ALLEGATO 6

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Gara europea a procedura negoziata con bando per "Acquisizione, installazione ed integrazione di un tool di supporto al sequenziamento degli arrivi sugli aeroporti maggiori (Arrival Manager)" CIG 66088091B7

MODELLO ATTRIBUZIONE PUNTEGGIO TECNICO CRITERIO TABELLARE ID 2 (PARAGRAFO 13 DISCIPLINARE DI GARA).

Rispondenza agli ulteriori requisiti per la caratterizzazione del software relativamente alla Appendice della Specifica tecnica paragrafo 11.2 tabella 4

ID	Descrizione	Peso	SI	NO
R-CFG-0130	AMAN shall allow off-line definition of LVP rate (flights per hour) for each configured runway.	0,20		
R-CFG-0140	AMAN shall allow off-line definition of LVP spacing (NM) for each configured runway.	0,20		
R-CFG-0160	AMAN shall allow off-line definition of Stability Interval Set associated to different configurable geographical areas in order to support sequence stability.	0,20		
R-CFG-0330	For each configured runway, AMAN shall allow modification of LVP rates.	0,20		
R-CFG-0340	For each configured runway, AMAN shall allow modification of LVP spacing.	0,20		
R-FUN-0110	If planned runway of an inbound flight differ from the AMAN Runway, AMAN shall suggest a new Runway.	0,20		
R-FUN-0190	AMAN shall provide total delay at the runway advice, for each inbound flight, as difference between TTA and ETA.	0,20		
R-FUN-0300	AMAN shall change the sequence position of a flight only if the difference between the calculated ETA and TTA is outside the pre-defined Stability Interval in the associated geographical area.	0,20		
R-FUN-0370	If the total delay exceed a pre-defined amount (Maximum Delay allowed of current ATSU + Shared Delay of adjacent upstream ATSU), AMAN shall re-distribute remaining delay to the TMA.	0,20		

R-HMI-0010	AMAN HMI shall be deployed on a dedicated Working Position (narrow vertical monitor with the following dimensions: 40x60 cm).	0,02		
R-HMI-0020	AMAN HMI shall be deployed on: * 25 working positions in ROMA ACC OPS * 22 working positions in MILANO ACC OPS * Up to 14 working positions in PADOVA ACC OPS * Up to 7 working positions in BRINDISI ACC OPS * 9 working positions in ROMA ACC Simulation Environment * 5 working positions in MILANO ACC Simulation Environment * 5 working positions in PADOVA ACC Simulation Environment * 5 working positions in BRINDISI ACC Simulation Environment * 9 working positions in ENAV Academy * 2 working positions in ROMA PSA * 2 working positions in MILANO PSA. The precise number will be provided by ENAV during Definition Phases.	0,02		
R-HMI-0050	AMAN HMI shall be configured in order to follow (on the CALLSIGN field) the following colour coding currently implemented in SATCAS CWP: * LIGHT GREEN --> Flights assumed under the sector control (CONCERNED Flights) * YELLOW -->Flights in Pending Status * RED --> Flights for which an STCA Alarm is detected * MAGENTA --> Flights under Transfer of Control (TOC), i.e. Tentative Flights * DARK GREEN -->Concerned AIS Flights * LIGHT GREEN (CALLSIGN) & WHITE --> Exit Handover Flights * WHITE -->Nearby Flights.	0,02		
R-HMI-0090	It shall be possible to on-line select the window to be displayed by clicking on a dedicated button.	0,02		
R-HMI-0130	AMAN HMI shall display the Timeline Window with a dark grey background.	0,02		
R-HMI-0150	AMAN HMI shall allow to on-line select the Timelines to be displayed on each working position by selecting the corresponding Runway/Airport.	0,02		
R-HMI-0160	AMAN HMI shall allow to on-line select the COP Lists to be displayed on each working position by selecting the corresponding COP.	0,02		
R-HMI-0210	AMAN HMI shall display the planning situation in the Timeline Window on both sides of the Timeline, according to off-line configuration. West-bound flights shall be displayed on the left part of the Timeline and East-bound flights shall be displayed on the right.	0,02		
R-HMI-0230	AMAN HMI shall allow to on-line change the orientation of the Timelines according to the orientation of the corresponding runways.	0,02		
R-HMI-0290	AMAN HMI shall display the AMAN Flight State by means of the following off-line defined colours associated to the Connector Line: * WHITE: for flights in the Active Horizon * GRAY: for flights in the Frozen Horizon * DASHED GRAY: For flights in the Common Path.	0,04		

R-HMI-0310	AMAN HMI shall display the fields of each Flight Label with the following colour coding: * CALLSIGN: Flight Status * TTL: Yellow or Orange (if TTL>Maximum delay) * TTG: Cyan * NO DELAY: white * All other fields: white.	0,04		
R-HMI-0320	AMAN HMI shall display, according to the off-line configured Metering fixes, on the Airport Timeline both flights under control and flights not under control, belonging to neighbouring sectors and which are sequenced on the same airport. The flight labels shall follow the Flight status colour coding.	0,04		
R-HMI-0330	On selecting a flight Label, its background colour shall change according to off-line configuration.	0,04		
R-HMI-0350	AMAN HMI shall indicate manually sequenced flights in the last field of the Flight Label.	0,04		
R-HMI-0370	When the current TTL assigned to a flight is greater than an off-line configured threshold, the corresponding TTL/TTG field in the Flight Label shall change colour.	0,04		
R-HMI-0380	AMAN HMI shall allow to acknowledge an highlighted TTL field.	0,04		
R-HMI-0470	AMAN HMI shall allow, by clicking with the left mouse button on the buttons of the button bar, to display the corresponding content information window.	0,02		
R-HMI-0480	On selecting one of the buttons of the button bar, a specific dedicated window shall open in an off-line defined position displaying the related information content.	0,02		
R-HMI-0490	By clicking with the left mouse button on the CONFIGURATION button in the Button Bar, AMAN HMI shall display a dedicated AMAN configuration window which allows to change the following HMI settings related to the displayed Timelines: • NUMBER OF DISPLAYED TIMELINES; • RUNWAYS/METERING FIXES displayed on the Timelines; • Displayed TIME HORIZON; • Orientation of Flight Labels on the Timeline.	0,02		
R-HMI-0500	By clicking with the left mouse button on the REMOVED FLIGHTS button in the Button Bar, AMAN HMI shall display non-sequenced flights in a dedicated Removed Flights List Window.	0,02		
R-HMI-0530	AMAN HMI shall display in the Removed Flights List Window the following possible de-sequencing reasons: • Manual removal from the sequence; • Flights with invalid or unknown route; • Automatically de-sequenced flights.	0,02		
R-HMI-0540	AMAN HMI shall display the Removed Flights button in the Button Bar with the following colours: • GRAY: when the Removed flights list is empty; • ORANGE: when the Removed Flights List Window contains at least one flight.	0,02		

R-HMI-0550	For each flight in the non-sequenced flight list, AMAN HMI shall display the following information in the flight label: • CALLSIGN; • ICAO Aircraft Type code; • WTC; • Metering FIX; • Reason for de-sequencing; • ADEP; • ADES; • ETA (if available); • TTO (EAT 4 CHARS).	0,02		
R-HMI-0580	Each time a parameter changes value, the corresponding information is highlighted in the Timeline Window.	0,02		
R-HMI-0610	AMAN HMI shall display the fields in the Status Bar as follows: • GRAY: all data is available; • ORANGE: data reception is interrupted; • RED: no connection is established/no data is available.	0,02		
R-HMI-0780	AMAN HMI shall allow to change the position of a flight on the current runway as follows: 1. AB press & hold on the CALLSIGN field of the Flight Label; 2. AB release on desired position (before or after a flight).	0,02		
R-HMI-0790	AMAN HMI shall allow to change the TTA for a flight on the current runway as follows: 1. AB press & hold on connector line; 2. Current TTA is highlighted; 3. Timeline displays 1 minute step timing; 4. On mouse move the Time is highlighted related to the position; 5. AB release on desired TTA.	0,02		
R-HMI-0800	AMAN HMI shall allow to change the runway for a flight as follows: 1. AB press & hold on CALLSIGN field; 2. On mouse move on the other runway: o Timeline displays 1 minute step timing; o Time is highlighted related to the position. 3. AB release: o A window is displayed with three choices: - Change runway: AMAN shall automatically re-sequence the flight on the new runway; - Change runway at specified position: AMAN shall insert the flight in the released position (after or before a flight); - Change runway at specified TTA : AMAN shall insert the flight at the highlighted TTA.	0,02		

R-HMI-0810	On WB click on CALLSIGN field of the Flight Label, AMAN HMI shall display a window with the following choices: • Remove: the selected flight is removed from the sequence and inserted in the non-sequence flight window; • Freeze: the flight position is locked; • Unfreeze: the flight position is unlocked; • Spacing: 1. A window is displayed that allows the definition of a flight-dependent separation in NM after the selected flight; 2. A spacing indicator is displayed on the Timeline; 3. AB click on Spacing Indicator : o A window is displayed that allows to change or remove the flight-dependent separation; • Priority: the flight is re-sequenced in such a way that its TTA is as close as possible to its ETA (TTG remains applicable); • Emergency: the concerned flight is the only landing a the allocated runway;	0,02		
R-HMI-0820	On IB click on the CALLSIGN field of the Flight Label, the latter shall be extended with additional flight information.	0,02		
R-HMI-0830	AMAN HMI shall allow to Re-Insert a non-sequenced flight, except for flights with invalid or unknown route by the following interaction with the Removed Flights List: 1. AB press & hold on CALLSIGN field; 2. On mouse move on a runway Timeline: o Timeline displays 1 minute step timing; o Time is highlighted related to the position. 3. AB release: o A window is displayed with three choices: -Change runway: AMAN shall automatically re-sequence the flight on the new runway; - Change runway at specified position: AMAN shall insert the flight in the released position (after or before a flight); - Change runway at specified TTA : AMAN shall insert the flight at the highlighted TTA.	0,02		
R-HMI-0900	AMAN HMI shall allow authorized users to manually modify the LVP RATE by setting runway arrival rate (flight per hour), selecting from a pre-defined set of LVP rates. The runway rate change shall be displayed as Runway Rate Indicator in the Timeline Window and shall also be displayed at the bottom of the Timeline Window in the parameter Section.	0,02		
R-HMI-0910	AMAN HMI shall allow authorized users to manually modify the LVP SPACING by setting the minimum separation (NM) between two subsequent flights on the same runway, selecting from a pre-defined set of LVP spacing. The arrival spacing change shall be displayed as Runway Spacing Indicator in the Timeline Window and shall also be displayed at the bottom of the Timeline Window in the parameter Section.	0,02		

R-IRQ-0020	The ENV Interface shall be able to receive the following environmental data: • Fixes; • Aerodromes; • Sectors; • Geographical Volumes;	0,2		
R-IRQ-0030	The ENV Interface shall exchange data via EUROCONTROL FMTP (“Flight Message Transfer Protocol”) as defined in the community specification N.0100 Edition 2.0[].	0,2		
R-IRQ-0040	The ENV Interface shall be able to receive data using the XML format following the specification provided by ENAV during Project Definition Phase.	0,1		
R-SPV-0020	The Supervision shall monitor the actual status of the following components: • AMAN hardware (Client, Server, LAN); • AMAN software; • AMAN interface with SATCAS (FDPS, RDPS, ENV). specifying when any of it has a failure.	0,10		
R-SPV-0070	The AMAN Supervision system shall allow the Technical Supervisor to perform the following class of actions towards managed objects: • stop, start, restart, enable, disable : o RDPS acquisition; o FDPS acquisition; o HMI communication; • start, stop, restart one or more logical sector; • stop, (re)start : o AMAN HW o AMAN SW; o Any server; o Any AMAN process • restart NTP synchronization on a server;	0,10		
R-RBP-0010	Video recording & playback system shall encompass all the data produced and managed by AMAN and displayed on dedicated AMAN HMI.	0,10		
R-RBP-0020	Video recording & playback system shall allow the replay of all AMAN operations for each Logical Position.	0,10		
R-DAF-0010	AMAN shall collect statistical data for the following sources: • FDPS (flight plan data including actual landing time); • RDPS (ModeS and path monitoring data); • AMAN (Sequence and advisory data) .	0,10		

R-DAF-0020	AMAN shall record, for each inbound flight, at least the following data : • CALLSIGN; • SSR CODE; • Aircraft ModeS; • Aircraft Type; • Departure Aerodrome; • Entry Fix; • Time/date and level at Entry fix; • Initial Estimated Time of Landing; • Initial Track Miles inside a pre-defined area; • Initial Delay; • Initial Runway in use; • Initial flight route; • Landing rate; • Actual time/date of landing; • Actual landing Runway; • Actual flown radar tracks; • Actual Track Miles inside a pre-defined area.	0,10		
R-NOF-0010	The System shall notify that AMAN server has a failure, removing all the obsolete information if the failure holds for more than 10 seconds.	0,10		
R-NOF-0020	The System shall notify that SA adapter has a failure, removing all the obsolete information if the failure holds for more than 10 seconds.	0,10		
R-NOF-0030	The System shall be able to manage up to 128 geographical volumes aggregated into a maximum of 50 logical sectors.	0,10		
R-NOF-0040	The System shall be able to manage up to 900 active flights (up to 120 flights for each logical sector)	0,10		
R-NOF-0050	The System shall be able to manage up to 1024 radar track	0,10		
R-NOF-0060	The System shall be able to manage up to 100 dedicated AMAN HMIs	0,10		
R-NOF-0070	The System shall be able to manage up to 50 geographical points for each trajectory.	0,10		
R-NOF-0080	The System shall, at initialization, compute the whole situation and to distribute it to dedicated AMAN HMIs in less than 2,5 minutes.	0,10		
R-NOF-0090	The System shall, upon any connection lost, re-compute the whole situation and to re-distribute it to dedicated AMAN HMIs in less than 30 seconds without any resource locking.	0,10		
R-NOF-0100	The System shall, upon AMAN server failure, re-compute the whole situation and to re-distribute it to dedicated AMAN HMIs in less than 30 seconds without any resource locking.	0,10		
R-NOF-0110	The System shall, upon FDPS failure, re-compute the whole situation and to re-distribute it to dedicated AMAN HMIs in less than 2,5 minutes without any resource locking.	0,10		
R-NOF-0120	The System shall manage a change of Sector configuration in less than 15 seconds.	0,10		
R-NOF-0130	The System shall be able to accept up to 11 dedicated AMAN HMIs requests per minute.	0,10		
R-NOF-0140	The System shall compute a dedicated AMAN HMIs request in less than 1000 milliseconds (of which 700 milliseconds spent for AMAN server elaboration).	0,10		

R-NOF-0150	The System shall update, upon new flight plan insertion or flight plan modification, the presented information in less than 2,5 seconds.	0,10		
R-NOF-0160	The System shall elaborate a sector absorption/splitting in less than 15 seconds.	0,10		
R-NOF-0170	The Availability of AMAN system shall be greater than 0.9999. Note: 0.9999 is more or less 5 minutes per month.	0,10		
R-TEC-0010	AMAN server shall be able to synchronize its clock with other SATCAS components via NTP protocol.	0,10		
R-TEC-0020	Each HW component of the system (both servers and clients) shall maintain a CPU occupancy less than 50%.	0,10		
R-SFW-0060	The Software developed in this program shall be developed with a technology that ensures an high degree of portability and uses COTS hardware.	0,4		