# Technical Specification

This section will define the IDD for the data and touch point in the webservice based on data that required for integration between MMDIS and SPK.

## 1.1 Vessel Registration / Update

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Data** | | | | | |
| **Field** | **Type** | **Size** | **Format** | **Mandatory** | **Description** |
| vesselId | varchar | 40 |  | / | Vessel ID (Unique ID For Vessel) |
| typeOfRegistry | varchar | 4 |  | / | Vessel registration type: MSR, TSR, MISR |
| status | varchar | 2 |  | / | Vessel register status (**refer lookup lt\_general\_status\_gsts**) |
| callSignNo | varchar | 10 |  |  | Call sign Number |
| imoNo | varchar | 10 |  |  | IMO number |
| officialNo | varchar | 30 |  | / | Vessel official number |
| vesselName | varchar | 100 |  | / | Vessel name |
| vesselType | varchar | 5 |  | / | Vessel Type (**refer lookup lt\_vessel\_type\_vtyp**) |
| portOfRegistry | varchar | 5 |  | / | Port of Registry (**refer lookup lt\_ports\_prt**) |
| yearOfReg | varchar | 4 |  | / | Year registered |
| vesselValue | double | 11, 2 | 99999999999.99 | / | Vessel Value in Ringgit Malaysia |
| vesselHullMaterial | varchar | 3 |  | / | Vessel hull material (**refer lookup lt\_hull\_material\_hm**) |
| length | double | 8, 3 |  | / | Vessel length |
| breadth | double | 8, 3 |  | / | Vessel breadth |
| depth | double | 8, 3 |  | / | Vessel depth |
| grossTonnage | double | 8, 2 |  | / | Gross tonnage |
| netTonnage | double | 8, 2 |  | / | Net tonnage |
| deadWeight | double | 8, 2 |  | / | deadweight |
| engineDesc | varchar | 2 |  |  | Engine description (**refer lookup lt\_engine\_description\_ed**) |
| propulsion | varchar | 1 | P / N | / | Vessel propulsion (P = Self-Propel / N = Non-Propel) |
| propelType | varchar | 2 |  | / | Engine description (**refer lookup lt\_propel\_type\_pro**) |
| numberOfEngine | int |  |  | / | Number of engines |
| numberOfShaft | int |  |  | / | Number of shafts |
| dateOfKeelLaid | varchar | 10 | dd-MM-yyyy | / | Date build |
| placeOfBuilt | varchar | 50 |  | / | Place of built (Country Name) |
| builder | varchar | 500 |  | / | Vessel builder name |
| builderAddress1 | varchar | 500 |  | / | Vessel builder address 1 |
| builderAddress2 | varchar | 500 |  |  | Vessel builder address 2 |
| builderAddress3 | varchar | 500 |  |  | Vessel builder address 3 |
| speed | double | 8, 2 |  | / | Vessel speed |
| totalEnginePower | double | 8, 2 |  | / | Total engine power |
| totalCrew | int |  |  | / | Total Crew |
| previousName | varchar | 100 |  |  | Previous vessel name |
| previousPortOfRegistry | varchar | 5 |  |  | Previous Port of Registry (**refer lookup lt\_ports\_prt**) |
| dateRegProv | varchar | 10 | dd-MM-yyyy | / | Date register provisional |
| provExpiryDate | varchar | 10 | dd-MM-yyyy | / | Provisional Expiry Date |
| vesselRegisterDate | varchar | 10 | dd-MM-yyyy | / | Vessel register date |
| ownerType | varchar | 1 |  | / | Jenis owner  (1: Korporat @2: individu) |
| ownerId | varchar | 35 |  | / | Company number/ IC number/ passport |
| ownerName | varchar | 100 |  | / | Owner name |
| ownerAddress1 | varchar | 300 |  | / | Owner address 1 |
| ownerAddress2 | varchar | 300 |  |  | Owner address 2 |
| ownerAddress3 | varchar | 300 |  |  | Owner address 3 |
| ownerPostcode | varchar | 5 |  |  | Owner postcode |
| ownerState | varchar | 2 |  |  | Owner state (**refer lookup lt\_state\_stt**) |
| ownerCountry | varchar | 2 |  |  | Owner address: country (**refer lookup lt\_country\_ctry**) |
| ownerPhoneNo | varchar | 15 |  |  | Owner Phone Number |
| ownerFaxNo | varchar | 15 |  |  | Owner Fax number |
| ownerEmail | varchar | 40 |  |  | Owner Email address |
| auoId | varchar | 35 |  | / | Company number/ IC number/ passport |
| auoName | varchar | 100 |  | / | Authorize officer name |
| auoAddress1 | varchar | 300 |  | / | Authorize officer address 1 |
| auoAddress2 | varchar | 300 |  |  | Authorize officer address 2 |
| auoAddress3 | varchar | 300 |  |  | Authorize officer address 3 |
| auoPostcode | varchar | 5 |  |  | Authorize officer postcode |
| auoState | varchar | 2 |  |  | Authorize officer state (**refer lookup lt\_state\_stt**) |
| auoCountry | varchar | 2 |  |  | Authorize officer address: country (**refer lookup lt\_country\_ctry**) |
| auoPhoneNo | varchar | 15 |  |  | Authorize officer Phone Number |
| auoFaxNo | varchar | 15 |  |  | Authorize officer Fax number |
| auoEmail | varchar | 40 |  |  | Authorize officer Email address |
| managerId | varchar | 35 |  | / | Company number/ IC number/ passport |
| managerName | varchar | 100 |  | / | Manager name |
| managerAddress1 | varchar | 300 |  | / | Manager address 1 |
| managerAddress2 | varchar | 300 |  |  | Manager address 2 |
| managerAddress3 | varchar | 300 |  |  | Manager address 3 |
| managerPostcode | varchar | 5 |  |  | Manager postcode |
| managerState | varchar | 2 |  |  | Manager state (**refer lookup lt\_state\_stt**) |
| managerCountry | varchar | 2 |  |  | Manager address: country (**refer lookup lt\_country\_ctry**) |
| managerPhoneNo | varchar | 15 |  |  | Manager Phone Number |
| managerFaxNo | varchar | 15 |  |  | Manager Fax number |
| managerEmail | varchar | 40 |  |  | Manager Email address |

Figure 1: IDD for Vessel Registration

|  |  |
| --- | --- |
| **Method Integration** | REST Web Services |
| **Format** | JSON |
| **Staging URL** | https://mmdis.marine.gov.my/MMDIS\_DIS\_STG/spk/insertUpdateVessel |
| **Live URL** |  |
| **Auth** | - |
| **HTTP Method** | POST |
| **Request Body** | [      {          "vesselId": "",          "typeOfRegistry": "",          "status": "",          "callSignNo": "",          "imoNo": "",          "officialNo": "",          "vesselName": "",          "vesselType": "",          "portOfRegistry": "",          "yearOfReg": "",          "vesselValue": "",          "vesselHullMaterial": "",          "length": 0,          "breadth": "",          "depth": "",          "grossTonnage": "",          "netTonnage": "",          "deadWeight": "",          "engineDesc": "",          "propulsion": "",          "propelType": "",          "numberOfEngine": 0,          "numberOfShaft": 0,          "dateOfKeelLaid": "",          "placeOfBuilt": "",          "builder": "",          "builderAddress1": "",          "builderAddress2": "",          "builderAddress3": "",          "speed": "",          "totalEnginePower": "",          "totalCrew": 0,          "previousName": "",          "previousPortOfRegistry": "",          "dateRegProv": "",          "provExpiryDate": "",          "vesselRegisterDate": "",          "ownerType": "",          "ownerId": "",          "ownerName": "",          "ownerAddress1": "",          "ownerAddress2": "",          "ownerAddress3": "",          "ownerPostcode": "",          "ownerState": "",          "ownerCountry": "",          "ownerPhoneNo": "",          "ownerFaxNo": "",          "ownerEmail": "",          "auoId": "",          "auoName": "",          "auoAddress1": "",          "auoAddress2": "",          "auoAddress3": "",          "auoPostcode": "",          "auoState": "",          "auoCountry": "",          "auoPhoneNo": "",          "auoFaxNo": "",          "auoEmail": "",          "managerId": "",          "managerName": "",          "managerAddress1": "",          "managerAddress2": "",          "managerAddress3": "",          "managerPostcode": "",          "managerState": "",          "managerCountry": "",          "managerPhoneNo": "",          "managerFaxNo": "",          "managerEmail": ""      }  ] |
| **Success Response** | {      "code": "00",      "content": ""  } |
| **Error Response** | {      "code": "01",      "content": "Error Message"  } |

Figure 2: JSON format for Vessel Registration / Update

## 1.2 Get Vessel Information

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Data** | | | | | |
| **Field** | **Type** | **Size** | **Format** | **Mandatory** | **Description** |
| vesselId | varchar | 40 |  | / | Vessel ID (Unique ID For Vessel) |
| typeOfRegistry | varchar | 4 |  | / | Vessel registration type: MSR, TSR, MISR |
| status | varchar | 2 |  | / | Vessel register status (**refer lookup lt\_general\_status\_gsts**) |
| callSignNo | varchar | 10 |  |  | Call sign Number |
| imoNo | varchar | 10 |  |  | IMO number |
| officialNo | varchar | 30 |  | / | Vessel official number |
| vesselName | varchar | 100 |  | / | Vessel name |
| vesselType | varchar | 5 |  | / | Vessel Type (**refer lookup lt\_vessel\_type\_vtyp**) |
| portOfRegistry | varchar | 5 |  | / | Port of Registry (**refer lookup lt\_ports\_prt**) |
| yearOfReg | varchar | 4 |  | / | Year registered |
| vesselValue | double | 11, 2 | 99999999999.99 | / | Vessel Value in Ringgit Malaysia |
| vesselHullMaterial | varchar | 3 |  | / | Vessel hull material (**refer lookup lt\_hull\_material\_hm**) |
| length | double | 8, 3 |  | / | Vessel length |
| breadth | double | 8, 3 |  | / | Vessel breadth |
| depth | double | 8, 3 |  | / | Vessel depth |
| grossTonnage | double | 8, 2 |  | / | Gross tonnage |
| netTonnage | double | 8, 2 |  | / | Net tonnage |
| deadWeight | double | 8, 2 |  | / | deadweight |
| engineDesc | varchar | 2 |  |  | Engine description (**refer lookup lt\_engine\_description\_ed**) |
| propulsion | varchar | 1 | P / N | / | Vessel propulsion (P = Self-Propel / N = Non-Propel) |
| propelType | varchar | 2 |  | / | Engine description (**refer lookup lt\_propel\_type\_pro**) |
| numberOfEngine | int |  |  | / | Number of engines |
| numberOfShaft | int |  |  | / | Number of shafts |
| dateOfKeelLaid | varchar | 10 | dd-MM-yyyy | / | Date build |
| placeOfBuilt | varchar | 50 |  | / | Place of built (Country Name) |
| builder | varchar | 500 |  | / | Vessel builder name |
| builderAddress1 | varchar | 500 |  | / | Vessel builder address 1 |
| builderAddress2 | varchar | 500 |  |  | Vessel builder address 2 |
| builderAddress3 | varchar | 500 |  |  | Vessel builder address 3 |
| speed | double | 8, 2 |  | / | Vessel speed |
| totalEnginePower | double | 8, 2 |  | / | Total engine power |
| totalCrew | int |  |  | / | Total Crew |
| previousName | varchar | 100 |  |  | Previous vessel name |
| previousPortOfRegistry | varchar | 5 |  |  | Previous Port of Registry (**refer lookup lt\_ports\_prt**) |
| dateRegProv | varchar | 10 | dd-MM-yyyy | / | Date register provisional |
| provExpiryDate | varchar | 10 | dd-MM-yyyy | / | Provisional Expiry Date |
| vesselRegisterDate | varchar | 10 | dd-MM-yyyy | / | Vessel register date |
| ownerType | varchar | 1 |  | / | Jenis owner  (1: Korporat @2: individu) |
| ownerId | varchar | 35 |  | / | Company number/ IC number/ passport |
| ownerName | varchar | 100 |  | / | Owner name |
| ownerAddress1 | varchar | 300 |  | / | Owner address 1 |
| ownerAddress2 | varchar | 300 |  |  | Owner address 2 |
| ownerAddress3 | varchar | 300 |  |  | Owner address 3 |
| ownerPostcode | varchar | 5 |  |  | Owner postcode |
| ownerState | varchar | 2 |  |  | Owner state (**refer lookup lt\_state\_stt**) |
| ownerCountry | varchar | 2 |  |  | Owner address: country (**refer lookup lt\_country\_ctry**) |
| ownerPhoneNo | varchar | 15 |  |  | Owner Phone Number |
| ownerFaxNo | varchar | 15 |  |  | Owner Fax number |
| ownerEmail | varchar | 40 |  |  | Owner Email address |
| auoId | varchar | 35 |  | / | Company number/ IC number/ passport |
| auoName | varchar | 100 |  | / | Authorize officer name |
| auoAddress1 | varchar | 300 |  | / | Authorize officer address 1 |
| auoAddress2 | varchar | 300 |  |  | Authorize officer address 2 |
| auoAddress3 | varchar | 300 |  |  | Authorize officer address 3 |
| auoPostcode | varchar | 5 |  |  | Authorize officer postcode |
| auoState | varchar | 2 |  |  | Authorize officer state (**refer lookup lt\_state\_stt**) |
| auoCountry | varchar | 2 |  |  | Authorize officer address: country (**refer lookup lt\_country\_ctry**) |
| auoPhoneNo | varchar | 15 |  |  | Authorize officer Phone Number |
| auoFaxNo | varchar | 15 |  |  | Authorize officer Fax number |
| auoEmail | varchar | 40 |  |  | Authorize officer Email address |
| managerId | varchar | 35 |  | / | Company number/ IC number/ passport |
| managerName | varchar | 100 |  | / | Manager name |
| managerAddress1 | varchar | 300 |  | / | Manager address 1 |
| managerAddress2 | varchar | 300 |  |  | Manager address 2 |
| managerAddress3 | varchar | 300 |  |  | Manager address 3 |
| managerPostcode | varchar | 5 |  |  | Manager postcode |
| managerState | varchar | 2 |  |  | Manager state (**refer lookup lt\_state\_stt**) |
| managerCountry | varchar | 2 |  |  | Manager address: country (**refer lookup lt\_country\_ctry**) |
| managerPhoneNo | varchar | 15 |  |  | Manager Phone Number |
| managerFaxNo | varchar | 15 |  |  | Manager Fax number |
| managerEmail | varchar | 40 |  |  | Manager Email address |

Figure 3: IDD for Get Vessel Information

|  |  |
| --- | --- |
| **Method Integration** | REST Web Services |
| **Format** | JSON |
| **Staging URL** | https://mmdis.marine.gov.my/MMDIS\_DIS\_STG/spk/getVessel |
| **Live URL** | TBD |
| **Auth** | - |
| **HTTP Method** | GET |
| **Request Body** | {      "vesselID": "",      "vesselName": "",      "officialNumber": "",      "imoNumber": ""  } |
| **Success Response** | [      {          "vesselId": "",          "typeOfRegistry": "",          "status": "",          "callSignNo": "",          "imoNo": "",          "officialNo": "",          "vesselName": "",          "vesselType": "",          "portOfRegistry": "",          "yearOfReg": "",          "vesselValue": "",          "vesselHullMaterial": "",          "length": 0,          "breadth": "",          "depth": "",          "grossTonnage": "",          "netTonnage": "",          "deadWeight": "",          "engineDesc": "",          "propulsion": "",          "propelType": "",          "numberOfEngine": 0,          "numberOfShaft": 0,          "dateOfKeelLaid": "",          "placeOfBuilt": "",          "builder": "",          "builderAddress1": "",          "builderAddress2": "",          "builderAddress3": "",          "speed": "",          "totalEnginePower": "",          "totalCrew": 0,          "previousName": "",          "previousPortOfRegistry": "",          "dateRegProv": "",          "provExpiryDate": "",          "vesselRegisterDate": "",          "ownerType": "",          "ownerId": "",          "ownerName": "",          "ownerAddress1": "",          "ownerAddress2": "",          "ownerAddress3": "",          "ownerPostcode": "",          "ownerState": "",          "ownerCountry": "",          "ownerPhoneNo": "",          "ownerFaxNo": "",          "ownerEmail": "",          "auoId": "",          "auoName": "",          "auoAddress1": "",          "auoAddress2": "",          "auoAddress3": "",          "auoPostcode": "",          "auoState": "",          "auoCountry": "",          "auoPhoneNo": "",          "auoFaxNo": "",          "auoEmail": "",          "managerId": "",          "managerName": "",          "managerAddress1": "",          "managerAddress2": "",          "managerAddress3": "",          "managerPostcode": "",          "managerState": "",          "managerCountry": "",          "managerPhoneNo": "",          "managerFaxNo": "",          "managerEmail": ""      }  ] |
| **Error Response** | {      "code": "01",      "content": "Error Message"  } |

Figure 4: JSON format for Get Vessel Information

## 1.3 Change Port Information

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Data** | | | | | |
| **Field** | **Type** | **Size** | **Format** | **Mandatory** | **Description** |
| user\_id | varchar | 100 |  |  | User id(name) |
| date\_change | datetime |  |  |  | Date changed port |
| prev\_port | varchar | 100 |  |  | Old/original port |
| curr\_port | varchar | 100 |  |  | Changed/Current port |
| ref\_no | char | 10 |  |  | Reference number |

Figure 5: IDD for Change Port Information

|  |  |
| --- | --- |
| **Method Integration** | REST Web Services |
| **Format** | JSON |
| **Staging URL** | https://mmdis.marine.gov.my/MMDIS\_DIS\_DEV/spk/changePort |
| **Live URL** | TBD |
| **Auth** | - |
| **HTTP Method** | POST |
| **Request Body** | {      "user\_id": "",  "date\_change": "",      "prev\_port": "",      "curr\_port": "",      "ref\_no": ""  } |
| **Success Response** | {      "code": "00",      "content": ""  } |
| **Error Response** | {      "code": "01",      "content": "Error Message"  } |

Figure 6: JSON format for change Port Information

## 1.3 Change Name Information

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Data** | | | | | |
| **Field** | **Type** | **Size** | **Format** | **Mandatory** | **Description** |
| old\_name | char | 50 |  |  | previous vessel name |
| new\_name | char | 50 |  |  | New vessel name |
| date\_change | datetime |  |  |  | Date vessel name changed |
| ref\_no | char | 10 |  |  | Reference number |

Figure 7: IDD for Change Name Information

|  |  |
| --- | --- |
| **Method Integration** | REST Web Services |
| **Format** | JSON |
| **Staging URL** | https://mmdis.marine.gov.my/MMDIS\_DIS\_DEV/spk/changeName |
| **Live URL** | TBD |
| **Auth** | - |
| **HTTP Method** | POST |
| **Request Body** | {      "old\_name": "",      "new\_name": "",      "date\_change": "",      "ref\_no": ""  } |
| **Success Response** | {      "code": "00",      "content": ""  } |
| **Error Response** | {      "code": "01",      "content": "Error Message"  } |

Figure 8 JSON format for Change Name Information

## 1.4 Set Mortage Information

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Attribute Data** | | | | | |
| **Field** | **Type** | **Size** | **Format** | **Mandatory** | **Description** |
| owner\_id | char | 18 |  |  | Vessel owner id |
| mort\_ref\_no | char | 10 |  | Y | Mort reference number (No Rujukan Gadaian ) |
| mort\_type | int |  |  |  | Type of mort (jenis gadaian)  1: Prinsipal & Faedah  2: Akaun Semasa |
| saham | int |  |  |  | Share percentage |
| mortgajor\_id | char | 18 |  |  | Register number @ in number of mortgage receiver |
| date\_start | datetime |  |  |  | Date vessel motgage start |
| date\_terminate | datetime |  |  |  | Date vessel motgage end |
| ship\_name | char | 30 |  |  | Vessel name |
| date\_register | datetime |  |  |  | Date vessels register for mortgage |
| interest\_rate | numeric | 5, 2 |  |  | Mortgage interest rate |
| currency | char | 4 |  |  | Money Currency |
| mort\_value | numeric | 15, 2 |  |  | The value of mortgage |
| mortgajor\_name | char | 100 |  |  | Broker name |
| ref\_no | char | 10 |  |  | Reference number |
| status | int |  |  |  | 1: active / 2: not active |

Figure 9: IDD for Set Mortgage Information

|  |  |
| --- | --- |
| **Method Integration** | REST Web Services |
| **Format** | JSON |
| **Staging URL** | https://mmdis.marine.gov.my/MMDIS\_DIS\_DEV/spk/mortageVessel |
| **Live URL** | TBD |
| **Auth** | - |
| **HTTP Method** | POST |
| **Request Body** | {      "vesselID": "",      "vesselName": "",      "officialNumber": "",      "imoNumber": ""  } |
| **Success Response** | {      "code": "00",      "content": ""  } |
| **Error Response** | {      "code": "01",      "content": "Error Message"  } |

Figure 10: JSON format for Set Mortgage Information

## 1.5 Cancel Vessel Information

|  |  |
| --- | --- |
| **Method Integration** | REST Web Services |
| **Format** | JSON |
| **Staging URL** | https://mmdis.marine.gov.my/MMDIS\_DIS\_DEV/spk/cancelVessel |
| **Live URL** | TBD |
| **Auth** | - |
| **HTTP Method** | POST |
| **Request Body** | {      "vesselId": "",      "reason": "",  "date": ""  } |
| **Success Response** | {      "code": "00",      "content": ""  } |
| **Error Response** | {      "code": "01",      "content": "Error Message"  } |

Figure 10: JSON format for Cancel Vessel