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Solution Specification Document for Financial Markets Regulations & Rules Repository Portal

iQx Consult Limited

January 2023

Document Information/Approvals	
Document Name	**Solution Specification Document for Financial Markets Regulations & Rules Repository Portal**
Prepared By Adedamola Folarin Date	Adedamola Folarin (Jan 26, 2023 15:54 GMT+1) ---------- **BUG, iQx Consult Limited** **January 2023**
Concurred By Dipo Omotoso Date	Dipo Omotoso (Jan 26, 2023 16:02 GMT+1) ---------- **Divisional Head, Information Services** **January 2023**
Approved By Shola Olufosoye Date	---------- **Divisional Head, IT Operations** **January 2023**

Document Revision History

Document Version	Date	Name	Purpose
Version 0.1	January 2023	Adedamola Folarin	Reviewer
Version 0.2	January 2023	Stephen Joseph	Reviewer
Version 1.0	January 2023	Approvers	Approval

N/A: Not Applicable

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1. Introduction

The Financial Markets Regulations and Rules Repository portal is aimed at providing a unique value to Nigeria's financial market, FMDQ's stakeholders, and the general public through the provision of a central digital database of Rules & Regulations, Guidelines, Market Circulars, Market Bulletins, Market Notices, and other similar documents relating to Capital Markets operations in Nigeria.

2. Scope

The main objective of this implementation is to provide a central digital database for Rules and Regulations, Guidelines, Market Circulars, Market Bulletins, Market Notices and other similar documents relating to Capital Market operations.

- A secured web enabled platform for users to access Rules and Regulations, Guidelines, Market Circulars, Market Bulletins, Market Notices, and related documents
- Content management system for the upload and indexing of documents and artefacts

Note: The scope for the first phase of this implementation will include provision of a secure web platform, and content management system with a workflow logic for the upload of documents as stated above. FMDQ QPay will be leveraged for the payment component of this implementation to enable end-users make payment for single download of documents. However, Bundle pricing and subscription module will be reviewed and analysed in a separate iteration when the product owner provides the pricing structure required for these use-cases.

3. Assumptions and Constraints

The following assumptions and constraints are documented to guide the design and implementation of the proposed platform.

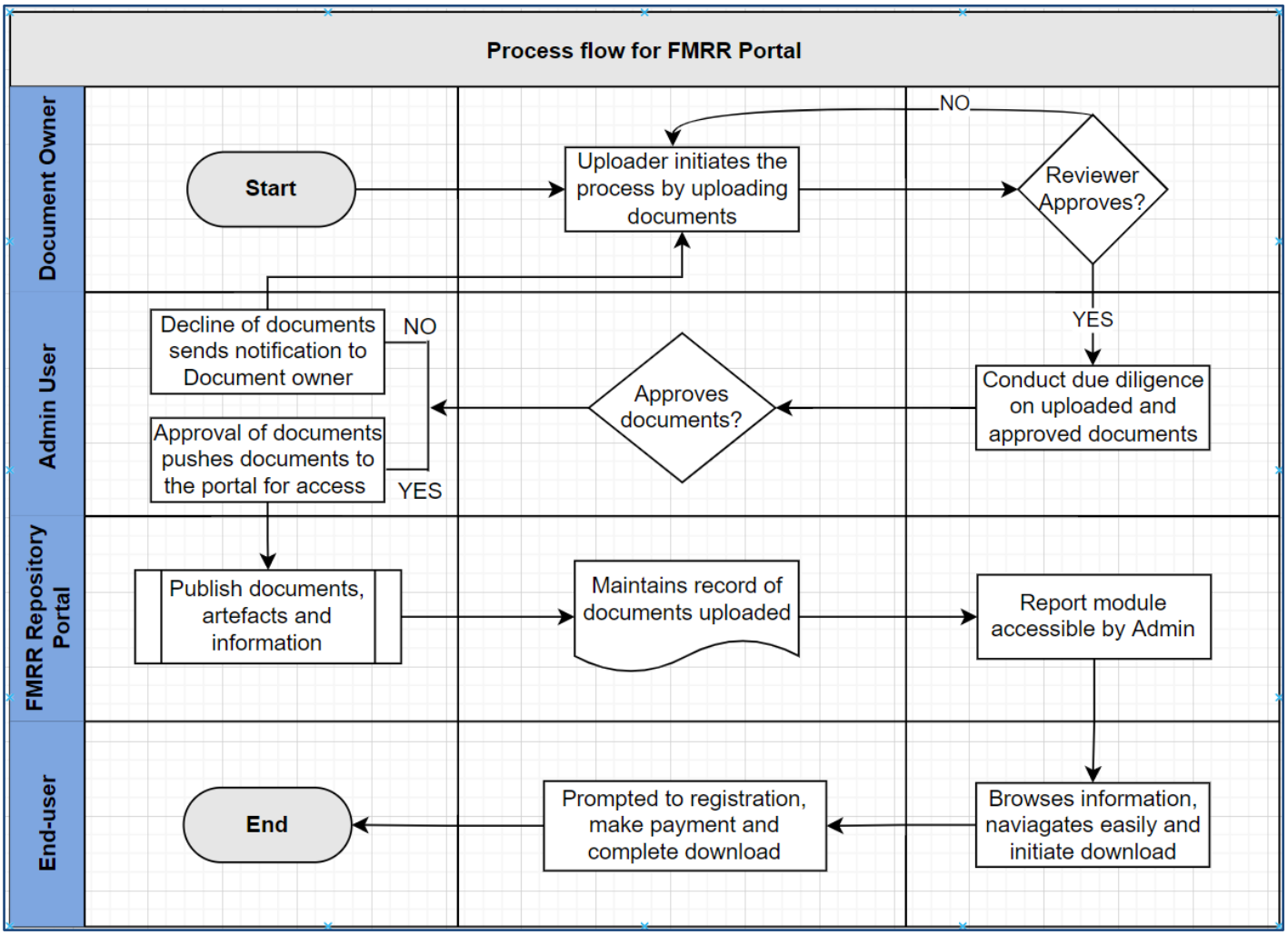
3.1 Assumptions

- Documents and information uploaded by administrative users will be subjected to operational due diligence independent from the platform to ensure correctness and completeness
- Acceptance criteria as communicated by the product owner will be based on adaptation of the user interface and user experience (UI/UX) of the web pages to reflect similar themes on the web pages of South Australian Legislation website - https://www.legislation.sa.gov.au/ and https://www.legislation.qld.gov.au/

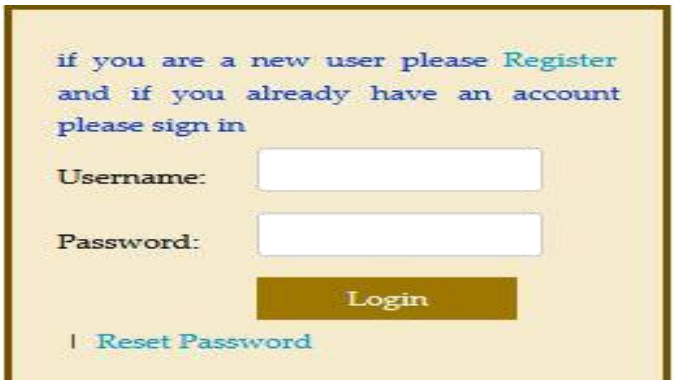
3.2 Constraints

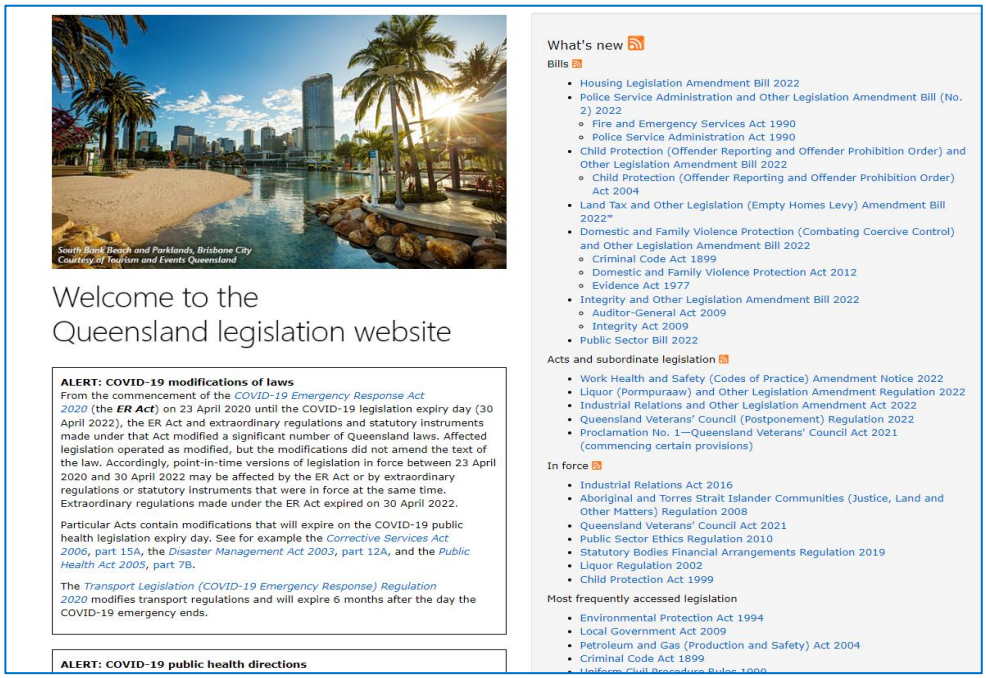
- The content management component will not validate the correctness, completeness of documents and information uploaded to the repository portal, required due diligence is to be completed manually by the document owners, reviewers, and administrative users.
- All documents and information - Rules & Regulations, Guidelines, Market Circulars, Market Bulletins, Market Notices and other information, Search) to be migrated or made available on the Rules and Regulation repository portal will be provided in a classified and specified format in alignment to the requirements captured in this document

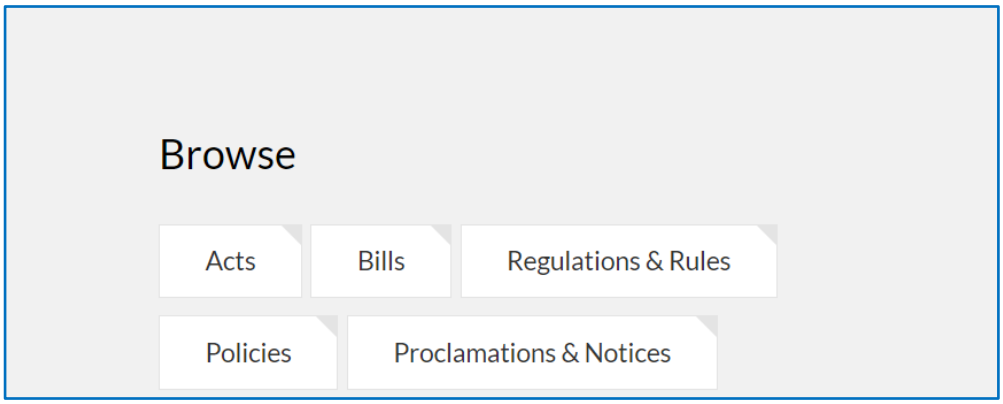
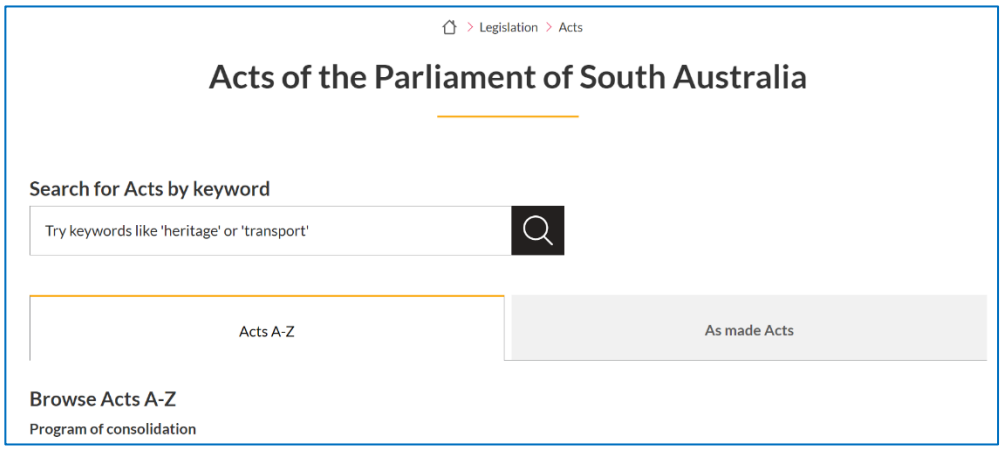
4. Process Flow

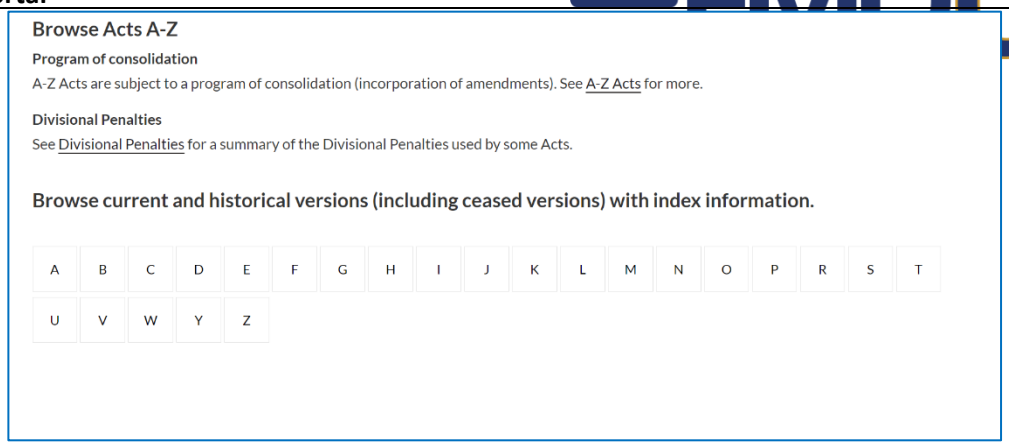


5. Functional Requirements

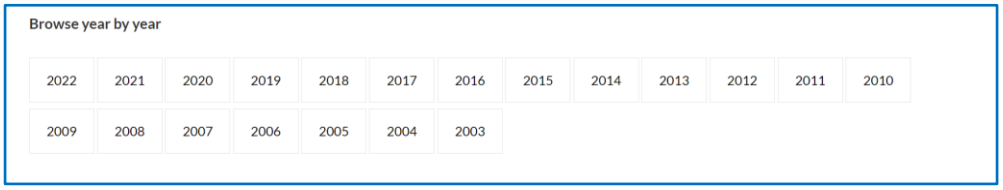
S/N	Module	Functional Specifications/Requirements
1	**Login Page**	User will be required to register or login at the point when they attempt to initiate document download.  As part of the user journey discussed, end-users will be prompted to pay for documents before they can be allowed to download same. The following payment options were suggested by the Product Owner (Market Data Group – MKG): ▪ **Pay per document download:** This option will enable end-users pay and download single document ▪ **Pay for bulk document download:** This option will enable end-users pay and download document in bulk (Product definition for grouping and combining documents will be provided by the Product Owner) ▪ **Subscription based pricing:** This option will provide end-user access to read the document online and an option to download documents
	Payment Options (discussed)	**Note:** User will be required to register to create user credentials "Username" and "Password" before they can download documents from the portal

2	**Landing Page (a)**	The landing page should have the following menu at the top of the page: ▪ Home ▪ Rules & Regulations ▪ Guidelines ▪ Market Circulars ▪ Market Bulletins ▪ Market Notices ▪ Search Directions for the landing page menu can be adopted from: https://www.legislation.qld.gov.au/
3	**Landing Page (b)**	The landing page should have the following: **Pictures:** The product owner will engage with Events & Brand Operations Group "EBG" for the use of approved digital images inline with the FMDQ Group Branding requirements. See image below for design directions: 
4		▪ **News alert section:** This section should only display latest news, proclamations & notices. ▪ **Home** – The home page should have the ''**search**'' bar. A user should be able to search for any item via the search bar. It should also have a ''Browse'' functionality as seen below. Directions for the landing page menu can be adopted from: https://www.legislation.qld.gov.au/

5	**Guidelines**	 **Note:** The highlighted in the screenshot above should only display the following items: ▪ Rules & Regulations ▪ Guidelines ▪ Market Circulars ▪ Market Bulletins ▪ Market Notices . **Guidelines** – This page should have a ''**search**'' ''**Guidelines A – Z**'' ''. See sample below. Directions: Landing Page ➔ Browse (Click on "Guidelines") ➔ Launches the search page for "Guidelines"  The ''**Guidelines A – Z**'' page should display alphabetically and contain both current and historical versions (**including ceased versions)** with index information:



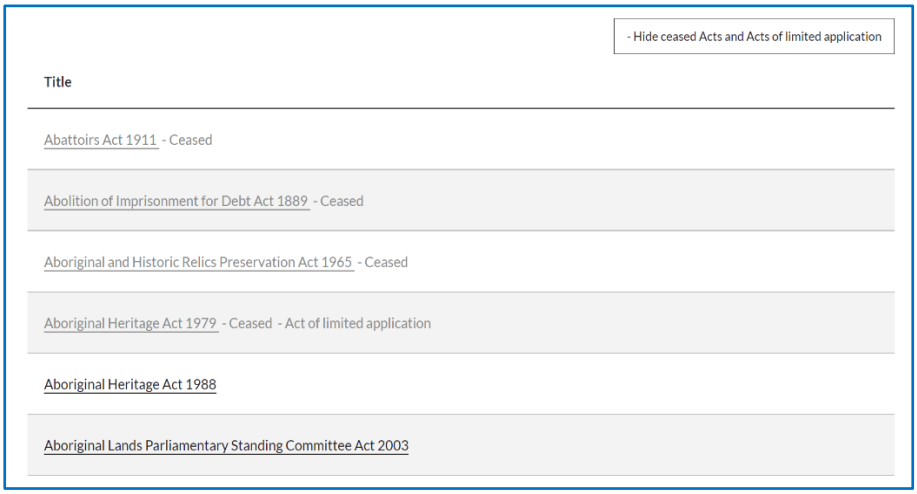
Users should be abale to browse the ''**Guidelines A – Z**'' search page by Year with a "Browse year by year"



Note:

1. All ''Guidelines'' that begins with alphabet ''A'' should be available via search in box ''A'' and so on.

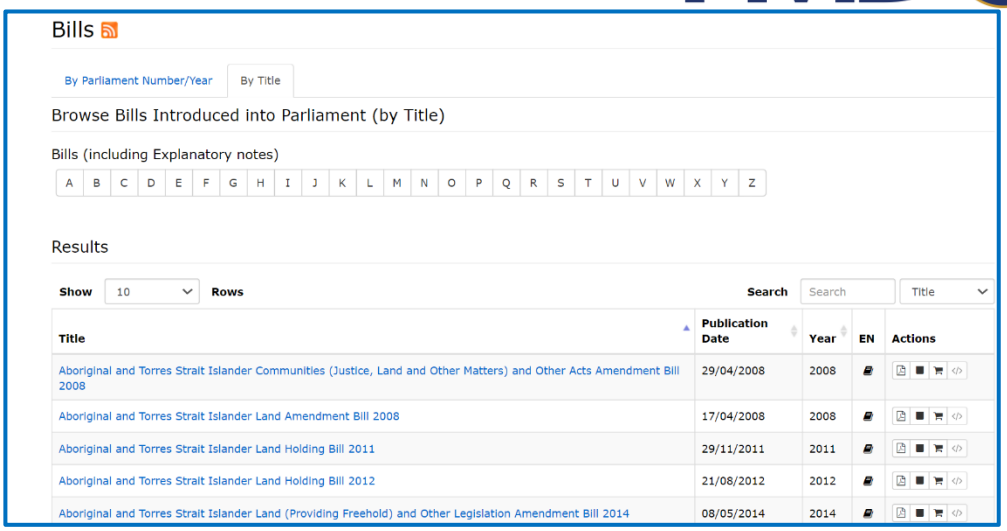
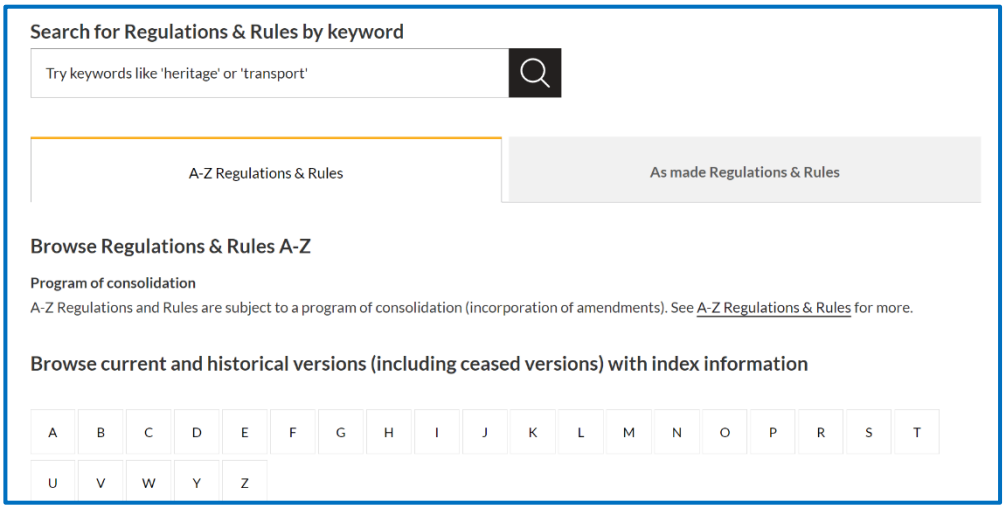
2. Search return should display list of documents with document name and date as shown below:



3. The documents should be available in the following format for download:

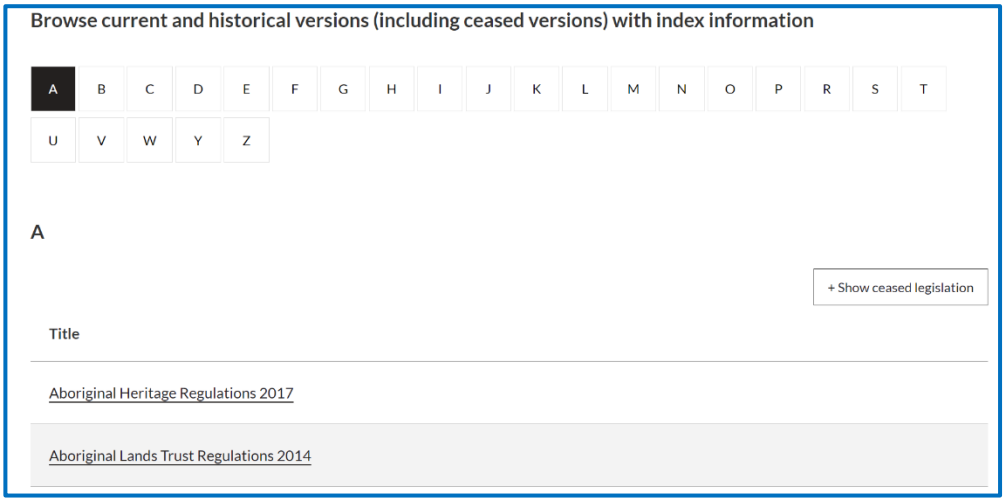
   a) PDF

		b) MS Word Note: End-users will be prompted to login or register at the point of document download before proceeding to make payment and download
6	**Market Circulars**	▪ **Directions:** Landing Page ➔ Browse (Click on "Market Circulars") ➔ Launches the search page for "Market Circulars" ▪ The Market Circularspage should be displayed by the following: 1. By Parliament Number/Year 2. By Title Bills By Parliament Number/Year	By Title Browse Bills Introduced into Parliament (by Parliament/Year) 57th Parliament — 12/11/2020 to ... — 2022, 2021, 2020 56th Parliament — 14/02/2018 to 06/10/2020 — 2020, 2019, 2018 55th Parliament — 13/02/2015 to 29/10/2017 — 2017, 2016, 2015 54th Parliament — 15/05/2012 to 06/01/2015 — 2014, 2013 ▪ Item one (1) above (By Parliament Number/Year) should display as shown in the above screenshot. The ''years'' should be clickable and should display all the Bills released in the referenced year. For instance, once the user clicks on 2022, all bills released in the said year should be displayed as seen below. Results Show 10 Rows — Search Search Year Title — Publication Date — Year — EN — HR — Actions Public Health and Other Legislation (Extension of Expiring Provisions) Amendment Bill 2022 — 22/02/2022 — 2022 Land and Other Legislation Amendment Bill 2022 — 17/03/2022 — 2022 Racing Integrity Amendment Bill 2022 — 24/02/2022 — 2022 Personal Injuries Proceedings and Other Legislation Amendment Bill 2022 — 31/03/2022 — 2022 Nature Conservation and Other Legislation Amendment Bill 2022 — 24/02/2022 — 2022 State Penalties Enforcement (Modernisation) Amendment Bill 2022 — 17/03/2022 — 2022 Animal Care and Protection Amendment Bill 2022 — 12/05/2022 — 2022 Trading (Allowable Hours) and Other Legislation Amendment Bill 2022 — 25/05/2022 — 2022 Transport Legislation (Road Safety and Other Matters) Amendment Bill 2022 — 26/05/2022 — 2022 Health Practitioner Regulation National Law and Other Legislation Amendment Bill 2022 — 11/05/2022 — 2022 Showing 1 to 10 of 35 titles — First Previous 1 2 3 4 Next Last *Note: An asterisk (*) at the end of a Bill's short title indicates the Bill is a private member's Bill.

		▪ Search Market Circularsby Title should be displayed as seen below:  ▪ The documents should be available in the following format for download: a) PDF b) MS Word c) Purchase
7	**Rules & Regulations**	**Directions:** Landing Page ➔ Browse (Click on "Rules & Regulation") ➔ Launches the search page for "Rules & Regulation" There should be a search bar on this page and the following tabs: 1. A-Z Rules & Regulations 2. As made Rules & Regulations  ▪ Amendments rules & regulations are also incorporated in the ''A-Z rules regulations'' page and once you click on the ''A-Z Rules & Regulations'', the page below should display. ▪ Upon the click of an alphabet, Rules & Regulations should be displayed by

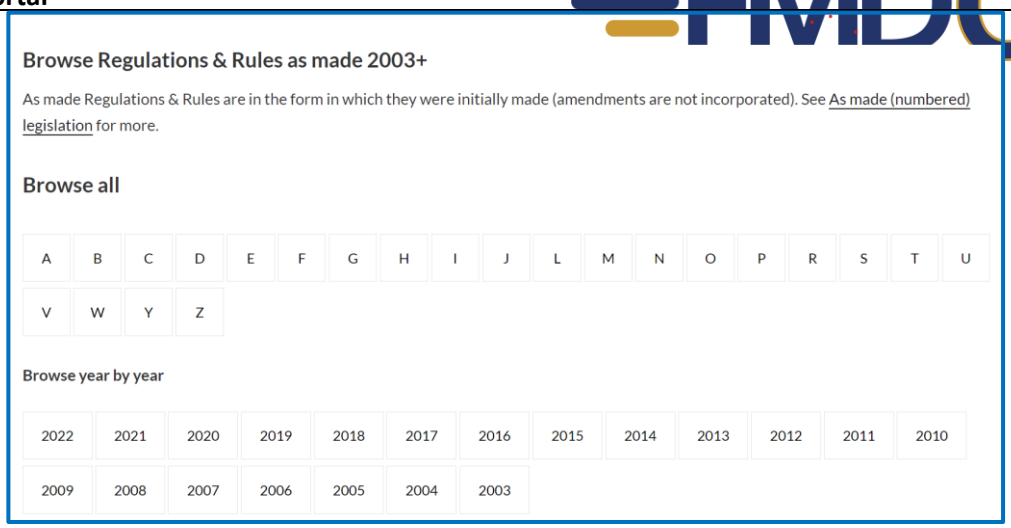
document name and date.

- By default, the search return doesn't include "Ceased Rules & Regulations", Users can click on the toggle below to include "Show Ceased Legislation"

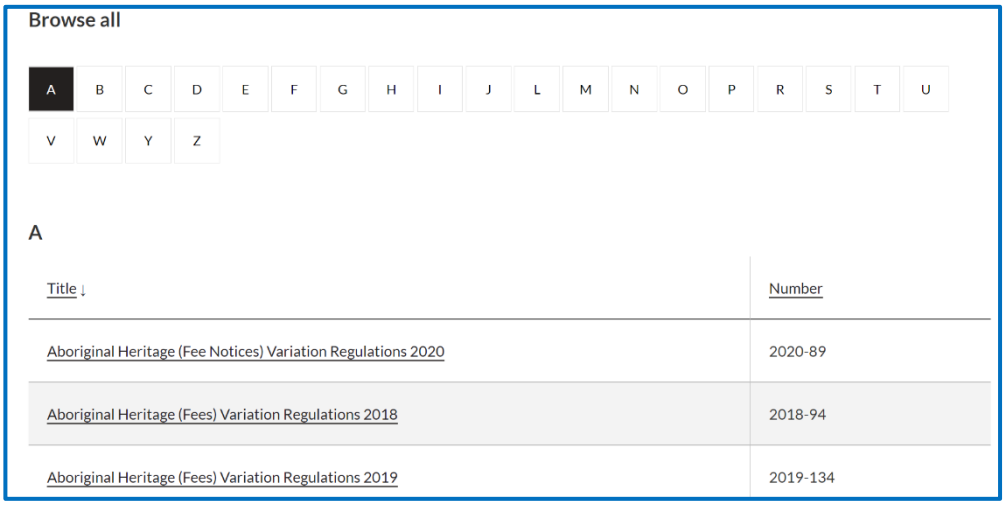


- The search hides all ''Ceased Legislation" when users click on the toggle button "Hide Ceased Legislation"

- **''As made rules & regulations''** are without amendments and should be displayed alphabetically and year by year.

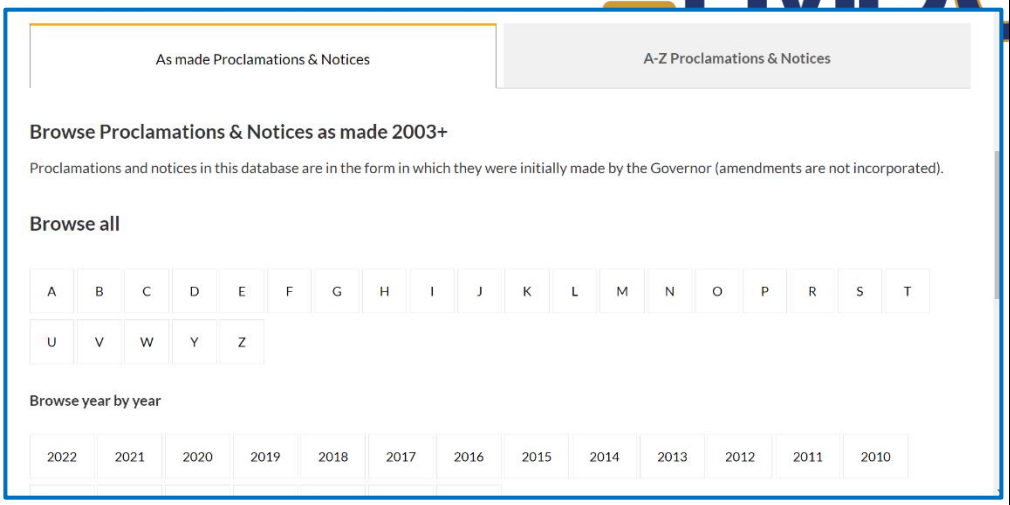


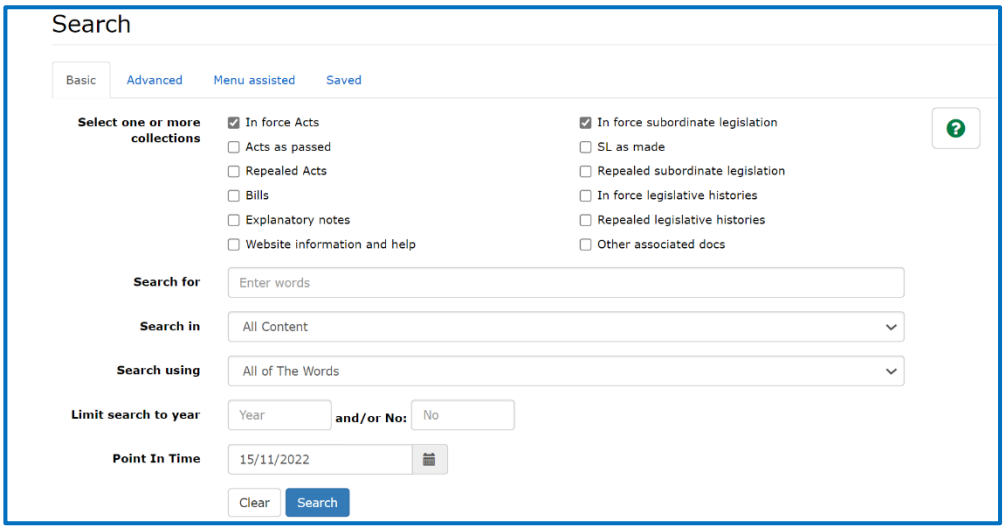
- Upon the click of an alphabet, "Rules & Regulations as made" should be displayed by document name and date.



- The documents should be available in the following format for download:
  a) PDF
  b) MS Word

8	**Market Notices**	The page should follow similar structure as the "Rules & Regulations" page.



9	**Search**	The search page should have the following additional tabs: 1. Basic 2. Advanced 3. Saved The basic search can be used for simple search queries while the advance search can be used to combine multiple search queries. The page for basic search can be seen below:  In this context, the **''select one or more collections''** will only have the following fields as applicable: ▪ Rules & Regulations ▪ Guidelines ▪ Market Circulars ▪ Market Bulletins ▪ Market Notices

- Other associated documents

The ''**Search in**'' field should have a drop down that will enable user to limit search and the items in the drop down will include the following:

- Title
- All Headings
- Part/Division Headings
- Schedule Headings
- Defined Terms
- Historical Title

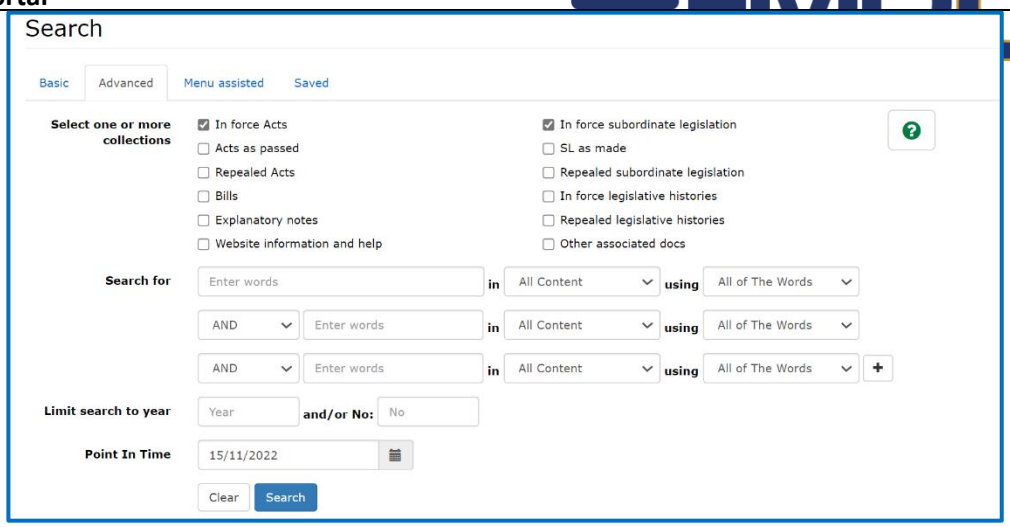
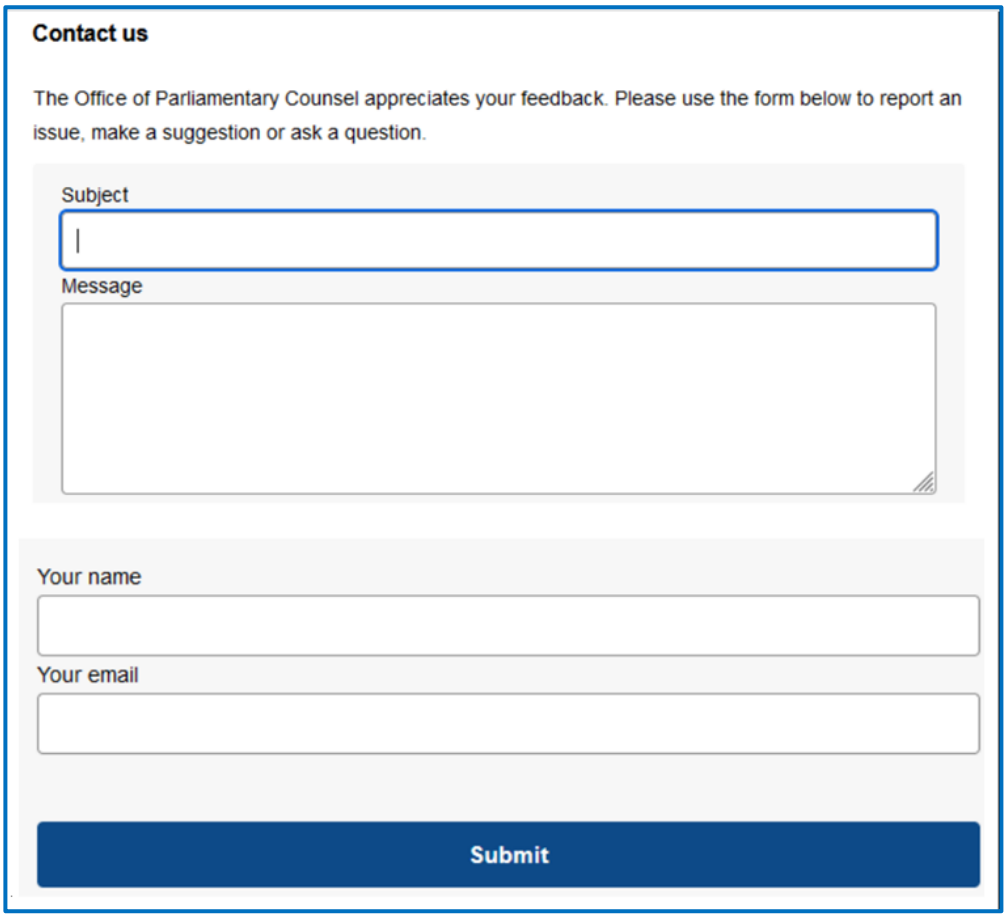
The "**Search using**" field should have a drop down that will enable user to limit search and the items in the drop down will include the following:

- All of The Words
- Any of The Words
- The Exact Phrase
- Without The Words

Once you populate all the fields, click on search and the result will be displayed as seen below

1. The documents should be available in the following format for download:
   - PDF
   - MS Word
   - Purchase

2. The advanced search page sample can be seen below

		 The ''select one or more collections'', ''search in'' and ''search using'' fields should be the same as the basic search page. 3. The field with ''And'' should also have a dropdown to include ''Or'' and ''Not''. 4. The search criteria should also include ''year'' and ''number''.
10	**Feedback Page**	This should be a page where users can report an issue, suggest, or ask a question. 

11	**Back-end features**	The financial markets rules & regulations repository portal should have the following back-end administrator features: ▪ Capability to upload documents (Pdf and MS Word) ▪ The admin should also have the ability to delete uploaded documents. ▪ A profile should be created for the admin to enable him or her upload documents successfully ▪ The categories of persons to be profiled will be made available in due time ▪ The admin should also be able to edit already uploaded documents The upload functionality should have the following fields: ▪ Rules & Regulations ➢ Title ➢ Publication Date ➢ Year ➢ Number of released Rules & Regulations ➢ Document type (Pdf or MS Word) ➢ Submit Refer to the display of Rules & Regulations in the screenshot above (Under Rules & Regulations). ▪ Guidelines ➢ Title ➢ Publication Date ➢ Year ➢ Number of released Guidelines ➢ The parliament numbers ➢ Document type (Pdf or MS Word) ➢ Submit Refer to the display of Bills in the screenshot above (Guidelines). ▪ Market Circulars ➢ Title ➢ Year ➢ Number of released Rules & Regulations ➢ Document type (Pdf or MS Word) ➢ Submit Refer to the display of Rules & Regulations in the screenshot above (Under Rules & Regulations).

		▪ Market Bulletins ➢ Title ➢ Date ➢ Page ➢ Document type (Pdf or MS Word) ➢ Submit Refer to the display of Rules & Regulations in the screenshot above (Under Rules & Regulations). ▪ Market Notices ➢ Title ➢ Date ➢ Page ➢ Document type (Pdf or MS Word) ➢ Submit Refer to the display of Policies in the screenshot above (Under Policies). **Note:** ▪ During the upload process, once an item (Rules & Regulations, Guidelines, Market Circulars, Market Bulletins, Market Notices) is selected, the fields under each of the item should populate automatically. **User Access Management** User access management module will be made available to Market Services Group ("**MSG**"). MSG will be created as Super Administrator with responsibilities for creation of user roles and permissions.

6. OTHER REQUIREMENTS

This section includes non-functional requirements that describe conditions under which a solution must remain effective or qualities that a solution must have.

6.1 Interface Requirements

- The content of the pages should be well formatted and possess a good error handling workflow
- The navigation of the interface should be smooth and intuitive while references to related data elements are well arranged
- The link to the interface should be compatible with the top five (5) browsers
- The display should be clear, easy to read using appropriate font and font sizes
- The status of progress and completion notification should be displayed

6.2 User Experience

- For ease of use, user-friendly interactive and intuitive interface will be adopted to improve user experience
- Records of participants already onboarded will be migrated to the new application as part of Go-live readiness activities
- **Responsiveness:** the portal should be compatible to run on different web and mobile browsers - Google Chrome, Microsoft Internet Explorer, Opera, Mozilla Firefox, and Apple Safari. It should also be able to run on different mobile operating systems– iOS, Android, Windows

6.3 **Scalability/Stability**

The platform can be scaled to accommodate more users and more contents; the portal is expected to host large volume of information with concurrent users at any point in time.

6.4 Security and Privacy

- The application will be subjected to Vulnerability Assessment and Penetration Test (VAPT) and vulnerabilities identified will be resolved and managed in line with the IT Security policy
- To ensure the confidentiality, integrity, and availability of the application, the application should meet the security requirements stated in here
- The application should be operated in a secure environment, implementing industry best practices such as ISO 27001, The Payment Card Industry Data Security Standard ("**PCI-DSS**"), The Defense Information Systems Agency ("**DISA**") The Security Technical Implementation Guide ("**STIGs**") or The National Institute of Standards and Technology ("**NIST**") checklists and guidelines and associated vendor recommendations (e.g., Microsoft Security Guidance, Oracle Hardening Guides, etc.)
- At a minimum, the software used in and around the application must be up-to-date, and there must be no known vulnerabilities
- Vulnerability assessment and penetration testing should be done against the OWASP Top 10 Web Application Vulnerabilities (Version 2021), and all vulnerabilities remediated

6.5 Backup and Recovery

The platform should have mechanisms in place to support data recovery

6.6 System Validation Rules

All specified mandatory fields and business rules will be taken into considerations at the implementation phase

FMDQ Color Guide:

Catalogue for Financial Markets Rules and Regulations Portal

- The catalogue provided by the Product Owner (MKG) will be used as a basis for developing the index and logic for categorisation and management of uploaded documents

Catalogue for Financial Markets Rul

PUBLIC