UID	BMA Non-Functional Requirement	DaaP Layer	DaaP Service	DaaP Sub-Service	MoP (Threshold)	MoP (Objective)	Remarks	BMA Key?	
BMA_NFR-1001	The BMA shall provide an intuitive Graphical User Interface to the User.	User Access Services	User Experience & Interface Design		Applications to be designed to present information in a standard format (e.g. buttons or menus to be located in a similar place.) and follow a common OS. Applications shall display application information in a readable format, in accordance with the accreditor. Applications shall guide the [User] through the input of application data in a logical manner Applications shall check the validity of data entered in to data fields The system shall enable a [User] to create and utilise shortcuts to carry out functional tasks.	Applications to be designed in accordance with a published style guide. Applications shall display application information in a readable format in accordance with JSP 101 In accordance with Reference GVA DefStan 23-09, Issue 3, Part 2, HMI Design Applications shall guide the [User] through the input of application data in a logical manner Applications shall check the validity of data entered in to data fields The system shall enable a [User] to create and utilise shortcuts to carry out functional tasks.	Applications to follow a common OS or application such as Windows/Office to rationalise training burden and familiarity.	Not Key	P3
BMA_NFR-1002	The BMA shall be capable of displaying information in a manner optimised for different lighting conditions. ⍰	User Access Services	User Experience & Interface Design		All Applications will operate in lighting from day to night and within vehicles and tents without compromising night vision In accordance with DefStan 00-35 and the GVA DefStan 23-09 HMI Standards As agreed with the Authority	As Threshold	HMI work on colour mixes	Not Key	P3
BMA_NFR-1003	The BMA shall be capable of being utilised whilst stationary.	User Access Services	User Experience & Interface Design		For all applications designed for use when the [Platform] is stationary the Graphical User Interface shall be suitable Where possible the design methodology follows the *Style Guide*	As Threshold		Key	Key
BMA_NFR-1004	The BMA shall be capable of being utilised whilst [On The Move].	User Access Services	User Experience & Interface Design		For all applications designed for use on the move the Graphical User Interface shall be suitable for use on the move at all the [Platform]'s operational speeds including a Tactical pause Where possible the design methodology follows the *Style Guide*	As Threshold	When on the move and in contact, GUI must be optimised to work with HMI devices suitable for these conditions. Likely to require using large soft keys and on-screen buttons. Work by GVA into the use of GUIs is underway.	Key	Key

UID	BMA Non-Functional Requirement	DaaP Layer	DaaP Service	DaaP Sub-Service	MoP (Threshold)	MoP (Objective)	Remarks	BMA Key?	
BMA_NFR-1005	The BMA shall be capable of being utilised whilst in contact.	User Access Services	User Experience & Interface Design		For applications designed for use in contact the Graphical User Interface shall be suitable for use at the [Platform]'s operational speeds and when the [Platform]'s operational systems are active	As Threshold	When on the move and in contact, GUI must be optimised to work with HMI devices suitable for these conditions. Likely to require using large soft keys and on-screen buttons	Key	Key
BMA_NFR-1006	The BMA shall provide simple context sensitive help for all functionality.	User Access Services	User Experience & Interface Design		Including all [Approved Applications] Context sensitive to the action being performed by the user Context sensitive to the application being used by the User In depth context sensitive help provided to the User in a plain English format Help functionality available when connected to and when disconnected from the network	As Threshold		Not Key	P3
BMA_NFR-1007	The BMA shall provide intuitive interface for the input and manipulation of data.	User Access Services	User Experience & Interface Design		To include but not limited to: auto-population, error prevention, clearly visible options and actions, appropriate feedback, prompts.	As Threshold		Not Key	P3
BMA_NFR-1008	The BMA shall enable Users to utilise functionalitywhen network connectivity is not available.	User Access Services	Accessibility		Able to access all functionality that does not require data transmission over the network. Does not apply to functionality requiring network connectivity.	As Threshold		Key	Key
BMA_NFR-1009	The BMA shall have a defined set of interfaces including APIs.	User Applications	Applications Governance		To be agreed by the Authority	As Threshold	To enable other [Approved Applications] can utilise existing functionality	Key	Key
BMA_NFR-1010	The BMA shall access and reuse [Common Services].	User Applications	Applications Governance		Including (where appropriate) but not limited to: Location Time IdAM Directory Services	As Threshold		Not Key	P3

UID	BMA Non-Functional Requirement	DaaP Layer	DaaP Service	DaaP Sub-Service	MoP (Threshold)	MoP (Objective)	Remarks	BMA Key?	
BMA_NFR-1011	The BMA shall utilise existing Services and Functionality.	User Applications	Applications Governance		To re-use services in accordance with JSP906 (Principle of Reuse), services including but not limited to: Messaging Chat / Instant Messaging Mission Planning Geospatial Services Operating Picture Office Automation Able to re-use wider [Platform] services and functionality where provided via the TIF and/or the Application Hosting COE.	As Threshold		Not Key	P3
BMA_NFR-1012	The BMA shall use common data stores and [Reference Information]	User Applications	Applications Governance		One set of authoritative source data to be available for use by all services and applications, either locally or remotely depending on bandwidth. Source data to be updated when bandwidth is available.	As Threshold		Not Key	P3
BMA_NFR-1013	The BMA shall make efficient use of System and [Platform] resources.	User Applications	Applications Governance		The application will demonstrate to the Authority the efficient use of resources including but not limited to: power network memory storage Applications accredited by appropriate Design Authority	The application will demonstrate to the Authority the most efficient use of resources including but not limited to: power network memory storage Applications accredited by appropriate Design Authority		Not Key	P3
BMA_NFR-1014	The BMA shall provide published Application Programming Interfaces (APIs) to enable all hosted [Approved Applications] to access and reuse functionality already delivered by other applications and [Services].	User Applications	Applications Governance		Published API provided to the authority. Authority able to share with third parties, including third parties independent of the original developer without cost	Published API provided to the authority. Authority able to share with third parties, including third parties independent of the original developer without cost. Industry standard APIs, wherever appropriate, are used (as agreed at the TAF).		Not Key	P3
BMA_NFR-1015	The BMA shall utilise [Platform] data from [Platform] systems, where they are provided by the TIF and/or Application Hosting COE.	User Applications	Operating Picture	Inputs	Platform Data may include but is not limited to: Orientation of hull and turret Commander's field of view, Details of lased target Platform data displayed in units of measure as defined in User Story 7 and 112	As Threshold	Future growth to include gathering data from soldier systems using GSA	Not Key	P3

UID	BMA Non-Functional Requirement	DaaP Layer	DaaP Service	DaaP Sub-Service	MoP (Threshold)	MoP (Objective)	Remarks	BMA Key?	
BMA_NFR-1016	The BMA shall concurrently handle multiple [Geo-positioned Objects].	User Applications	Operating Picture	Engine (Picture Processing)	1,000,000,000 [Geo-positioned Objects] concurrently held, used and managed within the system including all attached [Information].	As Threshold		Not Key	P3
BMA_NFR-1017	The BMA shall concurrently handle multiple [Tracks].	User Applications	Operating Picture	Engine (Picture Processing)	1,000,000 [Tracks] concurrently held, used and managed within the system including all attached [Information].	As threshold		Not Key	P3
BMA_NFR-1018	The BMA shall simultaneously display multiple independent [Geo-positioned Objects].	User Applications	Operating Picture	Display	20,000 independent [Geo-positioned Objects] simultaneously displayed through multiple users of the GIS (up to, at least, 10 applications per terminal) including all attached [Information].	As Threshold		Not Key	P3
BMA_NFR-1019	The BMA shall be capable of being installed quickly and efficiently	Technology Services	Hosting	Application Hosting	Authorised Users are able to install applications whilst deployed without unintentional modification to or inhibition of other applications/services	As Threshold	To ensure that any User can install their permitted [Approved Applications] whilst deployed	Not Key	P3
BMA_NFR-1020	The BMA shall enable the system to maintain a record of all information required by ORK policy	Technology Services	Archive & Retrieval		All [Information] (and associated metadata) defined in the Land Force Standing Order 1120.	As Threshold	Placeholder, need to investigate ORK further	Not Key	P3
BMA_NFR-1021	The BMA shall utilise the authoritative BMA time source.	Technology Services	Common Services	Time	In accordance with the Synchronised Time Service.	As Threshold		Not Key	P3
BMA_NFR-1022	The BMA shall provide a display redundancy that enables the differentiation of icons other than by using colour	User Devices	Display		Display approach to be agreed by the Authority	As Threshold		Not Key	P3
BMA_NFR-1023	The BMA shall be capable of displaying data across multiple screens	User Devices	Display		Capable of being split or mirrored across 2 display devices Able to interact from the Users own device	Capable of being split or mirrored across 8 display devices		Not Key	P3
BMA_NFR-1024	The BMA shall not prevent the system from displaying interfaces for multiple applications and/or services on the screen simultaneously	User Devices	HMI		Can display all concurrently running application interfaces	As Threshold		Not Key	P3
BMA_NFR-1025	The BMA shall demonstrate compliance with current and impending Environmental Legislation.	Constraints	Safety		Evidence of compliance in System Environmental case	As Threshold		Not Key	P3
BMA_NFR-1026	The BMA shall facilitate integration into the collective training environment	Constraints	Training		The BMA shall provide the User with the ability to take part in collective training in accordance with role. This should include all centralised (CAST, CATT, FTU, BATUS, BATUK, BATSUB) and decentralised (BC2T) collective constructive, virtual and live simulation BMAs	As Threshold	In conjunction with TSSP	Key	Key
BMA_NFR-1027	The BMA shall minimise the need for formal continuation training	Constraints	Training		Skills and competence levels are maintained, without the need for re-training	As Threshold		Not Key	P3

UID	BMA Non-Functional Requirement	DaaP Layer	DaaP Service	DaaP Sub-Service	MoP (Threshold)	MoP (Objective)	Remarks	BMA Key?	
BMA_NFR-1028	The BMA software shall meet or exceed reliability targets.	Constraints	ILS	Reliability and Maintainability	Appropriate supporting data and/or empirical evidence from field trials and/or operational use, as agreed with the Authority.	As Threshold		Not Key	P3
BMA_NFR-1029	The BMA shall have robust and resilient software.	Constraints	ILS	Software Support	Number of system failures attributable to the BMA shall be zero.	As Threshold		Not Key	P3
BMA_NFR-1030	The BMA shall ensure that all software items that comprise the BMA are identified.	Constraints	ILS	Software Support		As Threshold		Not Key	P3
BMA_NFR-1031	The BMA shall ensure that the source of all software items is stated.	Constraints	ILS	Software Support		As Threshold		Not Key	P3
BMA_NFR-1032	The BMA shall ensure that the type of all software items is stated (i.e. bespoke, COTS and modified COTS).	Constraints	ILS	Software Support		As Threshold		Not Key	P3
BMA_NFR-1033	The BMA shall ensure that the support concept for all software items is stated.	Constraints	ILS	Software Support		As Threshold		Not Key	P3
BMA_NFR-1034	The BMA shall ensure that any approaches detailing how the software development environment will be managed through-life are stated.	Constraints	ILS	Software Support	Evidence or statements provided by product supplier, as agreed with the Authority.	As Threshold		Not Key	P3
BMA_NFR-1035	The BMA shall ensure that any approaches detailing how the application of standards will be managed through-life are stated.	Constraints	ILS	Software Support	Evidence or statements provided by product supplier, as agreed with the Authority.	As Threshold		Not Key	P3
BMA_NFR-1036	The BMA shall be supplied such that the human related aspects of design, development and support are addressed.	Constraints	HFI		In accordance with DefStan 00-251.	As Threshold		Not Key	P3

UID	BMA Non-Functional Requirement	DaaP Layer	DaaP Service	DaaP Sub-Service	MoP (Threshold)	MoP (Objective)	Remarks	BMA Key?	
BMA_NFR-1037	The BMA shall have a consistent use of language and symbology	Constraints	HFI		Across all aspects of the Application.	As Threshold	Compliance with Def Stan 23-009, 23-012 & 23-013 and JSP 912, in accordance with contract as agreed with the Authority Current most up to date version of Def Stan 23-009 (in August 2016) is: Part No: 0, Issue No: 3 dated 22/03/2013; Part No: 1, Issue No: 3 dated 30/04/2013; Part No: 2, Issue No: 3 dated 17/05/2013; Part No: 3, Issue No: 3 dated 25/07/2016 Current most up to date version of Def Stan 23-012 (in August 2016) is: Issue No: 1 dated 14/06/2013 Current most up to date version of Def Stan 23-013 (in August 2016) is: Issue No: 1 dated 30/09/2014 At time of writing, current most up to date version of JSP 912 (in Nov 2016) is: V1.0 Dec 15. Relevant parts are: Part 1 - Directive; and Part 2 - Guidance.	Not Key	P3
BMA_NFR-1038	The Contractor shall design the BMA to operate within the constraints of the EvO Accreditation Framework.	Constraints	Security		In accordance with JSP 440 and the EvO Accreditation Framework	As Threshold		Key	Key
BMA_NFR-1039	The BMA shall operate within the constraints of the EvO secure configuration baseline and shall not introduce additional security vulnerabilities without approval of the Authority.	Constraints	Security		In accordance with the EvO secure configuration baseline and the MORPHEUS Target System Architecture	As Threshold		Key	Key
BMA_NFR-1040	The BMA shall operate within the constraints of the EvO security management provisions and protect the BMA configuration from unauthorised modification and tampering.	Constraints	Security		In accordance with the EvO Security Management Plan and the MORPHEUS Target System Architecture	As Threshold		Key	Key
BMA_NFR-1041	The BMA shall protect the exchange of information messages internally and externally including integrity, authenticity and content checking.	Constraints	Security		In accordance with JSP 440 and the MORPHEUS Target System Architecture	As Threshold		Key	Key
BMA_NFR-1042	The BMA shall integrate with the EvO Identity and Access Management (IdAM) services to authenticate and determine permissions applied to authorised users and roles.	Constraints	Security		In accordance with the MORPHEUS Target System Architecture	As Threshold		Key	Key

UID	BMA Non-Functional Requirement	DaaP Layer	DaaP Service	DaaP Sub-Service	MoP (Threshold)	MoP (Objective)	Remarks	BMA Key?	
BMA_NFR-1043	The BMA shall ensure that data held and processed by the BMA applies the correct classification and labelling information to support the EvO information handling model, access control model and information exchange requirements.	Constraints	Security		In accordance with the MORPHEUS Target System Architecture	As Thresold		Key	Key
BMA_NFR-1044	The BMA shall operate to maximise service availability within the constraints of the EvO TIF including backup and recovery functions.	Constraints	Security		In accordance with the MORPHEUS Target System Architecture	As Threshold		Key	Key
BMA_NFR-1045	The HMI used to operate and control the System shall conform to the requirements of Def-Stan 23-09	Constraints	Land Integration	GVA	Compliant with the latest version of Def-Stan 23-09 Part 2	As Threshold		Not Key	P3
BMA_NFR-1046	The HMI used to display System information shall conform to the requirements of Def-Stan 23-09	Constraints	Land Integration	GVA	Compliant with the latest version of Def-Stan 23-09 Part 2	As Threshold		Not Key	P3