On-Line Boats and Moorings Requirements Traceability Matrix

Bidders are asked to indicate if they can (yes) or cannot (no) meet each requirement from 1.0 to 14.2 and to return the completed table with their proposal (twelve (12) pages)

Requirement #	Requirement Description	User Interface Description	Meet requirement Yes/ No.
	USER INTERFACE (UI)	Usability	
1.0	The BMA will have a User Interface (UI) created.	Usability	
1.1	The BMA will be accessed via the internet using a public URL.	Usability	
1.2	The BMA will display the Government of Bermuda, Cabinet Office, Department of Marine & Ports and the Bermuda Crest on all UI's and web pages	Usability	
1.3	The BMA must be viewable via mobile devices, computers and tablets.	Usability	
1.4	The BMA will perform a browser check to detect the user's browser. If BMA it is not compatible with the browsers a pop-up box will be displayed to the user with a message that their browser needs to be upgraded to IE 11 or they must use one of these browsers: IE 11 and above, Chrome, Safari and Firefox.	Usability	
1.5	The BMA must be compatible with IE 10 and above, Chrome, Safari and Firefox.	Usability	
1.6	The BMA must be available to users 24/7.	Usability	
1.7	The BMA performance must be able to accept up to 100 concurrent users.	Usability	
1.8	The BMA must use a SSL Certification.	Usability	
1.9	The BMA will include the UI for Login and Password for each user to access their boats and moorings information.	Usability	
1.10	The BMA UI will include a "Forgot Password" option on the login page	Usability	
1.11	The BMA UI include a "Forgot Username" option on the login page	Usability	

Requirement #	Requirement Description	User Interface Description	Meet requirement Yes/ No.
	REGISTERED BMA USERS		
2.0	All BMA users MUST have a valid email address	User Information	
2.1	The BMA will display information related to the users registered boat(s), mooring(s) pylon(s) or floating dock(s) via an option on the web page	User Information	
2.2	The BMA will display any joint ownership for boats, moorings or floating docks.	User Information	
2.3	The BMA will display any outstanding fees owed by the user	User Information	
2.4	The BMA will display the user's account balance	User Information	
2.5	The BMA will allow the user to re-print all past invoices and payment receipts.	User Information	
2.6	The BMA will allow the registered user to add another person to be able to submit payments for boats, moorings and floating docks.	User Information	
2.7	The BMA will allow the user to re-register their boat(s), mooring(s) pylon(s) or floating dock(s) online	User Information	
2.8	The BMA will allow the users to make payments online	User Information	
2.9	The BMA will display any joint ownership for boats, moorings and floating docks on the user and clerk screen	User Information	
Requirement #	**Requirement Description**	**User Interface Description**	**Meet Requirement Yes/ No**
	INTERNAL USERS		
3.0	The BMA will have two levels of internal users: Administrator and Clerk	Admin Functions	
3.1	The BMA will provide the Administrators utility to create and manage other administrators.	Admin Functions	
3.2	The BMA will have Clerk accounts with restricted access to functions defined by the Administrator	Admin Functions	
3.3	The BMA will have the ability for all internal users to reset their passwords via a link sent to their email address.	Admin Functions	
3.4	Only the Administrator can create or change passwords for external users.	Admin Functions	
3.5	The BMA will provide the Administrators' a screen to provide tracking of inspections and investigations and their progress.	Admin Functions	
3.6	The Administrator can assign Administrator functions to a clerk as either full or restricted access	Admin Functions	
3.7	The Administrator will have full access to all UI's in the application.	Admin Functions	
3.8	The "Administrator Clerk" will have access to UI's as defined by the Administrator.	Admin Functions	
3.9	The vendor will create an administrative manual.	Admin Functions	

Requirement #	Requirement Description	User Interface Description	Meet requirement Yes/ No.
	USER LOGIN		
4.0	Users can not use the same password during 3 password changes	Login	
4.1	The BMA UI will include a "Forgot Password" option on the login page	Login	
	The BMA UI will include a "Forgot Username" option on the login page	Login	
4.2	The BMA will require the external user to enter their account name and password when signing on	Login	
4.3	The BMA will not allow user accounts to be created online	Login	
4.4	The BMA will require all users to answer three security questions at initial sign on. The answers will be stored with the users account information and used for password or username recovery.	Login	
4.5	The BMA will send a password recovery link to the users email address in the event of a forgotten password.	Login	
4.6	All clerk and administrator account access is restricted to internal access, no access outside the government network	Login	
Requirement #	**Requirement Description**	**User Interface Description**	**Meet requirement Yes/ No.**
	EMAIL FUNCTIONS		
5.0	The application will allow the user to send an email to a specified MPS email address and receive an answer from the Administrator or Clerk via the users' e-mail.	Email	
5.1	The BMA will allow the Administrator to send email notices to a specific user or groups of users	Email	
Requirement #	**Requirement Description**	**User Interface Description**	**Meet requirement Yes/ No.**
	FINANCIAL PROCESS REQUIREMENT	Financial	
6.0	The BMA will automatically calculate fees owed based on when fees are paid (before deadline or late)	Financial	
6.1	The BMA will automatically calculate late fees for an registration performed after May 31 of any year	Financial	
6.2	The BMA will automatically calculate whether an owner has a credit based on fees paid	Financial	
6.3	The BMA will automatically calculate any fees owed inclusive of late fees	Financial	
6.4	Outstanding fees for boats, moorings, floating docks and pylons are transferred to new owner	Financial	

Requirement #	Requirement Description	User Interface Description	Meet requirement Yes/ No.
6.5	The BMA will display an itemized list of fees owed by owner by separating each fee owed	Financial	
6.6	Ability to block online payments from unauthorized people as specified by the owner	Financial	
6.7	Payments can be split into/across credit card, check and cash for walk-in customers only and be applied to one item (boat, mooring, etc.) at a time.	Financial	
Requirement #	**Requirement Description**	**User Interface Description**	**Meet requirement Yes/ No.**
	FORMS		
7.0	The BMA will have online forms that users can complete while online	Forms	
7.1	The BMA will allow for users to print or PDF their form for their records.	Forms	
7.2	The BMA will allow the user to download or print forms.	Forms	
7.3	THE BMA will allow users to send completed forms to the MPS via email	Forms	
7.4	Existing forms used by MAP must be made available online. See forms attachment for forms	Forms	
7.5	All online forms must be in PDF format	Forms	
Requirement #	**Requirement Description**	**User Interface Description**	**Meet requirement Yes/ No.**
	AUDIT LOGS		
8.0	BMA must log all changes, deletions, payments, and additions etc. that are performed by any user	Logging	
8.1	The BMA audit logs will record the date and time of the change, deletion and additions.	Logging	
8.2	Audit logs will be kept indefinitely	Logging	
8.3	Only the Administrator will have access to the log files to run reports	Logging	
Requirement #	**Requirement Description**	**User Interface Description**	**Meet requirement Yes/ No.**
	BOAT REGISTRATION		
9.0	Only new boats are pro-rates based on when registered. Ex after deadline	Boat Registration	
9.1	If boat is joint owner, application will show joint ownership	Boat Registration	
9.2	New boat registration number is assigned after the class of boat is selected	Boat Registration	
9.3	When creating an owner account the boat details can be recorded	Boat Registration	
9.4	The same account for joint owned boats will be used by all owners and linked to the boat	Boat Registration	

9.5	Outstanding fees are transferred to new owner	Boat Registration	
9.6	New boat registration number is assigned after the class of boat is selected	Boat Registration	
9.7	When a boat is renamed, the BMA will archive the boat information of the renamed boat	Boat Registration	
9.8	When a boat, mooring, floating dock, pylon, etc., owner dies, the BMA will allow registration/renewal/transfer blocks / postponements be placed on the boat, mooring, floating dock, pylon, etc,. by the clerk or administrator.	Boat Registration	
9.9	When a boat, mooring, floating dock, pylon, etc., owner dies, the BMA will allow the clerk or administrator to block / postpone all online transaction to the account.	Boat Registration	
9.10	When registration/renewal/transfer blocks / postponements are placed on a boat, mooring, floating dock, pylon, etc., the BMA will deactivate the payment option.	Boat Registration	
9.11	The BMA will allow the clerk or administrator to block any user account from processing any transactions associated to the account owner.	Boat Registration	
9.12	The BMA will require the clerk or administrator to record a reason why the block was placed and record the date and time of the block.	Boat Registration	
9.13	Allow registration of multiple boats with the same name.	Boat Registration	
9.14	Blockings or postponements of transactions must create an alert on the screen of the clerk when reviewing or changing details for a boat, mooring, floating dock or pylon.	Boat Registration	
9.15	Blockings or postponements of transactions are selectable from a dropdown list	Boat Registration	
9.16	Ability to register boats with up to 4 engines	Boat registration	
Requirement #	**Requirement Description**	**User Interface Description**	**Meet requirement Yes/ No.**
	REPORTS	Reports	
10.0	The application will provide reports to be run by the Administrator from a reports menu	Reports	
10.1	The individual reports should include: a) Fees collected during a selectable period b) Number of boats registered during a selectable period c) Number of moorings registered during a selectable period d) Number of charter boats registered during a selectable period e) Number of private boats registered during a selectable period f) Number of pylons registered during a selectable period	Reports	

Requirement #	Requirement Description	User Interface Description	Meet requirement Yes/ No.
	g) Number of floating docks registered during a selectable period h) Show deactivated boats attached to a mooring i) Moorings with no boat attached for 1 years or more j) Moorings without a boat attached k) Number of boats unregistered during a selectable period l) Number of moorings unregistered during a selectable period m) Number of floating docks unregistered during a selectable period n) Number of pylons unregistered during a selectable period		
10.2	The BMA will provide the ability to produce ad hoc reporting using any of the fields in the database from dropdown lists	Reports	
10.3	The reports and data from the database can exported in ASCII and CSV formats.	Reports	
10.4	The BMA will provide the Administrator the ability to run audit reports against specific dates and external or internal users	Reports	
10.5	The BMA will generate a report of all boat inspections due for a selectable period	Reports	

	PAYMENTS AND RECEIPTS	Payments and Receipts	
11.0	Batch print online payments and receipts to the M&P printer	Payments and receipts	
11.1	External users are able to print present or past receipts or download them as PDF	Payments and receipts	

	CERTIFICATE AND DECAL PRINTOUTS	Certificates / Decals	
12.0	Boat decal printout to include the following Bermuda Marine & Ports (static text) along the top Expiry Date Registration # Boat Name (new field added to decal) Boat Registration (static text) along the bottom Boat Color Boat Construction See Appendix *** for sample of existing boat decal	Certificates and Decals	
12.1	Existing template layout for printing the "Certificate of Boat Registration" and decal will be used	Certificates and Decals	
12.2	Existing template layout for printing the "Certificate of Mooring Registration" and decal will be used	Certificates and Decals	
12.3	Certificates for Charter boats will also print the boat length and haul identification on the decal	Certificates and Decals	

Requirement #	Requirement Description	User Interface Description	Meet requirement Yes/ No.
12.4	Certificate for Rental vessels will print the vessel name and length of vessel on the decal	Certificates and Decals	
12.5	Auto generate a $27.00 fee and change to owner when requesting a replacement decal	Certificates and Decals	
Requirement #	**Requirement Description**	**User Interface Description**	**Meet requirement Yes/ No.**
	Functionality	Functionality	
13.0	The BMA will have drop down list for the following fields: Engine Type Engine Make Class of Boat	Functionality	
13.1	Registration numbers for all boats, moorings, pylons and floating docks will have the first character of the class in front the registration number Charter gets M in front the registration number Rental gets "R" in front the registration number Floating docks get "F" in front the registration number Pylons get a P in front the registration number Jet Ski gets a J in front the registration number Kayak gets a K in front of the registration number	Functionality	
13.2	All inspections by a M&P officer must be recorded in the application and inspection form attached to the account/owner	Functionality	
13.3	M&P officer able to print last inspection details from system to be used during present inspection	Functionality	
13.7	Blockings or postponements of transactions are selectable from a dropdown list	Functionality	
13.8	Transfers of any boat will list all the history of the boat from the initial registration	Functionality	
13.9	Registration number of a boat remains the same whether the boat is sold or transferred	Functionality	
13.10	All boat history will include the following details: Registration number Previous owner account number Previous owner name Existing owner account number Existing owner name Description of boat Data and time of transaction	Functionality	
13.11	No late fees are applied to new boats	Functionality	
13.12	New boat registration fees are pro-rated from June 1 – March 31	Functionality	
13.13	Existing boats will pay late fee based on type of boat	Functionality	
13.14	The BMA will allow for administrator to change rate fees	Functionality	
13.15	The BMA will automatically apply a late fee to all late registrations on June the 1st of each year for moorings, pylons and floating docks	Functionality	
13.16	Credits will show on the owners account	Functionality	

13.17	Owner will be able to apply credits to any boat, mooring, etc. listed under their account	Functionality	
13.18	Payment methods will be: Cash Credit card Check Government Account	Functionality	
13.19	Receipt number is auto generated upon completion of the payment transaction	Functionality	
13.20	The BMA will prompt the external user to either print the receipt or Email as a PDF	Functionality	
13.21	If the user is a clerk, the receipt will auto print in the office	Functionality	
13.22	Payment history can be printer by either the owner or clerk	Functionality	
13.23	Receipt history will show all payment details	Functionality	
13.24	Only the clerk or administrator can cancel a payment transaction	Functionality	
13.25	Cancelled payment transactions are easily identifiable with a check mark when viewing the receipt history of owner	Functionality	
13.26	Clerk or administrator cancelling a payment transaction will be prompted to enter the required reason for the cancellation	Functionality	
13.27	Receipt history can be printer by either the owner or clerk	Functionality	
13.28	Payment history details will show: Any outstanding fees owed Owner account number Registration number of boat, mooring, etc. Category of boat Description	Functionality	
13.29	Administrator is able to generate random reports bases on table and field selections from drop down list	Functionality	
13.30	Disputes/incidents will be added as a new feature in the new application for boats, moorings, pylons and floating docks.	Functionality	
13.31	Additional documents related to a dispute/incident reports will be scanned and attached to the appropriate owners account	Functionality	
13.32	Disputes/ incidents will include names of both parties, date of dispute, boat, mooring, pylon or floating dock number, location, investigating M&P officer, status and outcome	Functionality	
13.33	The new system will allow for scanned documents to be attached to a registered owners account for future reference	Functionality	
13.34	The system will recycled mooring registration numbers if the mooring is cancelled	Functionality	
13.35	Disputes/incidents closed or ongoing can be viewed by month and year	Functionality	

13.36	The system will allow for searching all history (payments, receipts and disputes/incidents by registration number account number and name	Functionality	
13.37	Boat history will be kept indefinitely	Functionality	
13.38	All transactions will be logged in a log file	Functionality	
13.39	Transaction logs will include name of owner or clerk performing the transaction, date and time of transaction and type of transaction made (payment, change to owner account, etc.)	Functionality	
13.40	The data from the MS Access data will be migrated to the new application	Functionality	
13.41	The BMA will have a button to allow clerk or administrator to add several joint owners	Functionality	
13.42	Existing data from old system will be migrated.	Functionality	
13.43	All history records will be preserved.	Functionality	
13.44	On the clerk's main screen, the list of boats, moorings, pylons, floating docks, etc., are separated in groups.	Functionality	
13.45	Special accounts for Police and RCC will be created to allow read only access from the web page to display boat, moorings, pylons, and etc. information.		
13.46	Police accounts will be allowed to perform restricted searches by registration number, expiration date, boat description (color and length of boat) and display picture of boat if available.	Functionality	
	RCC accounts will be allowed to perform restricted searches by registration number, expiration date, contact numbers, boat description (color and length of boat) and display picture of boat if available.		
13.47	Web site will auto adjust for whether the user is accessing from a desktop or mobile device	Functionality	
13.48	The BMA will allow the clerks and the administrator to perform searches by name, boat color, registration number, etc.	Functionality	
13.49	The BMA will allow for pdf, jpg, etc. documents to be attached to a user's account for future reference	Functionality	
13.50	Optional the BMA will allow for scanning and attaching documents directly into the application and linked to an account.	Functionality	
13.51	The BMA will auto deactivate all boats that have not been relicensed for 2 years or more.	Functionality	
13.52	The BMA will show on the clerks UI a moorings owner that has a fishing license	Functionality	
13.53	The clerks UI will flag a mooring without a boat attached for a user	Functionality	
13.54	The BMA will allow the clerk or administrator to perform searches for boats by color, length, make, inboard/outboard and type.	Functionality	
13.55	The BMA will not allow entering long distance area codes for contact numbers	Functionality	

Requirement #	Requirement Description	Printing Description	Meet requirement Yes/ No.
13.56	The BMA will not allow entering overseas addresses for owner or contact information	Functionality	
13.57	The BMA will allow for the external user, to view their profile information only	Functionality	
13.58	The BMA will allow the clerk or administration to view, open or print any document/picture attached to a user's account,	Functionality	
13.59	The BMA will allow for searching by joint owners	Functionality	
13.60	The BMA will display the owners driver's license or some form of valid picture ID on the clerks screen for an owner/account holder	Functionality	
13.61	When owner account transfers are performed, (upon decease) the account name is changed only if new owner does not have an account	Functionality	
13.62	The BMA will include a field permitting inclusion of vessel photographs	Functionality	
13.63	Vessel inspection fields should include a MMSI field (inserting a 9 digit number) and an AIS field (yes/no).	Functionality	
Requirement #	**Requirement Description**	**Printing Description**	**Meet requirement Yes/ No.**
	Printing	Printing	
14.0	The BMA will allow the clerk to batch printing of all receipts and decals for all online payments made the previous day, this will normally be done first thin each morning	Printing	
14.1	The BMA will allow the clerk to change the destination printer at any time prior to printing	Printing	
14.2	All print jobs sent from the BMA will be printed immediately, first in/first out	Printing	

End of Schedule II