the outlet on the cargo area SHOULD provide up to 10 outlets 220V AC at 50 Hz 4,5A	0,75
050		The cargo SHOULD use standardized connectors that are commonly accepted in aviation and compatible with European standards like IEC 60320 C13/C14 connectors for equipment interfaces and outlet receptacle compatible with IEC 60309 connectors if higher power ratings are required.	0,75
051	*	The Tanker SHALL be able to onboard at least 50 passengers with one personal bag, in normal configuration (not for contingency operations)	
052		The Tanker SHOULD be able to upload up to 250 passengers with one personal bag on board, in normal configuration (not for contingency operations)	2
053a	*	In both cases, enough space SHALL be guaranteed to stow one luggage per passenger in the hold, through the uploading of at least 3 pallets in the same flight. THRESHOLD: 50 passengers with one bag in the cabin and one in the cargo compartment.	

053b		In both cases, enough space SHALL be guaranteed to stow one luggage per passenger in the hold, through the uploading of at least 3 pallets in the same flight. OBJECTIVE: up to 250 passengers with one bag in the cabin and one in the cargo compartment.	1,5
054a	*	The configuration, for a minimum of 10 stretchers, SHALL (THRESHOLD) be convertible in maximum 24 hours.	
054b		The configuration, for a minimum of 10 stretchers, SHOULD (OBJECTIVE) be convertible in maximum 3 hours.	0,75
055a	*	The configuration SHALL (THRESHOLD) allow the loading of at least 10 NATO standard stretchers and at least 2 patients in intensive care (patients with oxygen).	
055b		The configuration SHOULD (OBJECTIVE) allow the loading of at least 30 NATO standard stretchers and at least 2 patients in intensive care (patients with oxygen).	1,5
056	*	The Human-Machine Interface (HMI) of the tanker aircraft SHALL feature a glass cockpit design. The glass cockpit will integrate the following advanced systems and capabilities	
057		The cockpit and the ARO station SHOULD be NVIS compatible in accordance with MIL-L-85762 and MIL-STD-3009.	0,5
058	*	The glass cockpit SHALL feature an advanced EFIS, including Primary Flight Displays (PFD) and Multi-Function Displays (MFD). These displays SHALL provide clear, real-time information on flight parameters, navigation, engine performance, and system status.	
059		The Tankers SHOULD be delivered with complete provision for Electronic Flight Bags.	0,25
060a	*	The cockpit SHALL be equipped with an integrated FMS, allowing for automated route planning, navigation, and performance management. The FMS SHALL interface seamlessly with the autopilot and auto-throttle systems.	
060b		The FMS SHOULD be able to transfer mission data to/from an external device	0,5
061		The aircraft SHOULD be equipped with a PFD HUD to project critical flight information into the pilot's forward field of view, enhancing situational awareness during critical phases of flight such as takeoff, approach, and landing.	0,5
062		The cockpit SHOULD be equipped with Touchscreen Displays and Cursor Control Devices (CCD) for intuitive and efficient interaction with the cockpit systems.	0,25

063	*	Electronic Checklists SHALL be provided to assist the crew in managing normal and emergency procedures.	
064	*	The aircraft SHALL include a state-of-the-art autopilot system capable of managing the aircraft's flight path and performing complex maneuvers to reduce pilot workload and enhance safety.	
065	*	The aircraft SHALL be equipped with an auto-throttle (or auto-thrust) system, enabling automatic control of engine power settings throughout different phases of flight, including takeoff, climb, cruise, descent, and landing.	
066	*	The airplane and its equipment SHALL be certified by the EASA/FAA for low-weather minimum operations within Category II	
067		The airplane SHOULD have Category IIIb automatic approach, landing, and automatic runway steering	0,75
068		The airplane SHOULD be capable of GPS based approach down to LVP minima.	1,25
069	*	The aircraft SHALL be equipped with full set of provisions for secure, multi-band communication systems, including UHF, VHF, and SATCOM and SHALL be interoperable with NATO and data link systems for real-time data exchange as the Link-16 MIDS JTRS or MIDS LVT BU2	
069a	*	The aircraft SHALL be able to carry out voice and data communications, including encrypted comms, with C2 centers based on the ground, on an air and naval platform, whether national, NATO or coalition.	
070	*	The communication system SHALL be able to carry out voice and data communications in the HF, VHF and UHF AM/FM, using dedicated radio systems with the capability to select at least two frequencies simultaneously for each bands including encrypted comms.	
071	*	According to specific national and NATO operational needs, the tanker aircraft SHALL be able to integrate, having already the full set of required provisions, the necessary equipment that can assure encrypted communications.	
072	*	The aircraft SHALL be able to integrate, having already the full set of required provisions, V/UHF radios capable of ECCM, Crypto SECURE, HAVE QUICK II, SINCGARS, SATURN capability.	
073	*	The Tanker SHALL be able to integrate, having already the full set of required provisions, voice and satellite data communications (UHF, and Ka or Ku band extended) system. Full provision for a MILSATCOM capability SHALL be also required by means of the integration in the avionics system of a UHF MILSATCOM Radio terminal with dedicated control panel and antenna.	



074		Specifically, the UHF MILSATCOM capability SHOULD be provided by means of the integration of a SICRAL radio system adding to the basic aircraft system a dedicated SATCOM antenna and a SICRAL MILSATCOM system consisting of RT, control panel, low noise amplifier/duplexors, high power amplifiers, antenna and associated filters and special cables.	1,5
075	*	The aircraft SHALL be able to integrate, having already the full set of required provisions, the Multifunctional Information Distribution System (MIDS Link-16) inclusive of the Joint Tactical Radio System terminals (JTRS) or MIDS LVT BU2.	
076		The aircraft SHOULD have a worldwide broadband IP connection	0,25
077		The aircraft SHOULD have a Wi-Fi system on both areas, cockpit and passengers cabin	0,5
078	*	The Navigation system SHALL include a satellite navigation system solution (GNSS)	
079	*	079.The aircraft SHALL be able to integrate, having already the full set of required provisions, a GPS-SAASM type GNSS, with additional capability of being able to receive the new military M-Code encrypted signal, when available, integrated with an inertial navigation system (INS), which SHALL be able to use receivers with at least one secure position navigation and timing PNT available and Selective Availability & Anti-Spoofing Module.	
080	*	It SHALL be able to operate in GAT airspace, including ocean routes, at all times, as well as having the ability to operate in accordance with the 180 minutes ETOPS rules.	
081	*	It SHALL possess an identification system capable of operating both in military airspace and in GAT (ATC Transponder/IFF).	
082	*	The navigation systems SHALL include the VOR-DME and TACAN including AA function (Air to Air) equipment integrated in the cockpit navigation displays.	
083		The aircraft SHOULD be equipped to support enhanced situational awareness and capability to act as a communication relay and control node in a networked battlefield.	0,75
084	*	The aircraft SHALL be capable of integrating with a full set of provisions IFF capability with modes 1, 2, 3/A C, S (enhanced), 5 level 2	
085	*	The aircraft SHALL be capable of integrating with a full set of provisions IFF capability with ADS-B (IN and OUT).	

086	*	The aircraft SHALL be capable of integrating with a full set of provisions IFF capability fully integrated with the navigation displays.	
087	*	The aircraft SHALL be capable of integrating with a full set of provisions IFF capability with the possibility to individually inhibit mode S, mode C and/or ADS-B OUT.	
088	*	The aircraft SHALL be equipped with a CPDLC system as the Future Air Navigation System (FANS-1/A+, FANS-2/B) or preferably the Aeronautical Telecommunication Network (ATN-B2)	
089		The aircraft SHOULD be compatible with Personal Protective Equipment to shield against radioactive particles and biological agents.	1
090		The aircraft SHOULD be compatible with decontamination systems to neutralize contaminants on the aircraft's exterior and interior surfaces.	1
091	*	091. In order to ensure operational resilience and crew safety in hostile environments, the tanker aircraft SHALL be able to integrate, having already the full set of required provisions, a suit of advanced survivability and protection systems such as Radar Warning Receiver/ESM (RWR/ESM), Missile Warning System (MWS), Large or Directed Aircraft Infrared Countermeasures (LAIRCM/DIRCM).	
092		The following system SHOULD be equipped on board: Radar Warning Receiver/ESM (RWR/ESM) to detect and alert the crew of radar emissions from enemy aircraft and ground-based threats;	1,25
093		The following system SHOULD be equipped on board: Missile Warning System (MWS) to detect launched and incoming missile threats and provide timely alerts for evasive actions, systems based on passive sensors operating in the IR and UV bands;	1,25
094		The following system SHOULD be equipped on board: Large or Directed Aircraft Infrared Countermeasures (LAIRCM/DIRCM) to actively counter infrared-guided missile threats by emitting targeted infrared energy to disrupt missile tracking.	1,25
095		The following system SHOULD be equipped and integrated on board: Laser Warning Receivers (LWR) to detect laser emissions used by enemy targeting systems and rangefinders, providing alerts to the crew and triggering countermeasures.	0,75
096		The following system SHOULD be equipped and integrated on board: Chaff and Flare Dispenser (CFD) to deceive incoming RF and IR guided missiles. This system, if provided, SHALL be capable of operating manually by the crew or in "automatic" mode in cooperation with the MWS and the DIRCM/LAIRCM systems in accordance with programs the loaded Mission Data File (MDF).	0,75
097		Tactical Situational Awareness System to provide real-time information about the operational environment and potential threats performing data fusion advanced processing and interface with communication and networking suite.	1

098		The SPS SHOULD be provided with an In-Flight Data Recording (IFDR) capability in order to record SPS detections and activations; in case this system is provided, recording SHALL be operating either in a "manual" mode (activation by the crew) or in an "automatic" mode (in accordance with mission MDFs). Recording formats SHALL be compatible with the Electronic Warfare Operational Support system in order to perform post-mission analysis.	0,5
099		EWOS SHOULD provide the capability to upload and download Mission Data Files (MDFs) to and from the SPS in addition to a post-mission capability.	0,25
100		EWOS SHOULD include the capability of validating the Mission Data Files (MDFs) once uploaded onto the aircraft.	0,25
101		Cockpit Armor, if installed, SHALL be reinforced with ballistic-resistant materials to protect the crew from small arms fire and shrapnel;	0,5
102		Critical Systems Armor, if installed on key components such as fuel tanks, hydraulic systems, and avionics, SHALL be protected with lightweight, high-strength armor materials.	0,5
103a		The aircraft SHOULD be capable of producing inert gas, typically nitrogen, and distributing it in one or more fuel tanks to prevent the risk of fuel tank explosions. THRESHOLD: the generated inert gas SHOULD be distributed to the most critical fuel tank.	0,5
103b		The aircraft SHOULD be capable of producing inert gas, typically nitrogen, and distributing it in one or more fuel tanks to prevent the risk of fuel tank explosions. OBJECTIVE: the generated inert gas SHOULD be distributed to all fuel tanks.	0,75
104		The aircraft SHOULD be resistant to nuclear EMP in accordance with MIL-STD-461.	1,25
105	*	Redundant Flight Control Systems: multiple, independent flight control systems to ensure continued aircraft control in the event of damage;	
106	*	Fire Suppression Systems: automatic and manual fire suppression systems in critical areas, such as engine bay and cargo compartments.	
107		The aircraft SHOULD be resilient against the risk of fuel leaks and fires if fuel tanks are punctured, either by Self-Sealing Fuel Tanks or proper "by-design" solutions and artifacts	0,25
108		To ensure less workload for pilots the Flight Control SHOULD be full fly-by-wire.	1

109		The tanker SHOULD have a health monitoring capability, for the diagnosis of malfunctions and maintenance.	0,5
110		The aircraft SHOULD be designed for ease of maintenance with modular components for quick replacement and repair.	0,25
111	*	Onboard diagnostic systems to monitor the health of the aircraft and predict maintenance needs SHALL be available on the aircraft.	
112	*	Global logistics support infrastructure SHALL be guaranteed to ensure the availability of spare parts and technical support.	
113	*	The aircraft SHALL assure participation on multinational operation through seamless integration into NATO command and control structures and capability of participating in combined air operations with multiple NATO member nations.	
114	*	The aircraft SHALL be fully compliant with NATO Standardization Agreements (STANAGs) related to air refueling operations, including STANAG 3447 (Air-to-Air Refueling Systems), STANAG 7215 (Aircraft Refueling Safety), and STANAG 3476 (Aerial Refueling Data Interoperability).	
115		The aircraft SHOULD be capable of operating on runways with a minimum width of 148 feet (45 meters) i.a.w. ICAO Annex 14 (Aerodromes) for runway width specifications.	1
116a		The aircraft SHOULD be able to operate on taxiways with the following minimum width: Threshold: 75 feet (23 meters).	0,5
116b		The aircraft SHOULD be able to operate on taxiways with the following minimum width: Objective: 59 feet (18 meters);	0,75
117a		The aircraft SHOULD have 180 degree turn-radius capable of having the following minimum pavement width (outside to outside of tire): Threshold: 200 feet (60 meters).	0,25
117b		The aircraft SHOULD have 180 degree turn-radius capable of having the following minimum pavement width (outside to outside of tire): Objective: 148 feet (45 meters)	0,75
118a		The aircraft SHOULD be able to operate on ramp spaces with at least the following dimensions to allow for safe maneuvering and parking based on FAA AC 150/5300-13A and ICAO Annex 14 for ramp space requirements: - Threshold: 300x300 feet (91x91 meters).	0,25
118b		The aircraft SHOULD be able to operate on ramp spaces with at least the following dimensions to allow for safe maneuvering and parking based on FAA AC 150/5300-13A and ICAO Annex 14 for ramp space requirements: - Objective: 250x250 feet (76 meters);	0,5

119a		The aircraft SHOULD be compatible with the following parking stands minimum distance so to accommodate its wingspan and length, including required clearances based on ICAO Annex 14 and FAA AC 150/5300-13A for parking stand design: Threshold: 265 feet (80x80 meters).	0,5
119b		The aircraft SHOULD be compatible with the following parking stands minimum distance so to accommodate its wingspan and length, including required clearances based on ICAO Annex 14 and FAA AC 150/5300-13A for parking stand design: Objective: 180 feet (55 meters);	0,25
120a	*	<p>The aircraft SHALL have the following ACN range of values to allow the tanker to operate on a broad spectrum of airfields, ensuring maximum operational flexibility and strategic reach deploying from both primary and secondary airfields within Italy and allied nations: (THRESHOLD)</p> <ul style="list-style-type: none"> <li>- up to 55 (threshold) on high rigid payment subgrades (K=150 MN/m3);</li> <li>- up to 63 (threshold) on medium rigid pavement subgrades (K=80 MN/m3);</li> <li>- up to 75 (threshold) on low rigid pavement subgrades (K=40 MN/m3);</li> <li>- up to 87 (threshold) on ultralow rigid pavement subgrades (K=20 MN/m3);</li> <li>- up to 64 (threshold) on high flexible pavement subgrades (K=150 MN/m3);</li> <li>- up to 69 (threshold) on medium flexible pavement subgrades (K=80 MN/m3);</li> <li>- up to 80 (threshold) on low flexible pavement subgrades (K=40 MN/m3);</li> <li>- up to 108 (threshold) on ultralow flexible pavement subgrades (K=20 MN/m3).</li> </ul>	
120b		<p>The aircraft SHALL have the following ACN range of values to allow the tanker to operate on a broad spectrum of airfields, ensuring maximum operational flexibility and strategic reach deploying from both primary and secondary airfields within Italy and allied nations: (OBJECTIVE)</p> <ul style="list-style-type: none"> <li>- greater than 40 (objective) on high rigid payment subgrades (K=150 MN/m3);</li> <li>- greater than 49 (objective) on medium rigid pavement subgrades (K=80 MN/m3);</li> <li>- greater than 59 (objective) on low rigid pavement subgrades (K=40 MN/m3);</li> <li>- greater than 68 (objective) on ultralow rigid pavement subgrades (K=20 MN/m3);</li> <li>- greater than 42 (objective) on high flexible pavement subgrades (K=150 MN/m3);</li> <li>- greater than 47 (objective) on medium flexible pavement subgrades (K=80 MN/m3);</li> <li>- greater than 57 (objective) on low flexible pavement subgrades (K=40 MN/m3);</li> <li>- greater than 77 (objective) on ultralow flexible pavement subgrades (K=20 MN/m3).</li> </ul>	1,25
121		The aircraft SHOULD be compatible with existing hangar facility in the main Italian military airbases.	1,5
122	*	If not compatible with the current facilities, the tanker fleet Company/manufacturer SHALL provide engineering feasibility studies in relation to infrastructure projects aimed to modify or reconstruct existing hangar facilities in order to accommodate the new aircraft. These studies, if granted by the Company/manufacturer, SHALL be completed no later than twelve months prior to the planned delivery date of the first aircraft and SHALL be based on applicable criteria of MIL-HDBK-1191 (Military Handbook for Facility Planning) and MIL-STD-3007 (Standard Practice for Unified Facilities Criteria) to ensure seamless integration and operational readiness upon delivery.	

123	*	The technical-logistical activities SHALL ensure maintenance in operational conditions and integrated logistical support of the tanker fleet, with serviceability levels suitable to ensure an indicative volume of annual flight hours not less than 1000 for each aircraft of the entire fleet.	
124	*	The ILS SHALL include the propulsion system, provided by either the engine OEM or the Company. The required serviceability levels are those required by national and NATO standards.	
125	*	The Integrated Logistic Support (ILS) SHALL cover for all aircraft that are delivered from the date of delivery of the first aircraft to one year from the delivery of the second aircraft.	
126		The Integrated Logistic Support (ILS) SHOULD cover for all aircraft that are delivered from the date of delivery of the first aircraft to one year from the delivery of the sixth aircraft.	1,25
127		ILS SHOULD ensure logistic support of the Self Protection System	0,75
128		The tanker fleet SHOULD be compatible with AGE and ground support vehicles already within Aeronautica Militare availability (e.g. GPU trolleys, cargo-loaders, ladders, etc.).	0,25
129	*	The aircraft SHALL be provided with a set of deployment kits (support material, spare parts and AGE material), when deployed in areas of operations outside national borders, to guarantee immediate restoration of efficiency in the event of failure.	
130	*	Full-motion simulators and computer-based training modules for aircrew and maintenance personnel (# AER(EP).P-147) SHALL be available	
131		and SHOULD be releasable by the aircraft provider for initial conversion at least six months before delivery, with a comprehensive training program for aircrew, maintenance and support personnel	0,75
132		The Full-motion simulators SHOULD be already certified by a civil aviation authority in order to provide an efficient and effective flight crew training	0,25
133	*	Minimum 30-year service life with periodic upgrades SHALL be granted in compliance with NATO sustainability and environmental impact standards.	
134	*	Spare parts SHALL be available with the first delivery according to the following: 2 engines and 2 additional spare set of WARPs, for a total of 8 WARPs sets (#6 installed, plus #2 spare), plus 1 BOOM system.	

135		A set of 7 Airstairs (1 considered spare) SHOULD be provided.	1
136	*	The Company SHALL declare to pursue aircraft military type certification in accordance with the applicable Italian Military Airworthiness Authority (DAAA) regulations (# AER(EP).P-21 subpart B, G and J)	
137	*	The Company SHALL provide the aircraft engineering data necessary to support AAR pairing airworthiness clearance in accordance with the NATO ATP 3.3.4.2 applicable requirements, standards and guidelines.	
138	*	The Company SHALL hold, maintain and update the Aircraft Military Type Certificate i.a.w. Italian Military Airworthiness Authority applicable regulations (# AER(EP).P-21 subpart B, G and J)	
139	*	The Company SHALL support the fleet through an approved AER(EP).P-145 Maintenance Organization within the framework of a full Performance Based Logistic service.	
140		The aircraft SHOULD be capable of operating in a dense and hostile electromagnetic environment without undergoing alterations in operation, while ensuring the ability to self-protect from any cyber threats (e.g. cyber avionic attack).	0,5
141		The aircraft and the EWOS SHOULD be certified, in accordance with the applicable security laws, for classified networks and systems with a full compliance with current security standards (up to national Secret and NATO Secret level).	0,25
142	*	The aircraft SHALL meet the requirements of NATO SDIP-27/2 and SHOULD meet the requirements of Section 5 of CNSSAM TEMPEST/1-13 RED/BLACK Installation Guidance for non-special category information.	
143	*	The following systems are considered red: ICS, Radios, EGI, IFF, Link 16. Therefore the Wires Segregation Requirements and Criteria for EMI Hardening and Information Security of this section SHALL apply	