## CHANGE REQUEST FORM

| Version | State | Author | Date | Description |
| :---: | :--- | :--- | :--- | :--- |
| 1 | Draft | J. Lim | 08 Sep 2021 | Initial Document |
| 2 | Draft | M.A. Gariplan | 20 Jan 2022 | Added error message in item 2.a. Change Details; added <br> Other.Other template in Change Impact |
| 3 | Draft | M.A. Gariplan | 17 Mar 2022 | Added new Assumption |


| Title | Evaluate ISO 3166 (2 char) validation for the entry of underlier instrument ISIN |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Background | At present, the input process of validating an Underlying instrument ISIN is based on the format pattern of (2alpha, 9 alphanumeric and 1numeric) of the input value and syntactic validation of last digit. If such pattern or syntactic validation does not conform with the requirements, an error message will be returned to the users. <br> To further improved the data quality of the input underlying instrument ISIN, the task is to evaluate the first two characters of the input value whether the prefix represents a valid ISIN prefix based on the list of ISIN prefixes that is available on the ANNA website. If the prefix of the input underlying ISIN does not correspond to a valid ISIN prefix, the request for creation of ISIN must be rejected. |  | JIRA | DSB-1410 |
|  |  |  | Type | Validation |
|  |  |  | Owner | Jovelyn Lim |
|  |  |  | Version | 3 |
|  |  |  | State | Final |
| Terms of Reference | In Scope <br> - The impact of change applies to product templates where an attribute is underlying ISIN. <br> - SWAPTION products are in scope <br> Out of Scope <br> - The specification does not include the UPI behaviour of underlier ISIN. <br> - The specification does not include the requirements for each product template e.g., for swaption product where the underlier ISIN must be a swap type. | In Scope <br> - The impact of change applies to product templates where an attribute is underlying ISIN. <br> - SWAPTION products are in scope <br> Out of Scope <br> - The specification does not include the UPI behaviour of underlier ISIN. <br> - The specification does not include the requirements for each product template e.g., for swaption product where the underlier ISIN must be a swap type. |  |  |
|  |  | - Dependent on the availability of RA list of ISIN prefixes and active maintenance of the list. |  |  |
|  | 号 | - The 2-char code list to be used is based on the RA list of ISIN prefixes made available by ANNA. <br> - The specification assumes that the existing ISIN validation process will not be modified. <br> - The specification for ISIN pattern (2alpha, 9alphanumeric, 1 check digit) is based on the ISO 6166. <br> - The specification for swaption products will not be subject to specific validation. <br> - The DSB must be consistent with the ASB validations in which the existing RA list is considered correct and invalid prefixes, including those for substitute numbering agencies or technical prefixes are not considered valid. |  |  |
| Requirements | There is a requirement to improve the data quality of OTC ISINs by evaluating the 2-char code of the input Underlying ISINs. In addition to that the validation of 2-char code will be based on the RA list of ISIN prefixes made available by ANNA. <br> The first two-character alpha codes must go through a validation whether the alpha codes exist in the RA list of ISIN prefixes. If the two-character code does not exist, the DSB will return an error message and will |  |  |  |


|  | not proceed to create an ISIN. |
| :---: | :---: |
| Current Process | The following validations are based on the current OTC ISIN product definitions and will not be affected by the changes detailed in the CRF. <br> a. First two characters -2 alpha codes <br> b. Next nine characters - alphanumeric combination <br> c. Last character - check digit formula. |
| Change Details | In addition to the existing validation for the in-scope Underlying ISIN (see Current Process), the system will modify the validation of the first 2-char code of the underlying instrument ISIN. The change will apply to request message having "Underlying Instrument ISIN" or "Instrument ISIN" as an attribute. <br> 1. Valid input of 2-char codes <br> a. The 2-char code applies to the first two-character of the underlier ISIN <br> b. The 2-char must be an existing code in the RA list of ISIN prefixes made available by ANNA. <br> 2. Invalid input of 2-char codes <br> a. If the 2-char code is alphanumeric combination: <br> - ISIN Single structure - the DSB will not return an ISIN and instead will provide an error message of <br> - For attribute Underlying Instrument ISIN - <br> "/Attributes/UnderlyingInstrumentISIN: ECMA 262 regex "^[A-Z]\{2\}[A-ZO-9]\{9\}[09]\$\" does not match input string "[user input]"" <br> - For attribute Instrument ISIN - "/Attributes/Underlying/InstrumentISIN: ECMA 262 regex "^[A-Z]\{2\}[A-Z0-9]\{9\}[0-9]\$\" does not match input string "[user input]"" <br> - ISIN AnyOf structure - the DSB will not return an ISIN and instead will provide an error message of "/Attributes/Underlying/UnderlyingInstrumentISIN: ECMA 262 regex "^[A-Z]\{2\}[A-Z0-9]\{9\}[0-9]\$\" does not match input string "[user input]"" <br> - ISIN OneOf structure - the DSB will not return an ISIN and instead will provide an error message of "/Attributes: instance failed to match exactly one schema (matched 0 out of $3)^{\prime \prime}$. <br> b. If the 2-char code does not exist in the source, the DSB will not return an ISIN and instead will provide an error message of "Error: ISIN/s must be valid". <br> In cases where product templates have multiple underlier ISINs (e.g., Non-standard), and one of the inputs has invalid 2-char code, the DSB will return an error message of "Error: ISIN/s must be valid". |
| Change Impact | Below templates will be impacted by the change of validation and its attribute. For array type of attributes, the validation will apply to all input ISIN by the user and if one of the inputs has invalid 2-char code, the DSB will not generate an ISIN and instead will send an error message to the user. <br> The following templates have attribute of "Underlying Instrument ISIN" and has single input underlier. <br> - Rates.Forward.FRA_Other <br> - Rates.Option.Swaption <br> - Rates.Option.Debt_Option <br> - Credit.Swap.Total_Return_Swap <br> - Credit.Option.Index_Swaption <br> - Credit.Option.Single_Name_Swaption <br> - Commodities.Option.Swaption <br> - Equity.Swap.Price_Return_Basic_Performance_Single_Name <br> - Equity.Swap.Price_Return_Basic_Performance_Single_Index |


|  | - Equity.Swap.Price_Return_Basic_Performance_Single_Name_CFD <br> - Equity.Swap.Price_Return_Basic_Performance_Single_Index_CFD <br> - Equity.Forward.Price_Return_Basic_Performance_Single_Name_CFD <br> - Equity.Forward.Price_Return_Basic_Performance_Single_Index_CFD <br> - Equity.Forward.Price_Return_Basic_Performance_Single_Name <br> - Equity.Forward.Price_Return_Basic_Performance_Single_Index <br> - Equity.Swap.Parameter_Return_Dividend_Single_Name <br> - Equity.Swap.Parameter_Return_Dividend_Single_Index <br> - Equity.Swap.Parameter_Return_Variance_Single_Name <br> - Equity.Swap.Parameter_Return_Variance_Single_Index <br> - Equity.Swap.Parameter_Return_Volatility_Single_Name <br> - Equity.Swap.Parameter_Return_Volatility_Single_Index <br> - Equity.Swap.Portfolio_Swap_Other <br> - Equity.Swap.Portfolio_Swap_Single_Name <br> - Equity.Swap.Portfolio_Swap_Single_Index <br> - Equity.Option.Single_Name <br> - Equity.Option.Single_Index <br> The following templates have attribute of "Instrument ISIN" and has single input underlier. <br> - Credit.Swap.Corporate <br> - Credit.Swap.Municipal <br> - Credit.Swap.Sovereign <br> - Credit.Swap.Loan <br> - Credit.Swap.ABS <br> The following templates have attribute of "Underlying Instrument ISIN" and has multiple input underliers. <br> - Equity.Swap.Price_Return_Basic_Performance_Basket <br> - Equity.Swap.Price_Return_Basic_Performance_Basket_CFD <br> - Equity.Forward.Price_Return_Basic_Performance_Basket_CFD <br> - Equity.Forward.Price_Return_Basic_Performance_Basket <br> - Equity.Swap.Parameter_Return_Dividend_Basket <br> - Equity.Swap.Parameter_Return_Variance_Basket <br> - Equity.Swap.Parameter_Return_Volatility_Basket <br> - Equity.Swap.Portfolio_Swap <br> - Equity.Swap.Non_Standard <br> - Other.Swap.Non_Standard <br> - Equity.Option.Basket <br> - Equity.Option.Non_Standard <br> - Equity.Forward.Non_Standard <br> - Other.Option.Non_Standard <br> - Other.Other.Non_Standard <br> The following templates have attribute of "Instrument ISIN" and has multiple input underliers. <br> - Credit.Option.Non_Standard <br> - Credit.Swap.Non_Standard_Swap |
| :---: | :---: |
| Backward Compatibility | The existing ISIN will continue to exist in the DSB record but retrieving the record templates will be limited depending on the search or retrieve function used by users. <br> The following functions are supported by DSB and should be taken into consideration once the validation has been added in the system. <br> 1) Retrieve or Create ISIN record - Users supplies request attributes to the system, and DSB returned the recorded version of the ISIN or generate a new ISIN if not yet created in the system. <br> a) User will submit request attribute, then the system validates the input data including the 2-char |


|  | code of the underlying instrument ISIN. <br> b) If the 2-char code ISIN exist in the RA list of ISIN prefixes, the DSB will return a recorded version of an ISIN or generate a new ISIN if not exist. <br> c) If the 2-char code ISIN does not exist in the RA list of ISIN prefixes, the DSB will not return an ISIN record, even if the ISIN has an existing record in the DSB. <br> d) If ISIN has not been created in the DSB yet, and the 2-char code does not exist in the RA list of ISIN prefixes, the system will provide an error message and will not generate an ISIN. <br> e) The DSB will not inform users whether an ISIN exists in the DSB record or not. <br> 2) Retrieve ISIN record by ISIN - User uses the search function by supplying the OTC ISIN, and the DSB returns the record attributes. <br> a) If user supplies the OTC ISIN, even if the underlying ISIN of the existing record has invalid 2-char code, the system will return the record template. <br> 3) Search for ISIN record - User can search an ISIN based on the attributes of the templates. <br> a) User needs to use the Lucene search string to search for an ISIN record. <br> b) If the search string includes underlying instrument ISIN in the input search and the 2-char code is not in the RA list of ISIN prefixes, the DSB will return the recorded ISIN. <br> 4) Retrieve no create - User supplies the request attribute to the system, and DSB will return the record attributes (including the derived). <br> a) User will submit request attribute, then the system validates the input data including the 2-char code of the underlying instrument ISIN. <br> b) If the 2-char code ISIN exist in the RA list of ISIN prefixes, the DSB will return a record template (attributes and derived) but will not generate an ISIN in the record or will provide an ISIN record template found if exist. <br> c) If the 2-char code ISIN does not exist in the RA list of ISIN prefixes, the DSB will not return an ISIN record, even if the ISIN has an existing record in the DSB. <br> d) If ISIN has not been created in the DSB yet, and the 2-char code does not exist in the RA list of ISIN prefixes, the system will provide an error message and will not generate an ISIN. |
| :---: | :---: |
| Documentation | The following DSB documents are to be updated: <br> - DSB UAT Product Definitions here <br> - DSB PROD Product Definitions here |
| Comments | - The specification only includes the two alpha code validation whether the code used is a recognized country code based on RA list of ISIN prefixes made by ANNA, however, it will not specify whether an ISIN is a valid underlying of a product. |
| References | Main source: <br> RA list of ISIN prefixes <br> Other sources: <br> ISO-3166 Glossary <br> ISO-3166-2 country codes collection <br> ISO-6166 |

## APPENDIX

The following table shows the list of eligible ISIN prefixes in the RA list of ISIN prefixes, ISO 3166-2 or in both sources. The remarks are the status of code elements based on country codes collection. The DSB will use the RA list of ISIN prefixes made available by ANNA as the list includes "QZ" and "XS" which are user-assigned codes for ISIN.

The RA list of ISIN prefixes by ANNA has 258 alpha codes available, wherein 249 of which are officially assigned country codes for ISIN and rest of which are reserved or user-assigned codes. The RA list of ISIN prefixes includes 2 of the user-assigned codes "QZ" and "XS" which do not represent a country but an organization for particular use. In addition, one code in the list is formerly used codes where it used to be part of the standard but no longer in use. The codes "EU" and "EZ" are exceptionally reserve, which means that these codes are special request from ISO member, governments or international organizations. Moreover, the remaining four codes - "AN", "CS", "YU" and "ZR" are transitionally reserve codes which are reserved during transitional period while the replacement of new codes is taken into use.

Summary Table:

| ISO Status | ISO 3166 Membership | RA List Membership | Examples |
| :--- | ---: | ---: | :--- |
| Officially assigned | 249 | 249 | United States, Japan, France |
| Exceptionally reserved | 13 | 2 | European Union, OTC Derivatives, United Nations, USSR |
| Formerly used | 14 | 1 | DDR, Yemen, Upper Volta |
| Indeterminately Reserved | 30 | 0 | Patent Offices, License Plates |
| Transitionally reserved | 7 | 4 | Zaire, Yugoslavia, East Timor |
| User-assigned | 0 | 2 | Unique Product Identifier, Euroclear/ Clearstream |
| Total | $\mathbf{3 1 3}$ | $\mathbf{2 5 8}$ |  |

Alpha-2 code set list:

| Alpha-2 code | RA list of ISIN prefixes | ISO-3166-2 | Remarks |
| :---: | :---: | :---: | :---: |
| AC | $\times$ | $\checkmark$ | Exceptionally reserved |
| AD | $\checkmark$ | $\checkmark$ | Officially Assigned |
| AE | $\checkmark$ | $\checkmark$ | Officially Assigned |
| AF | $\checkmark$ | $\checkmark$ | Officially Assigned |
| AG | $\checkmark$ | $\checkmark$ | Officially Assigned |
| Al | $\checkmark$ | $\checkmark$ | Officially Assigned |
| AL | $\checkmark$ | $\checkmark$ | Officially Assigned |
| AM | $\checkmark$ | $\checkmark$ | Officially Assigned |
| AN | $\checkmark$ | $\checkmark$ | Transitionally reserved |
| AO | $\checkmark$ | $\checkmark$ | Officially Assigned |
| AP | $\times$ | $\checkmark$ | Indeterminately reserved |
| AQ | $\checkmark$ | $\checkmark$ | Officially Assigned |
| AR | $\checkmark$ | $\checkmark$ | Officially Assigned |
| AS | $\checkmark$ | $\checkmark$ | Officially Assigned |
| AT | $\checkmark$ | $\checkmark$ | Officially Assigned |
| AU | $\checkmark$ | $\checkmark$ | Officially Assigned |
| AW | $\checkmark$ | $\checkmark$ | Officially Assigned |
| AX | $\checkmark$ | $\checkmark$ | Officially Assigned |
| AZ | $\checkmark$ | $\checkmark$ | Officially Assigned |
| BA | $\checkmark$ | $\checkmark$ | Officially Assigned |
| BB | $\checkmark$ | $\checkmark$ | Officially Assigned |
| BD | $\checkmark$ | $\checkmark$ | Officially Assigned |
| BE | $\checkmark$ | $\checkmark$ | Officially Assigned |
| BF | $\checkmark$ | $\checkmark$ | Officially Assigned |


| BG | $\checkmark$ | $\checkmark$ | Officially Assigned |
| :---: | :---: | :---: | :---: |
| BH | $\checkmark$ | $\checkmark$ | Officially Assigned |
| BI | $\checkmark$ | $\checkmark$ | Officially Assigned |
| BJ | $\checkmark$ | $\checkmark$ | Officially Assigned |
| BL | $\checkmark$ | $\checkmark$ | Officially Assigned |
| BM | $\checkmark$ | $\checkmark$ | Officially Assigned |
| BN | $\checkmark$ | $\checkmark$ | Officially Assigned |
| BO | $\checkmark$ | $\checkmark$ | Officially Assigned |
| BQ | $\checkmark$ | $\checkmark$ | Officially Assigned |
| BR | $\checkmark$ | $\checkmark$ | Officially Assigned |
| BS | $\checkmark$ | $\checkmark$ | Officially Assigned |
| BT | $\checkmark$ | $\checkmark$ | Officially Assigned |
| BU | $\times$ | $\checkmark$ | Transitionally reserved |
| BV | $\checkmark$ | $\checkmark$ | Officially Assigned |
| BW | $\checkmark$ | $\checkmark$ | Officially Assigned |
| BX | $\times$ | $\checkmark$ | Indeterminately reserved |
| BY | $\checkmark$ | $\checkmark$ | Officially Assigned |
| BZ | $\checkmark$ | $\checkmark$ | Officially Assigned |
| CA | $\checkmark$ | $\checkmark$ | Officially Assigned |
| CC | $\checkmark$ | $\checkmark$ | Officially Assigned |
| CD | $\checkmark$ | $\checkmark$ | Officially Assigned |
| CF | $\checkmark$ | $\checkmark$ | Officially Assigned |
| CG | $\checkmark$ | $\checkmark$ | Officially Assigned |
| CH | $\checkmark$ | $\checkmark$ | Officially Assigned |
| Cl | $\checkmark$ | $\checkmark$ | Officially Assigned |
| CK | $\checkmark$ | $\checkmark$ | Officially Assigned |
| CL | $\checkmark$ | $\checkmark$ | Officially Assigned |
| CM | $\checkmark$ | $\checkmark$ | Officially Assigned |
| CN | $\checkmark$ | $\checkmark$ | Officially Assigned |
| CO | $\checkmark$ | $\checkmark$ | Officially Assigned |
| CP | $\times$ | $\checkmark$ | Exceptionally reserved |
| CQ | $\times$ | $\checkmark$ | Exceptionally reserved |
| CR | $\checkmark$ | $\checkmark$ | Officially Assigned |
| CS | $\checkmark$ | $\checkmark$ | Transitionally reserved |
| CT | $\times$ | $\checkmark$ | Formerly used |
| CU | $\checkmark$ | $\checkmark$ | Officially Assigned |
| CV | $\checkmark$ | $\checkmark$ | Officially Assigned |
| CW | $\checkmark$ | $\checkmark$ | Officially Assigned |
| CX | $\checkmark$ | $\checkmark$ | Officially Assigned |
| CY | $\checkmark$ | $\checkmark$ | Officially Assigned |
| CZ | $\checkmark$ | $\checkmark$ | Officially Assigned |
| DD | $\times$ | $\checkmark$ | Formerly used |
| DE | $\checkmark$ | $\checkmark$ | Officially Assigned |
| DG | $\times$ | $\checkmark$ | Exceptionally reserved |
| DJ | $\checkmark$ | $\checkmark$ | Officially Assigned |
| DK | $\checkmark$ | $\checkmark$ | Officially Assigned |
| DM | $\checkmark$ | $\checkmark$ | Officially Assigned |


| DO | $\checkmark$ | $\checkmark$ | Officially Assigned |
| :---: | :---: | :---: | :---: |
| DY | $\times$ | $\checkmark$ | Indeterminately reserved |
| DZ | $\checkmark$ | $\checkmark$ | Officially Assigned |
| EA | $\times$ | $\checkmark$ | Exceptionally reserved |
| EC | $\checkmark$ | $\checkmark$ | Officially Assigned |
| EE | $\checkmark$ | $\checkmark$ | Officially Assigned |
| EF | $\times$ | $\checkmark$ | Indeterminately reserved |
| EG | $\checkmark$ | $\checkmark$ | Officially Assigned |
| EH | $\checkmark$ | $\checkmark$ | Officially Assigned |
| EM | $\times$ | $\checkmark$ | Indeterminately reserved |
| EP | $\times$ | $\checkmark$ | Indeterminately reserved |
| ER | $\checkmark$ | $\checkmark$ | Officially Assigned |
| ES | $\checkmark$ | $\checkmark$ | Officially Assigned |
| ET | $\checkmark$ | $\checkmark$ | Officially Assigned |
| EU | $\checkmark$ | $\checkmark$ | Exceptionally reserved |
| EV | $\times$ | $\checkmark$ | Indeterminately reserved |
| EW | $\times$ | $\checkmark$ | Indeterminately reserved |
| EZ | $\checkmark$ | $\checkmark$ | Exceptionally reserved |
| FI | $\checkmark$ | $\checkmark$ | Officially Assigned |
| FJ | $\checkmark$ | $\checkmark$ | Officially Assigned |
| FK | $\checkmark$ | $\checkmark$ | Officially Assigned |
| FL | $\times$ | $\checkmark$ | Indeterminately reserved |
| FM | $\checkmark$ | $\checkmark$ | Officially Assigned |
| FO | $\checkmark$ | $\checkmark$ | Officially Assigned |
| FQ | $\times$ | $\checkmark$ | Formerly used |
| FR | $\checkmark$ | $\checkmark$ | Officially Assigned |
| FX | $\times$ | $\checkmark$ | Exceptionally reserved |
| GA | $\checkmark$ | $\checkmark$ | Officially Assigned |
| GB | $\checkmark$ | $\checkmark$ | Officially Assigned |
| GC | $\times$ | $\checkmark$ | Indeterminately reserved |
| GD | $\checkmark$ | $\checkmark$ | Officially Assigned |
| GE | $\checkmark$ | $\checkmark$ | Officially Assigned |
| GF | $\checkmark$ | $\checkmark$ | Officially Assigned |
| GG | $\checkmark$ | $\checkmark$ | Officially Assigned |
| GH | $\checkmark$ | $\checkmark$ | Officially Assigned |
| GI | $\checkmark$ | $\checkmark$ | Officially Assigned |
| GL | $\checkmark$ | $\checkmark$ | Officially Assigned |
| GM | $\checkmark$ | $\checkmark$ | Officially Assigned |
| GN | $\checkmark$ | $\checkmark$ | Officially Assigned |
| GP | $\checkmark$ | $\checkmark$ | Officially Assigned |
| GQ | $\checkmark$ | $\checkmark$ | Officially Assigned |
| GR | $\checkmark$ | $\checkmark$ | Officially Assigned |
| GS | $\checkmark$ | $\checkmark$ | Officially Assigned |
| GT | $\checkmark$ | $\checkmark$ | Officially Assigned |
| GU | $\checkmark$ | $\checkmark$ | Officially Assigned |
| GW | $\checkmark$ | $\checkmark$ | Officially Assigned |
| GY | $\checkmark$ | $\checkmark$ | Officially Assigned |


| HK | $\checkmark$ | $\checkmark$ | Officially Assigned |
| :---: | :---: | :---: | :---: |
| HM | $\checkmark$ | $\checkmark$ | Officially Assigned |
| HN | $\checkmark$ | $\checkmark$ | Officially Assigned |
| HR | $\checkmark$ | $\checkmark$ | Officially Assigned |
| HT | $\checkmark$ | $\checkmark$ | Officially Assigned |
| HU | $\checkmark$ | $\checkmark$ | Officially Assigned |
| HV | $\times$ | $\checkmark$ | Formerly used |
| IB | $\times$ | $\checkmark$ | Indeterminately reserved |
| IC | $\times$ | $\checkmark$ | Exceptionally reserved |
| ID | $\checkmark$ | $\checkmark$ | Officially Assigned |
| IE | $\checkmark$ | $\checkmark$ | Officially Assigned |
| IL | $\checkmark$ | $\checkmark$ | Officially Assigned |
| IM | $\checkmark$ | $\checkmark$ | Officially Assigned |
| IN | $\checkmark$ | $\checkmark$ | Officially Assigned |
| 10 | $\checkmark$ | $\checkmark$ | Officially Assigned |
| IQ | $\checkmark$ | $\checkmark$ | Officially Assigned |
| IR | $\checkmark$ | $\checkmark$ | Officially Assigned |
| IS | $\checkmark$ | $\checkmark$ | Officially Assigned |
| IT | $\checkmark$ | $\checkmark$ | Officially Assigned |
| JA | $\times$ | $\checkmark$ | Indeterminately reserved |
| JE | $\checkmark$ | $\checkmark$ | Officially Assigned |
| JM | $\checkmark$ | $\checkmark$ | Officially Assigned |
| JO | $\checkmark$ | $\checkmark$ | Officially Assigned |
| JP | $\checkmark$ | $\checkmark$ | Officially Assigned |
| JT | $\times$ | $\checkmark$ | Formerly used |
| KE | $\checkmark$ | $\checkmark$ | Officially Assigned |
| KG | $\checkmark$ | $\checkmark$ | Officially Assigned |
| KH | $\checkmark$ | $\checkmark$ | Officially Assigned |
| KI | $\checkmark$ | $\checkmark$ | Officially Assigned |
| KM | $\checkmark$ | $\checkmark$ | Officially Assigned |
| KN | $\checkmark$ | $\checkmark$ | Officially Assigned |
| KP | $\checkmark$ | $\checkmark$ | Officially Assigned |
| KR | $\checkmark$ | $\checkmark$ | Officially Assigned |
| KW | $\checkmark$ | $\checkmark$ | Officially Assigned |
| KY | $\checkmark$ | $\checkmark$ | Officially Assigned |
| KZ | $\checkmark$ | $\checkmark$ | Officially Assigned |
| LA | $\checkmark$ | $\checkmark$ | Officially Assigned |
| LB | $\checkmark$ | $\checkmark$ | Officially Assigned |
| LC | $\checkmark$ | $\checkmark$ | Officially Assigned |
| LF | $\times$ | $\checkmark$ | Indeterminately reserved |
| LI | $\checkmark$ | $\checkmark$ | Officially Assigned |
| LK | $\checkmark$ | $\checkmark$ | Officially Assigned |
| LR | $\checkmark$ | $\checkmark$ | Officially Assigned |
| LS | $\checkmark$ | $\checkmark$ | Officially Assigned |
| LT | $\checkmark$ | $\checkmark$ | Officially Assigned |
| LU | $\checkmark$ | $\checkmark$ | Officially Assigned |
| LV | $\checkmark$ | $\checkmark$ | Officially Assigned |


| LY | $\checkmark$ | $\checkmark$ | Officially Assigned |
| :---: | :---: | :---: | :---: |
| MA | $\checkmark$ | $\checkmark$ | Officially Assigned |
| MC | $\checkmark$ | $\checkmark$ | Officially Assigned |
| MD | $\checkmark$ | $\checkmark$ | Officially Assigned |
| ME | $\checkmark$ | $\checkmark$ | Officially Assigned |
| MF | $\checkmark$ | $\checkmark$ | Officially Assigned |
| MG | $\checkmark$ | $\checkmark$ | Officially Assigned |
| MH | $\checkmark$ | $\checkmark$ | Officially Assigned |
| MI | $\times$ | $\checkmark$ | Formerly used |
| MK | $\checkmark$ | $\checkmark$ | Officially Assigned |
| ML | $\checkmark$ | $\checkmark$ | Officially Assigned |
| MM | $\checkmark$ | $\checkmark$ | Officially Assigned |
| MN | $\checkmark$ | $\checkmark$ | Officially Assigned |
| MO | $\checkmark$ | $\checkmark$ | Officially Assigned |
| MP | $\checkmark$ | $\checkmark$ | Officially Assigned |
| MQ | $\checkmark$ | $\checkmark$ | Officially Assigned |
| MR | $\checkmark$ | $\checkmark$ | Officially Assigned |
| MS | $\checkmark$ | $\checkmark$ | Officially Assigned |
| MT | $\checkmark$ | $\checkmark$ | Officially Assigned |
| MU | $\checkmark$ | $\checkmark$ | Officially Assigned |
| MV | $\checkmark$ | $\checkmark$ | Officially Assigned |
| MW | $\checkmark$ | $\checkmark$ | Officially Assigned |
| MX | $\checkmark$ | $\checkmark$ | Officially Assigned |
| MY | $\checkmark$ | $\checkmark$ | Officially Assigned |
| MZ | $\checkmark$ | $\checkmark$ | Officially Assigned |
| NA | $\checkmark$ | $\checkmark$ | Officially Assigned |
| NC | $\checkmark$ | $\checkmark$ | Officially Assigned |
| NE | $\checkmark$ | $\checkmark$ | Officially Assigned |
| NF | $\checkmark$ | $\checkmark$ | Officially Assigned |
| NG | $\checkmark$ | $\checkmark$ | Officially Assigned |
| NH | $\times$ | $\checkmark$ | Formerly used |
| NI | $\checkmark$ | $\checkmark$ | Officially Assigned |
| NL | $\checkmark$ | $\checkmark$ | Officially Assigned |
| NO | $\checkmark$ | $\checkmark$ | Officially Assigned |
| NP | $\checkmark$ | $\checkmark$ | Officially Assigned |
| NQ | $\checkmark$ | $\checkmark$ | Formerly used |
| NR | $\checkmark$ | $\checkmark$ | Officially Assigned |
| NT | $\times$ | $\checkmark$ | Transitionally reserved |
| NU | $\checkmark$ | $\checkmark$ | Officially Assigned |
| NZ | $\checkmark$ | $\checkmark$ | Officially Assigned |
| OA | $\times$ | $\checkmark$ | Indeterminately reserved |
| OM | $\checkmark$ | $\checkmark$ | Officially Assigned |
| PA | $\checkmark$ | $\checkmark$ | Officially Assigned |
| PC | $\times$ | $\checkmark$ | Formerly used |
| PE | $\checkmark$ | $\checkmark$ | Officially Assigned |
| PF | $\checkmark$ | $\checkmark$ | Officially Assigned |
| PG | $\checkmark$ | $\checkmark$ | Officially Assigned |


| PH | $\checkmark$ | $\checkmark$ | Officially Assigned |
| :---: | :---: | :---: | :---: |
| PI | $\times$ | $\checkmark$ | Indeterminately reserved |
| PK | $\checkmark$ | $\checkmark$ | Officially Assigned |
| PL | $\checkmark$ | $\checkmark$ | Officially Assigned |
| PM | $\checkmark$ | $\checkmark$ | Officially Assigned |
| PN | $\checkmark$ | $\checkmark$ | Officially Assigned |
| PR | $\checkmark$ | $\checkmark$ | Officially Assigned |
| PS | $\checkmark$ | $\checkmark$ | Officially Assigned |
| PT | $\checkmark$ | $\checkmark$ | Officially Assigned |
| PU | $\times$ | $\checkmark$ | Formerly used |
| PW | $\checkmark$ | $\checkmark$ | Officially Assigned |
| PY | $\checkmark$ | $\checkmark$ | Officially Assigned |
| PZ | $\times$ | $\checkmark$ | Formerly used |
| QA | $\checkmark$ | $\checkmark$ | Officially Assigned |
| QZ | $\checkmark$ | $\times$ | User-assigned |
| RA | $\times$ | $\checkmark$ | Indeterminately reserved |
| RB | $\times$ | $\checkmark$ | Indeterminately reserved |
| RC | $\times$ | $\checkmark$ | Indeterminately reserved |
| RE | $\checkmark$ | $\checkmark$ | Officially Assigned |
| RH | $\times$ | $\checkmark$ | Indeterminately reserved |
| RI | $\times$ | $\checkmark$ | Indeterminately reserved |
| RL | $\times$ | $\checkmark$ | Indeterminately reserved |
| RM | $\times$ | $\checkmark$ | Indeterminately reserved |
| RN | $\times$ | $\checkmark$ | Indeterminately reserved |
| RO | $\checkmark$ | $\checkmark$ | Officially Assigned |
| RP | $\times$ | $\checkmark$ | Indeterminately reserved |
| RS | $\checkmark$ | $\checkmark$ | Officially Assigned |
| RU | $\checkmark$ | $\checkmark$ | Officially Assigned |
| RW | $\checkmark$ | $\checkmark$ | Officially Assigned |
| SA | $\checkmark$ | $\checkmark$ | Officially Assigned |
| SB | $\checkmark$ | $\checkmark$ | Officially Assigned |
| SC | $\checkmark$ | $\checkmark$ | Officially Assigned |
| SD | $\checkmark$ | $\checkmark$ | Officially Assigned |
| SE | $\checkmark$ | $\checkmark$ | Officially Assigned |
| SF | $\times$ | $\checkmark$ | Indeterminately reserved |
| SG | $\checkmark$ | $\checkmark$ | Officially Assigned |
| SH | $\checkmark$ | $\checkmark$ | Officially Assigned |
| SI | $\checkmark$ | $\checkmark$ | Officially Assigned |
| SJ | $\checkmark$ | $\checkmark$ | Officially Assigned |
| SK | $\checkmark$ | $\checkmark$ | Officially Assigned |
| SL | $\checkmark$ | $\checkmark$ | Officially Assigned |
| SM | $\checkmark$ | $\checkmark$ | Officially Assigned |
| SN | $\checkmark$ | $\checkmark$ | Officially Assigned |
| SO | $\checkmark$ | $\checkmark$ | Officially Assigned |
| SR | $\checkmark$ | $\checkmark$ | Officially Assigned |
| SS | $\checkmark$ | $\checkmark$ | Officially Assigned |
| ST | $\checkmark$ | $\checkmark$ | Officially Assigned |


| SU | $\times$ | $\checkmark$ | Exceptionally reserved |
| :---: | :---: | :---: | :---: |
| SV | $\checkmark$ | $\checkmark$ | Officially Assigned |
| SX | $\checkmark$ | $\checkmark$ | Officially Assigned |
| SY | $\checkmark$ | $\checkmark$ | Officially Assigned |
| SZ | $\checkmark$ | $\checkmark$ | Officially Assigned |
| TA | $\times$ | $\checkmark$ | Exceptionally reserved |
| TC | $\checkmark$ | $\checkmark$ | Officially Assigned |
| TD | $\checkmark$ | $\checkmark$ | Officially Assigned |
| TF | $\checkmark$ | $\checkmark$ | Officially Assigned |
| TG | $\checkmark$ | $\checkmark$ | Officially Assigned |
| TH | $\checkmark$ | $\checkmark$ | Officially Assigned |
| TJ | $\checkmark$ | $\checkmark$ | Officially Assigned |
| TK | $\checkmark$ | $\checkmark$ | Officially Assigned |
| TL | $\checkmark$ | $\checkmark$ | Officially Assigned |
| TM | $\checkmark$ | $\checkmark$ | Officially Assigned |
| TN | $\checkmark$ | $\checkmark$ | Officially Assigned |
| TO | $\checkmark$ | $\checkmark$ | Officially Assigned |
| TP | $\times$ | $\checkmark$ | Transitionally reserved |
| TR | $\checkmark$ | $\checkmark$ | Officially Assigned |
| TT | $\checkmark$ | $\checkmark$ | Officially Assigned |
| TV | $\checkmark$ | $\checkmark$ | Officially Assigned |
| TW | $\checkmark$ | $\checkmark$ | Officially Assigned |
| TZ | $\checkmark$ | $\checkmark$ | Officially Assigned |
| UA | $\checkmark$ | $\checkmark$ | Officially Assigned |
| UG | $\checkmark$ | $\checkmark$ | Officially Assigned |
| UK | $\times$ | $\checkmark$ | Exceptionally reserved |
| UM | $\checkmark$ | $\checkmark$ | Officially Assigned |
| UN | $\times$ | $\checkmark$ | Exceptionally reserved |
| US | $\checkmark$ | $\checkmark$ | Officially Assigned |
| UY | $\checkmark$ | $\checkmark$ | Officially Assigned |
| UZ | $\checkmark$ | $\checkmark$ | Officially Assigned |
| VA | $\checkmark$ | $\checkmark$ | Officially Assigned |
| VC | $\checkmark$ | $\checkmark$ | Officially Assigned |
| VD | $\times$ | $\checkmark$ | Formerly used |
| VE | $\checkmark$ | $\checkmark$ | Officially Assigned |
| VG | $\checkmark$ | $\checkmark$ | Officially Assigned |
| VI | $\checkmark$ | $\checkmark$ | Officially Assigned |
| VN | $\checkmark$ | $\checkmark$ | Officially Assigned |
| VU | $\checkmark$ | $\checkmark$ | Officially Assigned |
| WF | $\checkmark$ | $\checkmark$ | Officially Assigned |
| WG | $\times$ | $\checkmark$ | Indeterminately reserved |
| WK | $\times$ | $\checkmark$ | Formerly used |
| WL | $\times$ | $\checkmark$ | Indeterminately reserved |
| WO | $\times$ | $\checkmark$ | Indeterminately reserved |
| WS | $\checkmark$ | $\checkmark$ | Officially Assigned |
| WV | $\times$ | $\checkmark$ | Indeterminately reserved |
| XS | $\checkmark$ | $\times$ | User-assigned |


| YD | $\times$ | $\checkmark$ | Formerly used |
| :---: | :---: | :---: | :---: |
| YE | $\checkmark$ | $\checkmark$ | Officially Assigned |
| YT | $\checkmark$ | $\checkmark$ | Officially Assigned |
| YU | $\checkmark$ | $\checkmark$ | Transitionally reserved |
| YV | $\checkmark$ | $\checkmark$ | Indeterminately reserved |
| ZA | $\checkmark$ | $\checkmark$ | Officially Assigned |
| ZM | $\checkmark$ | $\checkmark$ | Officially Assigned |
| ZR | $\checkmark$ | $\checkmark$ | Transitionally reserved |
| ZW |  | $\checkmark$ | Officially Assigned |

