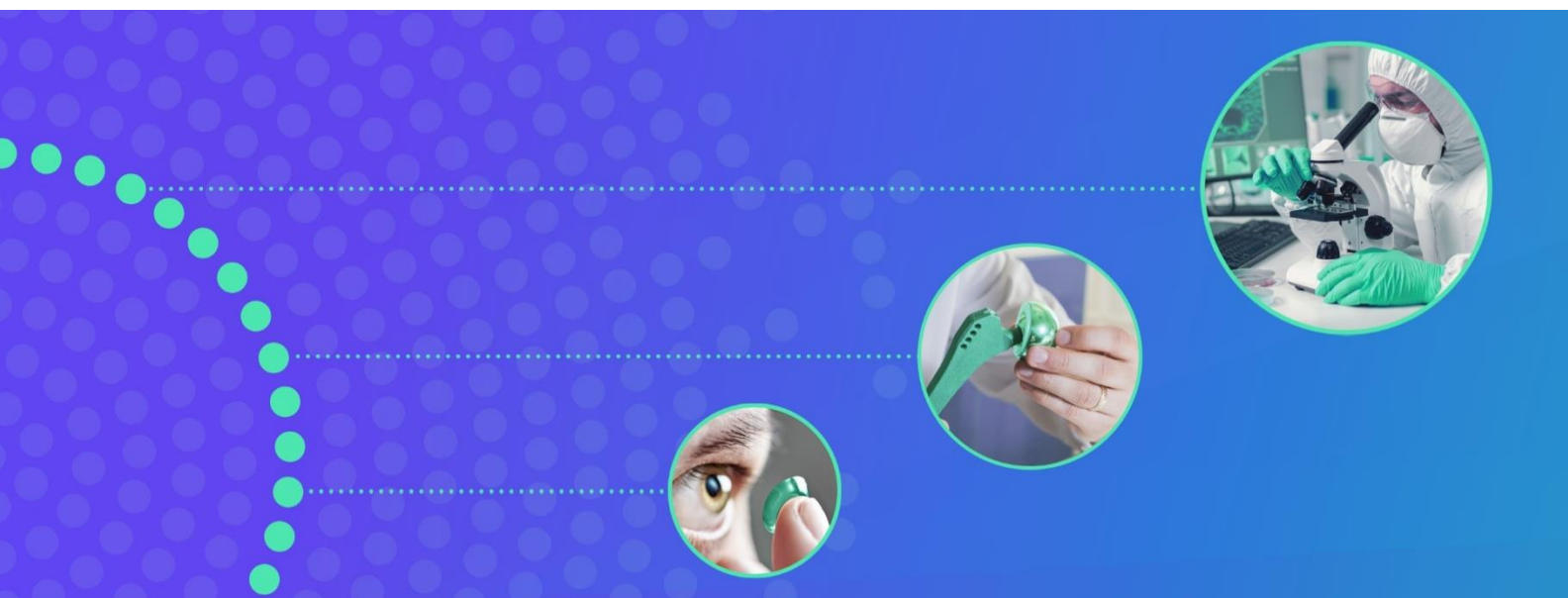




BIOMATDB

ADVANCED DATABASE FOR BIOMATERIALS WITH DATA ANALYSIS AND VISUALISATION TOOLS EXTENDED BY A MARKETPLACE WITH DIGITAL ADVISORS

Grant Agreement: 101058779

D4.5 Online knowledge base (KB) with manuals, FAQ, and screencast video tutorials

(Additional Document to the Demonstrator)

DISCLAIMER: While the BIOMATDB Biomaterial Marketplace, Biomaterial Database and the Knowledge Base represent the actual deliverable, this document is an additional, public report intended to show the development progress of the solutions.



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Project description

Acronym	BIOMATDB
Title	Advanced Database for Biomaterials with Data Analysis and Visualisation Tools extended by a Marketplace with Digital Advisors
Coordinator	SYNYO GmbH
Reference	101058779
Type	Coordination and Support Action (CSA)
Programme	Horizon Europe (HORIZON)
Topic	HORIZON-CL4-2021-RESILIENCE-01-25 Biomaterials database for Health Applications
Start	01.06.2022
Duration	33 months
Website	www.biomatdb.eu
Consortium	SYNYO GmbH (SYNYO) , Austria, Coordinator Barcelona Supercomputing Center (BSC) , Spain University of Oslo (UIO) , Norway Universitat Politècnica de Catalunya (UPC) , Spain Tampere University (TAU) , Finland West Pomeranian University of Technology, Szczecin (ZUT) , Poland MINDS & SPARKS GmbH (M&S) , Austria Business Council of the Center Region & CCIC (CEC/CCIC) , Portugal Clust-ER Health (CLUSTER) , Italy National University of Ireland, Galway (NUIG) , Ireland Hospital Infantil Universitario Niño Jesús (FHUNJ) , Spain European Connected Health Alliance (ECHA) , Ireland Osnat Hakimi (Subcontractor), Israel Carla Verónica FuentesLópez (Subcontractor), United Kingdom Yannis Missirlis (Subcontractor), Greece

Deliverable

Deliverable number	D4.5
Deliverable title	Online knowledge base (KB) with manuals, FAQ, and screencast video tutorials
Deliverable version	1.0
Lead beneficiary	M&S
Work package number	WP4
Work package title	DEVELOP: Database System, Data Analysis Tools, Web Applications, Backend Modules, and Multilingual Frontends
Due date of delivery	31.10.2024
Actual date of delivery	31.10.2024
Dissemination level	Public
Type	Demonstrator
Rights	BIOMATDB Consortium
Authors	Jakob Seper (SYNYO) Tilman Kerl (SYNYO)
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Executive Summary

This deliverable serves as a demonstrator, primarily showcasing the development progress of the help systems for the Biomaterial Marketplace and Biomaterial Database. Through a combination of screenshots, descriptions, and functionality overviews, this report provides a detailed look into the knowledge bases – mainly referred as help systems in this document.

The systems are structured to address the specific needs of each user group, offering targeted resources, including detailed articles, FAQs, and video tutorials. The report is organised into sections that cover the system architecture, interface development, and the content added for the help systems. Each component is presented with screenshots and descriptions, demonstrating the stages of development and user experience improvements that have been implemented.

Contents

Executive Summary	4
1 Introduction.....	9
1.1 Overview.....	9
1.2 Relation to other tasks and deliverables.....	9
1.3 Structure of the deliverable	9
2 Help System Database.....	10
2.1 Application Structure	10
2.2 Development.....	10
2.3 Content.....	14
3 Help System Marketplace	18
3.1 Application Structure	18
3.2 Development.....	19
3.3 Content.....	27
4 Conclusion	29

Figures

Figure 1. System Architecture and Application Structure	10
Figure 2. Previous “Start”-page layout option	11
Figure 3. Previous “Category”-page layout option.....	11
Figure 4. Previous “Article”-view with image option	11
Figure 5. Previous “Start”-page layout - logo option	11
Figure 6. Previous “All articles”-view option.....	11
Figure 7. Previous alternative “Start”-page layout	11
Figure 8. Collapsible FAQs	12
Figure 9. Exemplary article view featuring a video	12
Figure 10. Topic view.....	13
Figure 11. Search bar with results.....	13
Figure 12. Contact Form	13
Figure 13. Example of the guided tours on the database web-app.....	14
Figure 14. Guided Tours Content	15
Figure 15. FAQ Content Creation	15
Figure 16. Case Study Content Creation.....	16
Figure 17. Help system backend: article list.....	16
Figure 18. Help system backend: edit an article	17
Figure 19. Help system backend: add new FAQ.....	17
Figure 20. Components of the Biomaterial Marketplace Help System.....	18
Figure 21. List of Help Topics (Help AdminBase).....	19
Figure 22. List of Help Articles (Help AdminBase).....	20
Figure 23. Article Edit Page (Help AdminBase).....	20
Figure 24. Article Edit Page (Help AdminBase).....	21
Figure 25. Article Translation Page (Help AdminBase).....	21
Figure 26. List of Help FAQs (Help AdminBase).....	22
Figure 27: List of Help Tags (Help AdminBase).....	22
Figure 28: Index Page (Marketplace Help)	23
Figure 29. Buyers Home (Marketplace Help)	23
Figure 30. Articles List (Marketplace Help)	24
Figure 31. Help Article Example for Buyers (Marketplace Help).....	24
Figure 32. Help Article for Suppliers (Marketplace Help)	25
Figure 33. Article Feedback Section (Marketplace Help)	25
Figure 34. FAQ List (Marketplace Help).....	26
Figure 35: Contact Form (Marketplace Help).....	26

Figure 36. Footer (Marketplace Help) 27

Figure 37. Article Spreadsheet 27

Figure 38. Article Template 28

Figure 39. Videos on the Biomaterial Marketplace..... 28

Tables

Table 1. D4.5 Input from other tasks and deliverables 9

Table 2. D4.5 Output for other tasks and deliverables 9

1 Introduction

This demonstrator serves as a comprehensive overview of the current implementation status of the content creation and development of the two help systems within the BIOMATDB project. The subsequent content of this document aims to show the ongoing development progress mainly in form of visual representations.

1.1 Overview

The project develops two main solutions, each designed to address specific needs within the bio-material ecosystem: the **Biomaterial Database**, and the **Biomaterial Marketplace**. For both solutions, a help system and knowledge base (hereafter named help system) has been implemented. These systems are designed to empower users by providing informative documentation, troubleshooting guidance, and insightful resources to navigate through the applications effectively.

1.2 Relation to other tasks and deliverables

Receives inputs from:

Table 1. D4.5 Input from other tasks and deliverables

Deliverable	Due Date	Input for D4.5
D3.4	31.03.2024	Database, data processing, tools and web application marketplace and specifications (Phase 2)
D3.5	30.04.2024	Web application backend and frontend specifications (Phase 2)
D4.2	31.08.2023	Database and marketplace application frontend and backend (Phase 1)
D5.1	30.09.2023	Demonstration plan and test system
D5.2	30.04.2024	Demonstration and validation report (Phase 1)

Provides outputs to:

Table 2. D4.5 Output for other tasks and deliverables

Deliverable	Due Date	Output from D4.2
D5.3	31.01.2025	Demonstration and validation report (Phase 2)

1.3 Structure of the deliverable

This deliverable is structured as follows:

Chapter 2 focuses on the demonstration of the help system for the Biomaterial Database, detailing its application structure, development, and user-support content.

Chapter 3 presents the help system for the Biomaterial Marketplace, covering its architecture, development process, and specialized content for buyers and suppliers.

2 Help System Database

As per the last deliverable, the help system of the biomaterial database was already (technically) set up. In accordance to the feedback, we collected up to this point through our internal testing – both within SYNYO and with other partners, we improved and implemented the respective aspects. The progression and different versions, up to the current one will be presented and described further down, in the “Development” section of this chapter.

The system is currently live on <https://help.biomaterialdatabase.com>. The site is not yet available for the public and can only be accessed by providing valid credentials, with the submission of this deliverable the page will be made public.

2.1 Application Structure

To save development resources and facilitate content management for non-technicians, we used a pre-existing software component as our starting template that customised and adopted to our specific needs.

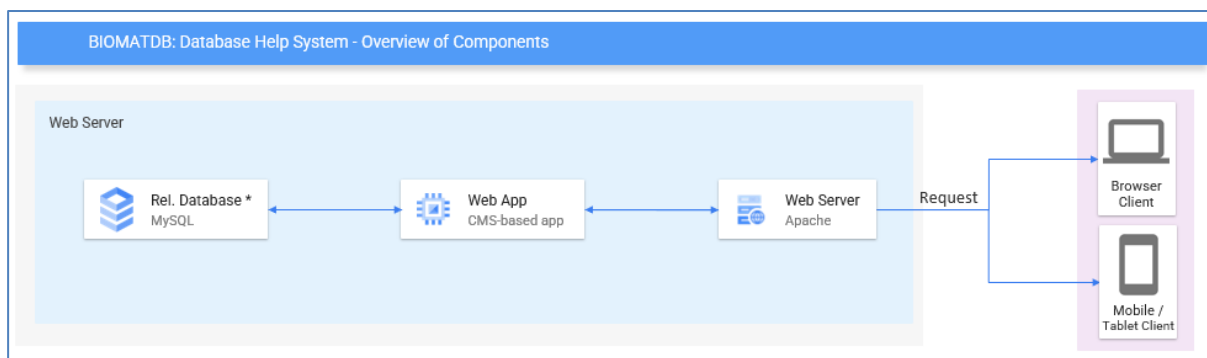


Figure 1. System Architecture and Application Structure

Figure 1 shows the architectural structure of the help system. We use an apache2 web server to handle the incoming request from client devices, then have the developed CMS-based web application which itself uses a relational database to store both the help content and applications-specific data (e.g. sessions, logs, etc.).

The web application is structured into three different entities which determine the main components. Topics (previously named categories), articles belonging to topics and general frequently asked questions (FAQs). Each entity has its own overview and detail page. The detail (single) page for FAQs can only be accessed when searching and then clicking on a FAQ-result.

An article can consist of text, images and videos. Each article also features a link to a contact form, a feedback button and a sidebar showing other articles from the same topic. More details and screenshots are presented in the next section.

2.2 Development

This section provides a detailed overview of the various development phases, updates, and steps undertaken, guided by initial planning and feedback from internal testing and project partners. For the help system of the database, we employed (as mentioned above) a ready-to-use CMS template that,

was substantially customized to meet our specifications. This approach allowed us to build from the ground up, balancing the benefits of a tailored system with the efficiency of a time-saving pre-existing software package. To ensure consistency with the biomaterial database design, the template was modified to visually and structurally align with the general design and colours of the biomaterial database.

It should be noted that some screenshots contain sample or placeholder content, as initial development efforts focused primarily on layout and technical integration, with content production occurring separately. The Figures below illustrate this progression, highlighting changes made in alignment with collected feedback, the most recent one being from the internal testing rounds before our consortium meeting in Vienna in September 2024.

Figure 2 to Figure 7 showcase old versions and styling variations of the system. They already featured the core entities of articles and topics.



Figure 2. Previous “Start”-page layout option

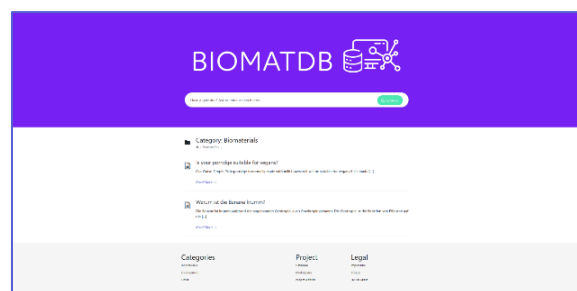


Figure 3. Previous “Category”-page layout option



Figure 4. Previous “Article”-view with image option

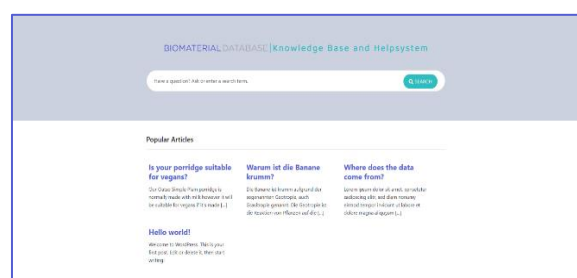


Figure 5. Previous “Start”-page layout - logo option

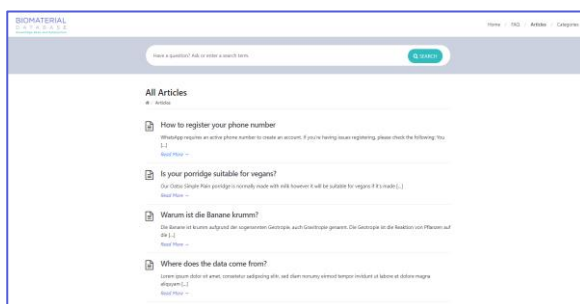


Figure 6. Previous “All articles”-view option

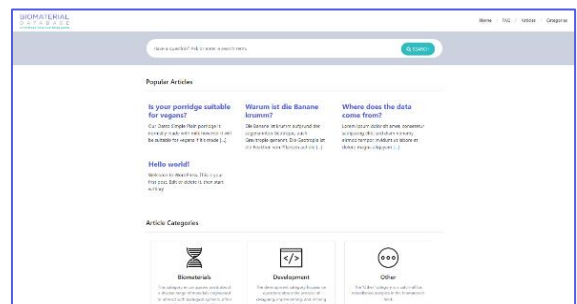


Figure 7. Previous alternative “Start”-page layout

The figures below (Figure 8, Figure 9, Figure 10, Figure 12, and Figure 13) showcase the current layout and design of the system. A few more components and features were designed and implemented. Namely: Feedback-buttons for the usefulness of the article (as can be seen in Figure 9 at the bottom); a sidebar in the article view that features articles belonging to the same topic (see Figure 9 left); a

contact form (see description below and [Figure 12](#)); collapsable FAQs (see [Figure 8](#)); a new search bar (see [Figure 11](#) – including search results, both articles and FAQs).

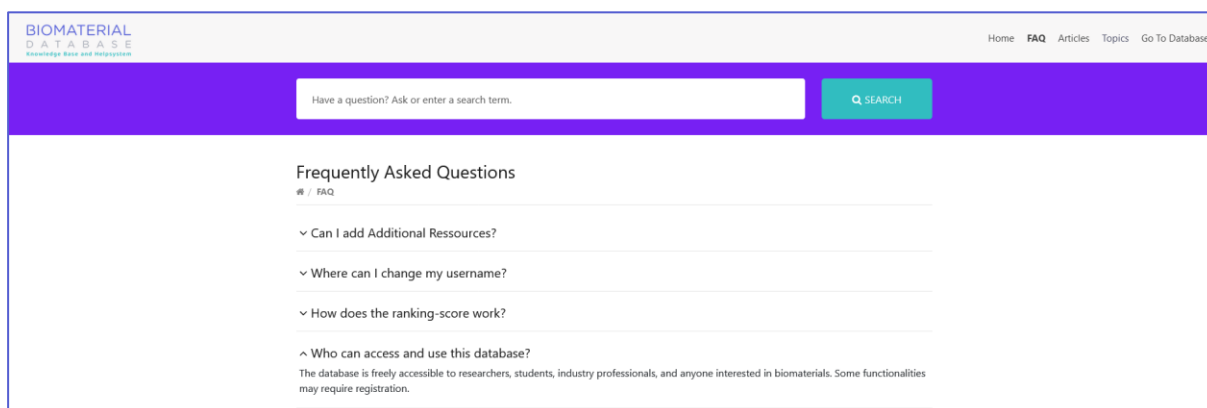


Figure 8. Collapsable FAQs

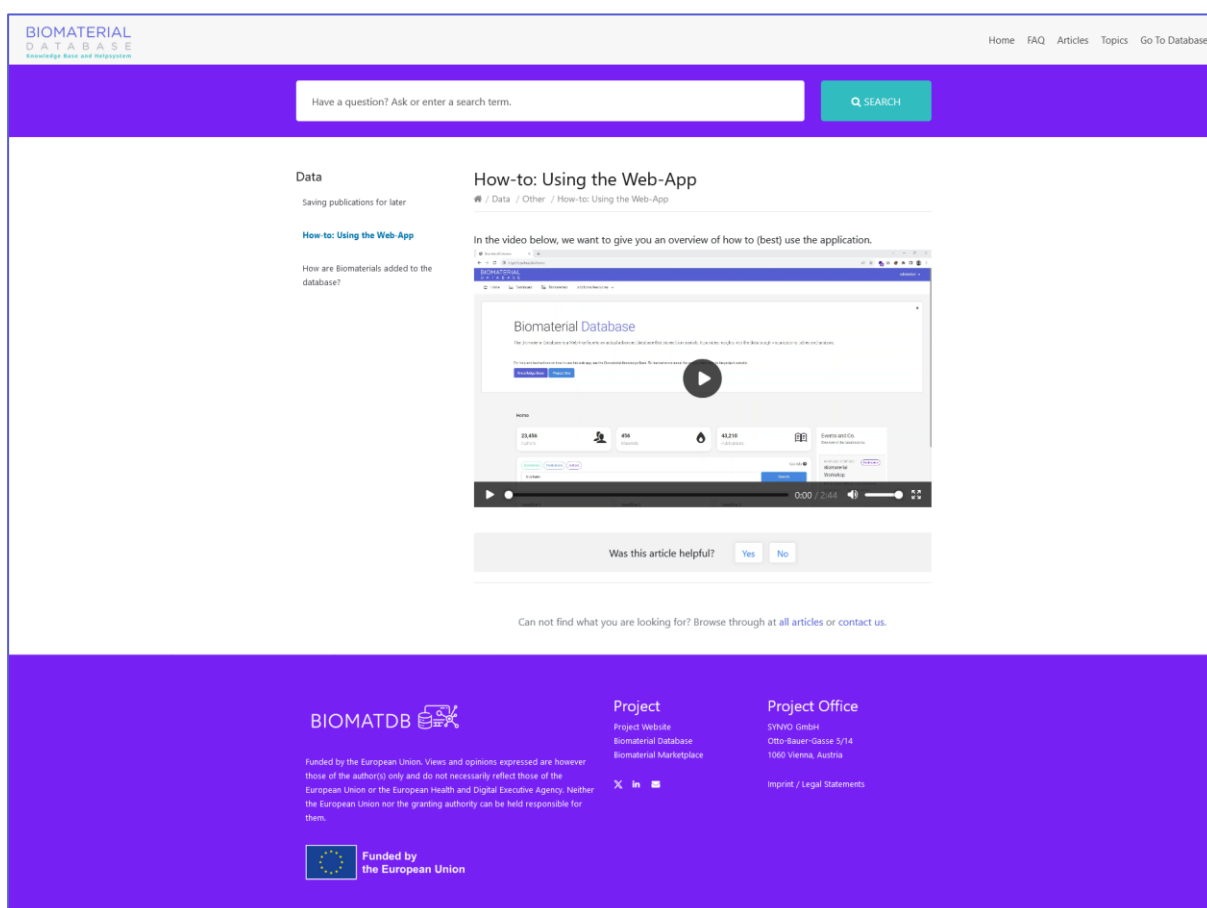


Figure 9. Exemplary article view featuring a video

Apart from the additional features, also some other components changed – e.g. the colour scheme was adopted to match the database web-app: using purple to highlight the search bar. Further changes include a denser topic-view (see below).

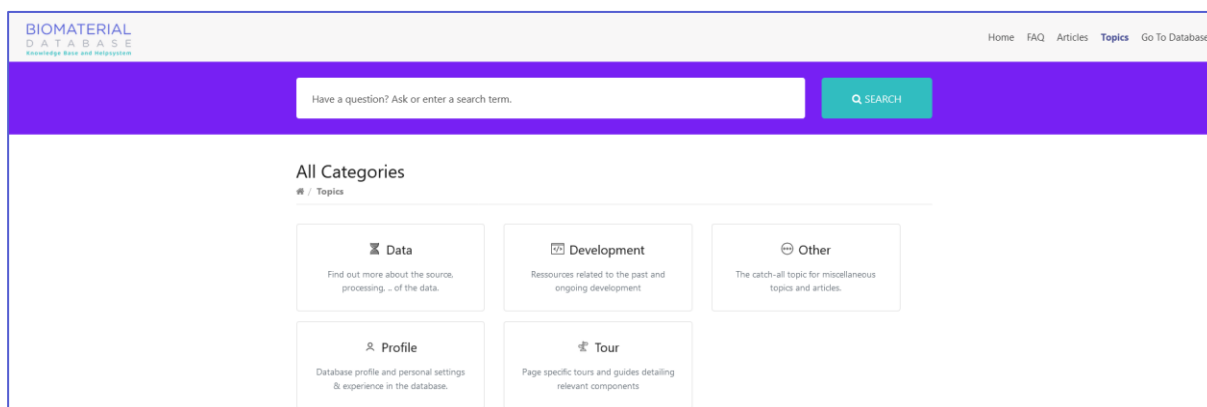


Figure 10. Topic view



Figure 11. Search bar with results

To enhance functionality, we integrated Google Analytics to monitor user interactions and assess system performance, as well as Google ReCAPTCHA v3 to guard against spam submissions. The latter is particularly used and helpful in the contact form (see Figure 12) that we implemented to allow users to get in contact in case no article or FAQ was able to resolve their issue.

The screenshot shows the 'Contact' form. The header includes the logo and navigation links: Home, FAQ, Articles, Topics, and Go To Database. A search bar with the placeholder text 'Have a question? Ask or enter a search term.' and a 'SEARCH' button is at the top. The main content area is titled 'Contact' and contains a form with the following fields: Name *, Email *, Subject *, and Your Question *. Below the 'Your Question' field is a note: 'Describe your question/problem as detailed as possible 0 of 500 max characters.' and a 'Confirm' section with a checkbox: 'I have looked for my question in both the articles and FAQs'. A 'Send' button is at the bottom.

Figure 12. Contact Form

2.3 Content

2.3.1 Content Creation

The content includes in-depth articles, FAQs, and videos, with the videos supporting built-in guided tours that users can initiate at any time to navigate through the website's features. As shown in [Figure 13](#), these tours have an interactive, highlighted backdrop and walk users step-by-step through the functionality, enhancing their understanding of the platform.

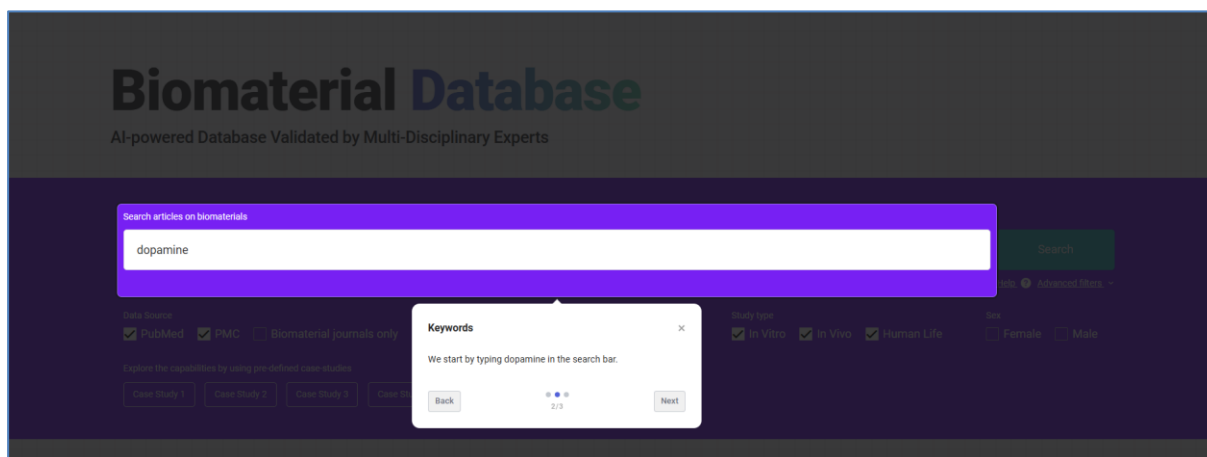


Figure 13. Example of the guided tours on the database web-app

The main content is already developed, covering guides for each page (see [Figure 14](#)), case studies (see [Figure 16](#)) showcasing various search scenarios aligned with the developed user personas, and targeted FAQs (see [Figure 15](#)). Ongoing data integration and testing may require updates to the help system content, and user feedback could lead to additional articles. Currently, there is one video/screencast, which will likely be replaced by an updated version at the project's conclusion to match the latest site updates. The guided tours that are currently developed and implemented also serve as the basis for more help- and promotional videos.

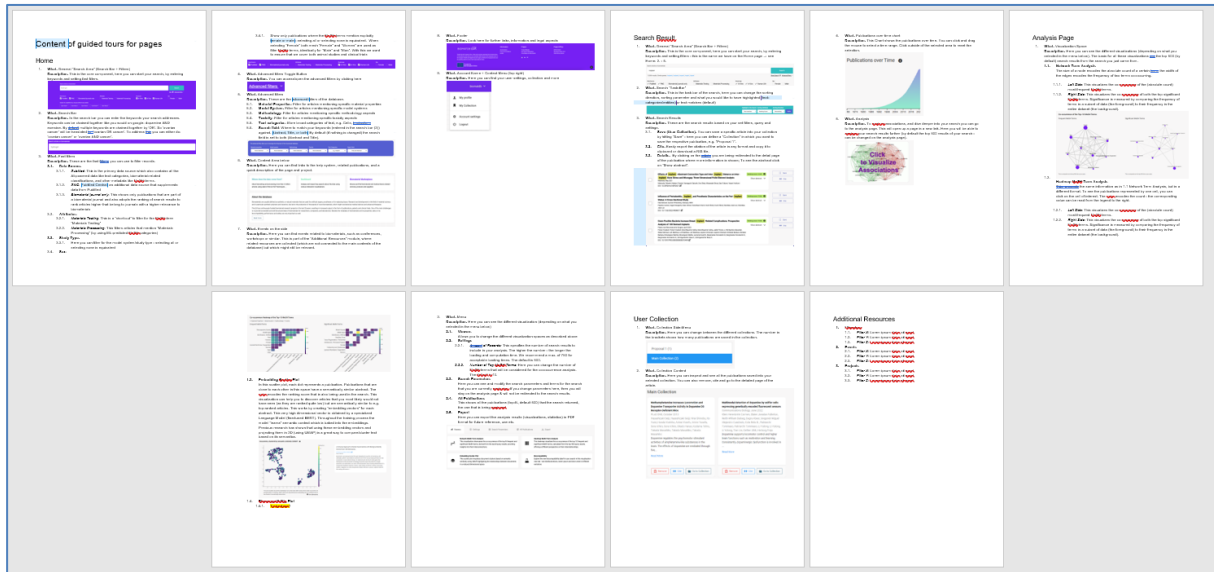


Figure 14. Guided Tours Content

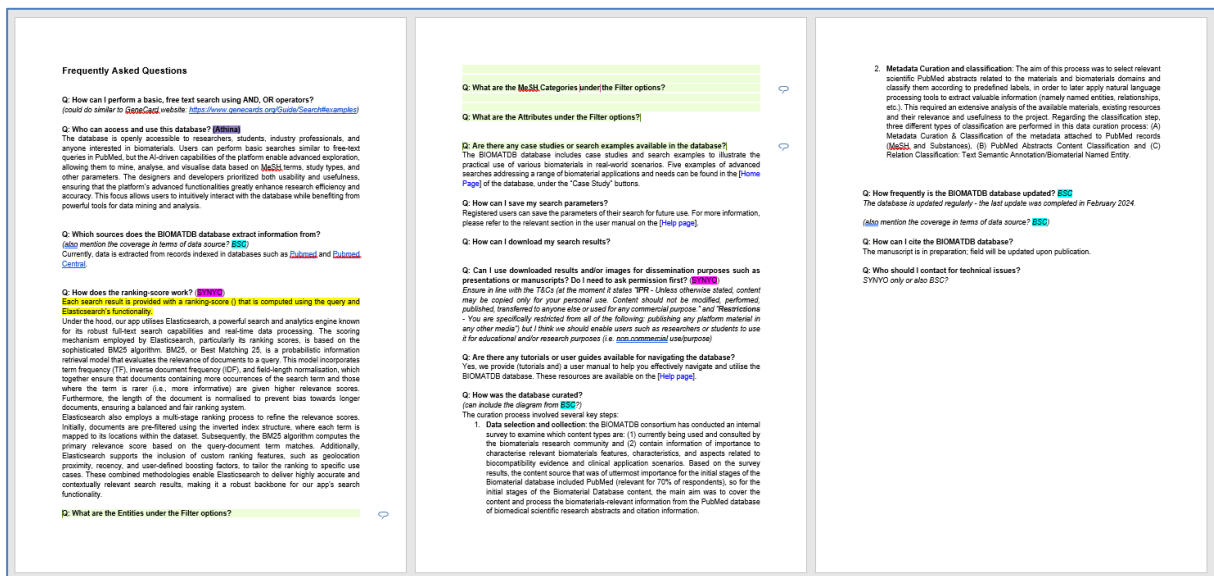


Figure 15. FAQ Content Creation

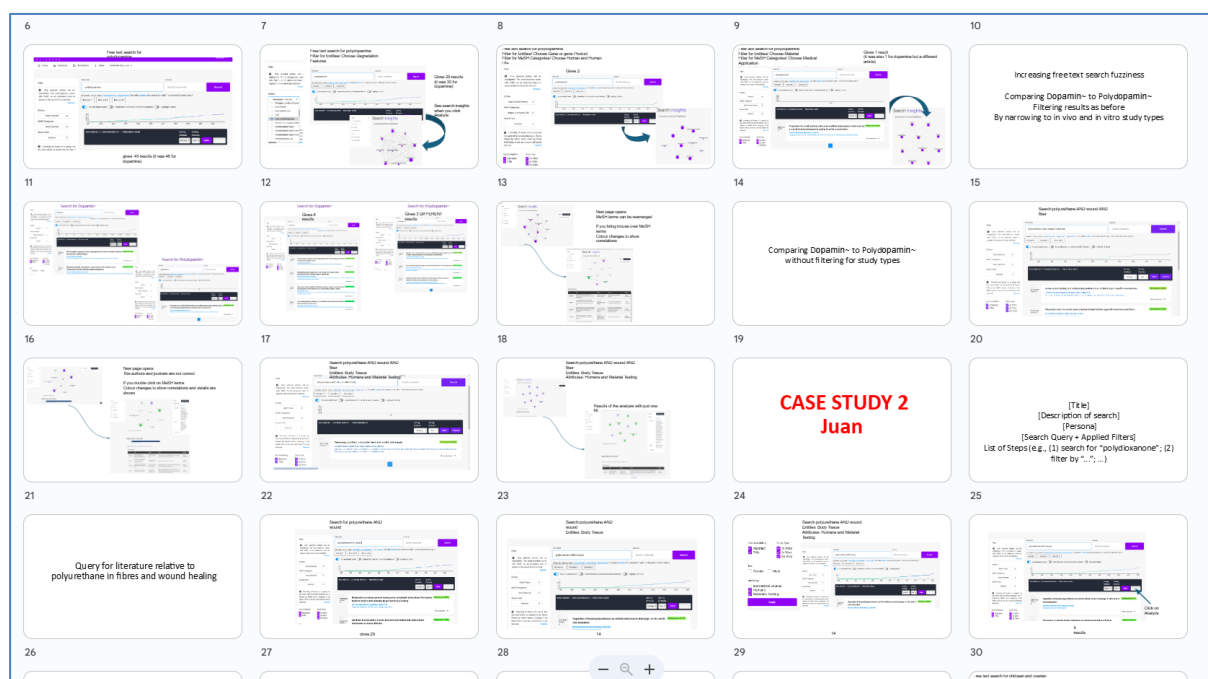


Figure 16. Case Study Content Creation

2.3.2 Content Management

The management of the content is being facilitated by the content-management system that allows to add and govern various users and their roles – which can then edit the content. All data is stored in the database on a dedicated server in Germany. Below, we can see an excerpt of the backend of the help system that shows a list help articles. Further, the editing and creation of new articles or FAQs (see Figure 18, Figure 19) is straight forward and support various content- and media types.

All (5) | Published (5) | Bin (4)

Bulk actions

Apply

All dates

All Categories

Filter

5 items

☐ Title	Author	Categories	Tags		Date	Helpful
☐ Home Page Components	tkerl	Tour	—	—	Published 2024/10/22 at 13:04	%100 <u>1 helpful / 0 not helpful</u>
☐ Saving publications for later	tkerl	Data, Profile	—	—	Published 2023/10/06 at 08:55	—
☐ How-to: Using the Web-App	tkerl	Data, Other	—	—	Published 2023/08/11 at 08:51	—
☐ How are Biomaterials added to the database?	tkerl	Data	—	—	Published 2023/07/19 at 11:47	—
☐ Where does the data come from?	tkerl	Development	—	—	Published 2023/07/17 at 16:24	—
☐ Title	Author	Categories	Tags		Date	Helpful

Bulk actions

Apply

5 items

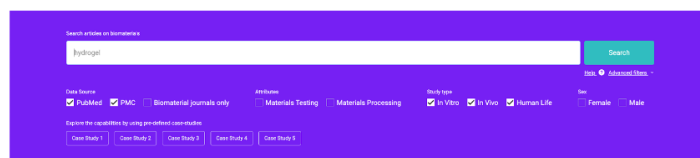
Figure 17. Help system backend: article list

Home Page Components



1. What: General "Search Area" (Search Bar + Filters)

Description: This is the core component, here you can start your search, by entering keywords and setting filters.



2. What: Search Bar

Description: In the search bar you can enter the keywords your search addresses. Keywords can be chained together like you would on google: dopamine AND exercise. By default multiple keywords are chained together by 'OR'. So 'ovarian cancer' will be translated to 'ovarian OR cancer'. To address this you can either do: 'ovarian cancer' or 'ovarian AND cancer'.



3. What: Fast filters

Description: These are the fast filters, you can use to filter records.

1. Data Source:

1. *PubMed*: This is the primary data source which also contains all the AI-powered data like text categories, biomaterial-related classifications, and other metadata like mesh-terms.
2. *PMC*: An additional data source that supplements PubMed

Figure 18. Help system backend: edit an article

Enter the FAQ question

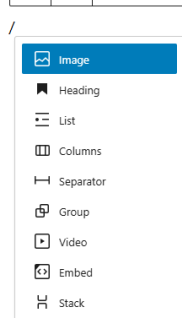
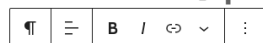


Figure 19. Help system backend: add new FAQ

3 Help System Marketplace

The help system for the Biomaterial Marketplace has been fully developed and implemented to support both buyers and suppliers in navigating and using the system effectively. Buyers for example can access manuals on searching for biomaterials, contacting suppliers, and using the marketplace's filtering tools, while suppliers are provided with resources such as managing product listings, adjusting profile visibility, and translating their provided content.

The help system for the Biomaterial Marketplace is accessible online via help.biomaterialmarketplace.com. The following sections provide an overview of the help system's technical structure, followed by a demonstration of the main interface sections. Finally, it highlights the content of the application.

3.1 Application Structure

A notable characteristic of this help system is its integration within the overall solution landscape. The help system for the Biomaterial Marketplace functions as part of the larger marketplace ecosystem and uses a separate administration panel ("Help AdminBase") to manage the specific content and data. The panel can only be accessed with valid credentials that are only provided to persons taking on an administrator role within the marketplace system. Demonstration screenshots of the Help AdminBase can be found in section 3.2.1.

The implemented structure with a separated administration panel aligns with the architectural design of the marketplace, as the main marketplace application also uses an external administration panel ("AdminBase") connected with the frontend via API. The architectural approach of the main application has been explained in previous deliverables and is therefore not covered in detail in this section.

Furthermore, the selected approach for the help system is particularly suited to the unique requirements of its content. Given the need to differentiate resources for buyers and suppliers, the external management platform simplifies the process of maintaining and updating content, translations, and media.

The corresponding system architecture for the help system is illustrated in Figure 20 below.

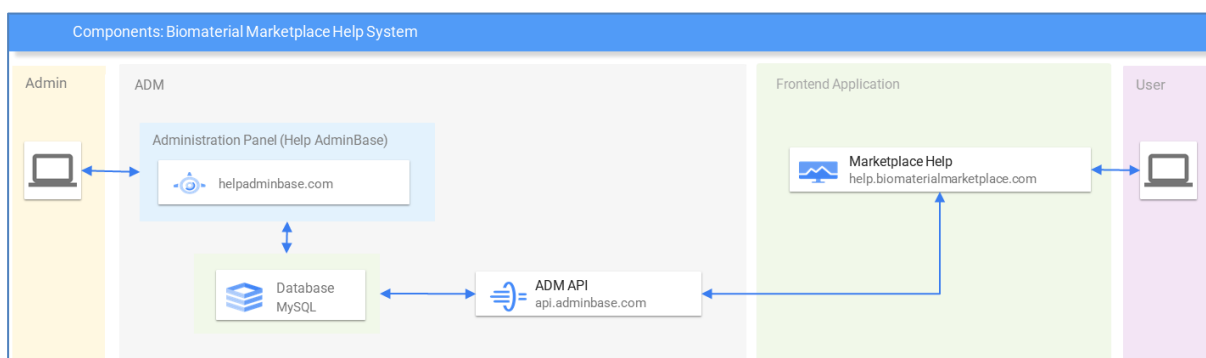


Figure 20. Components of the Biomaterial Marketplace Help System

3.2 Development

As explained in the previous section about the application structure, the development of the help system for the Biomaterial Marketplace consists of two core elements:

- 1) Administration Panel (“Help AdminBase”)

URL: www.helpadminbase.com
- 2) Help Frontend (“Biomaterial Marketplace Help”)

URL: help.biomaterialmarketplace.com

This section aims to demonstrate the development of these main parts, with a strong focus on visual elements in form of screenshots of the deployed solutions.

3.2.1 Help AdminBase

The Help AdminBase is the central place to manage the content that is shown on the Biomaterial Marketplace Help. The key components for the content management are topics, articles, FAQs and tags (for the buyer-supplier distinction). For each of those components, the panel provides list views, from where admin users can easily organise the entries. There is the option to create, edit and delete an entry with just a few clicks. For articles, there is also the option to preview the layout directly in the panel.

Figure 21 below shows the list of topics which act as categorisation for the help articles. The actual help article list can be seen in Figure 22.

Action	ID	Name	Chained Name	Parent
	1	Products	Products	
	4	Profile	Profile	
	5	Registration	Profile / Registration	Profile
	6	Add	Products / Add	Products
	7	Delete	Products / Delete	Products
	8	Services	Services	
	10	Documents	Documents	
	11	Scenarios	Scenarios	
	12	News	News	
	13	Events	Events	

Figure 21. List of Help Topics (Help AdminBase)

Action	ID	Title	Application	Topic	Tags	Feedback Count	View Count
	5	How to register	biomaterialmarketplace	Profile / Registration	Supplier	0	23
	6	How to add a product	biomaterialmarketplace	Products / Add	Supplier	3	74
	7	How to change your password	biomaterialmarketplace	Profile / Change Password	Supplier	0	53
	8	How to change visibility of your profile	biomaterialmarketplace	Profile / Change Visibility	Supplier	0	13
	9	How to edit a product	biomaterialmarketplace	Products / Edit	Supplier	0	18
	10	How to delete a product	biomaterialmarketplace	Products / Delete	Supplier	4	36
	11	How to change visibility of a product	biomaterialmarketplace	Products / Change Visibility	Supplier	0	18
	12	How to add a service	biomaterialmarketplace	Services / Add	Supplier	0	39
	13	How to edit a service	biomaterialmarketplace	Services / Edit	Supplier	0	4
	14	How to delete a service	biomaterialmarketplace	Services / Delete	Supplier	0	7

Figure 22. List of Help Articles (Help AdminBase)

Figure 23 and Figure 24 demonstrate the edit page of a help article. The page contains a form where relevant information needs to be provided about the article. Among the content itself, this includes information such as a title, subtitle, topic and tags. Tags are crucial to indicate whether the article is relevant for suppliers, buyers or both of the target groups. For the content, different types of blocks can be used, such as text or images, including GIF (Graphics Interchange Format).

Edit Article

Dashboard / Articles / How to reg...

en de es it fr

English

Title*
How to register

Slug*
how-to-register

Application*
Biomaterial Marketplace

Topic*
Profile / Registration

Tags
Supplier

Subtitle
Instruction on how to create an account for the Biomaterial Marketplace

1. Access panel
Access the panel via <https://biomaterialmarketplace.devadminbase.com>.

2. 'Register Now'
Click on 'Register Now' or access the registration page directly via <https://biomaterialmarketplace.devadminbase.com/en/auth/register/start>.

Figure 23. Article Edit Page (Help AdminBase)

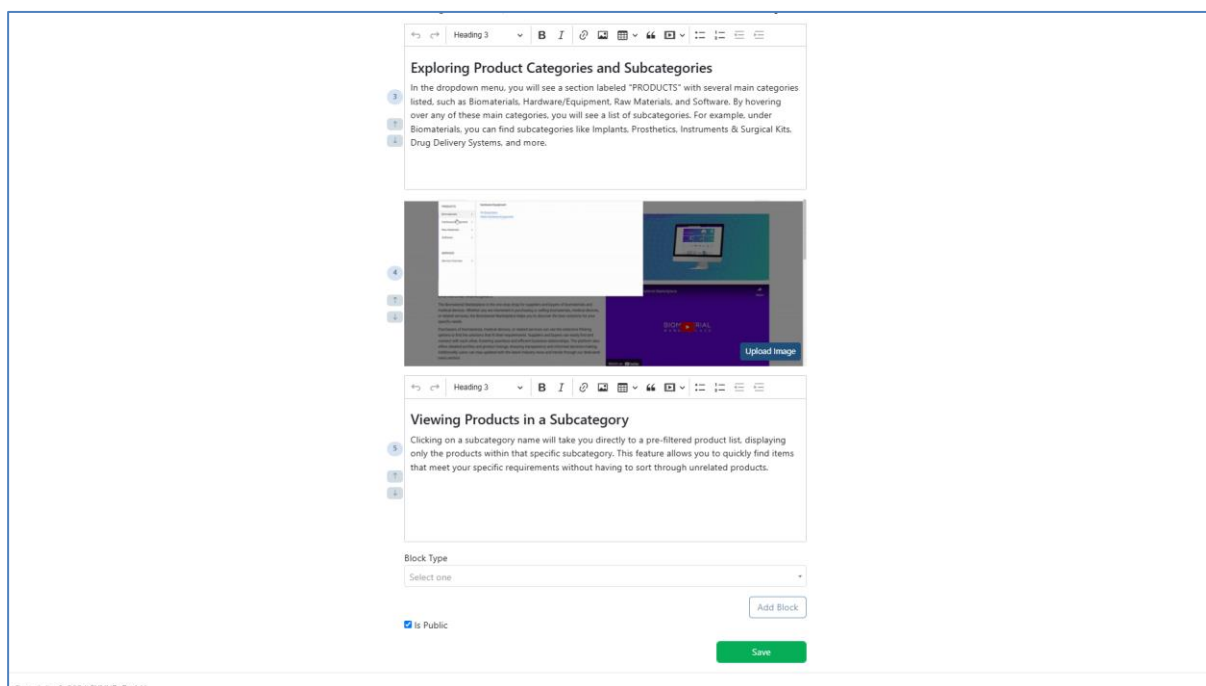


Figure 24. Article Edit Page (Help AdminBase)

Another aspect handled within the Help AdminBase are translations of help articles. The articles can be translated to all available languages, among the default language English these are German, Spanish, French and Italian. The translation page of help articles can be seen in Figure 25 below.

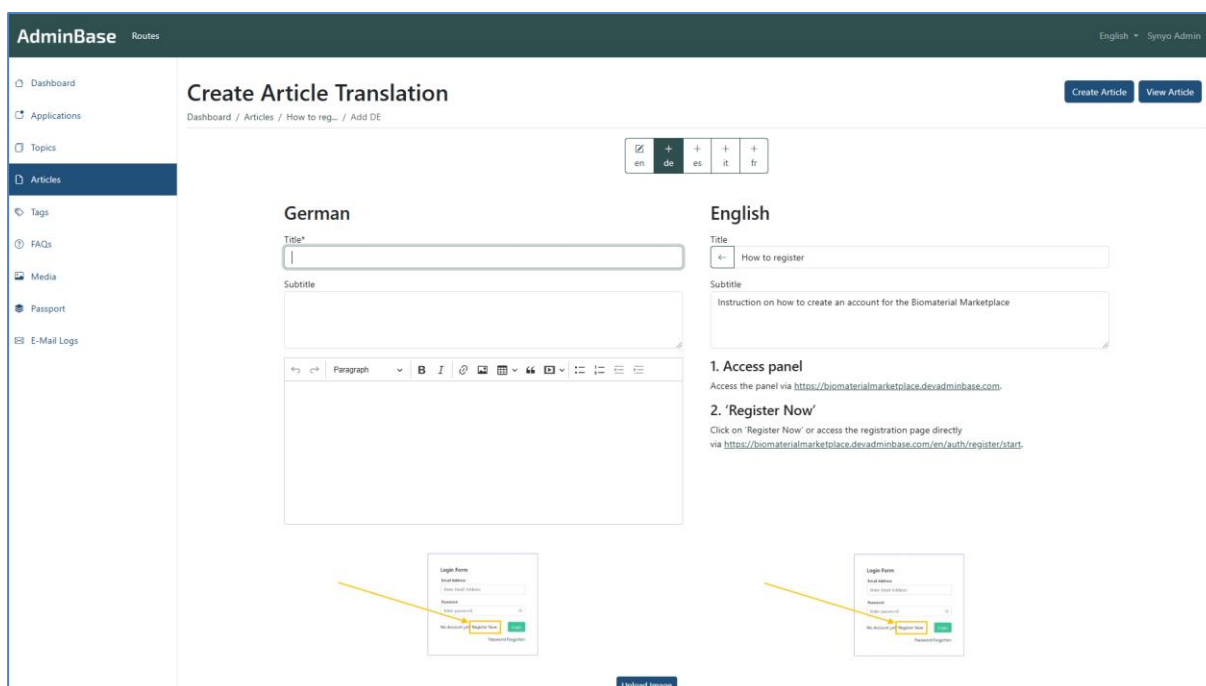
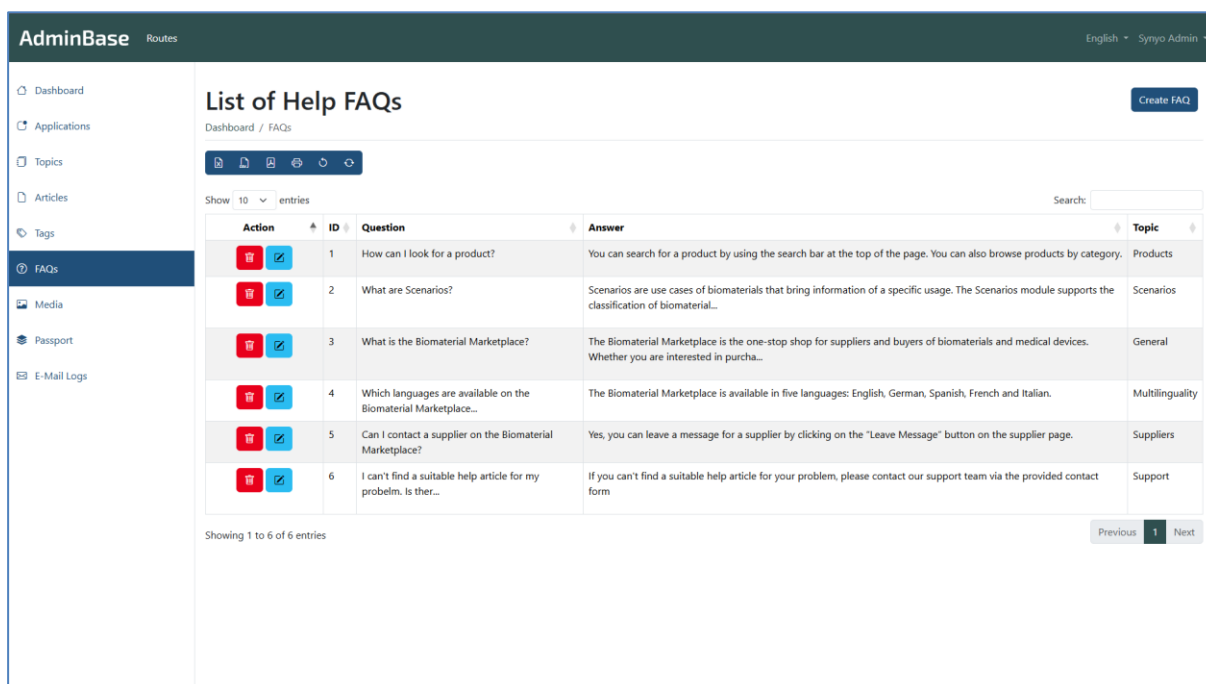


Figure 25. Article Translation Page (Help AdminBase)

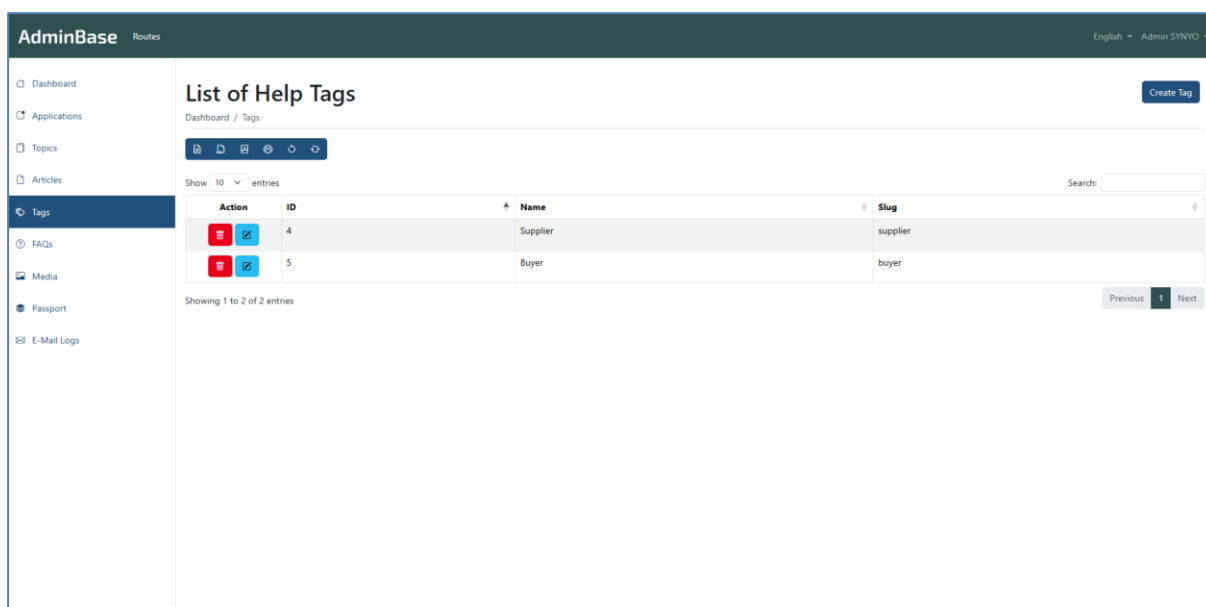
The FAQ list within the Help AdminBase is shown below in Figure 26. Like articles, also FAQs are using topics for their categorisation.



Action	ID	Question	Answer	Topic
	1	How can I look for a product?	You can search for a product by using the search bar at the top of the page. You can also browse products by category.	Products
	2	What are Scenarios?	Scenarios are use cases of biomaterials that bring information of a specific usage. The Scenarios module supports the classification of biomaterial...	Scenarios
	3	What is the Biomaterial Marketplace?	The Biomaterial Marketplace is the one-stop shop for suppliers and buyers of biomaterials and medical devices. Whether you are interested in purcha...	General
	4	Which languages are available on the Biomaterial Marketplace...	The Biomaterial Marketplace is available in five languages: English, German, Spanish, French and Italian.	Multilinguality
	5	Can I contact a supplier on the Biomaterial Marketplace?	Yes, you can leave a message for a supplier by clicking on the "Leave Message" button on the supplier page.	Suppliers
	6	I can't find a suitable help article for my problem. Is ther...	If you can't find a suitable help article for your problem, please contact our support team via the provided contact form	Support

Figure 26. List of Help FAQs (Help AdminBase)

As mentioned, a key characteristic of the Biomaterial Marketplace Help is the separation of buyer and supplier resources. To implement this in a logical way, corresponding tags have been created which can be assigned to resources like help articles or FAQs. The tag section can be seen in Figure 27.



Action	ID	Name	Slug
	4	Supplier	supplier
	5	Buyer	buyer

Figure 27: List of Help Tags (Help AdminBase)

3.2.2 Biomaterial Marketplace Help

When accessing the Biomaterial Marketplace Help on help.biomaterialmarketplace.com the users first have to select which help section they want to enter – either the buyer or supplier section. In addition to the logical separation of these two sections, different identity colours have been assigned to them to highlight the difference between the buyer and supplier section also in a visual way. For the ‘neutral’ index page, a mixture of the used colours blue (for buyers) and purple (for suppliers) is used for the header and footer. The index page with the chosen colours can be seen in Figure 28 below.

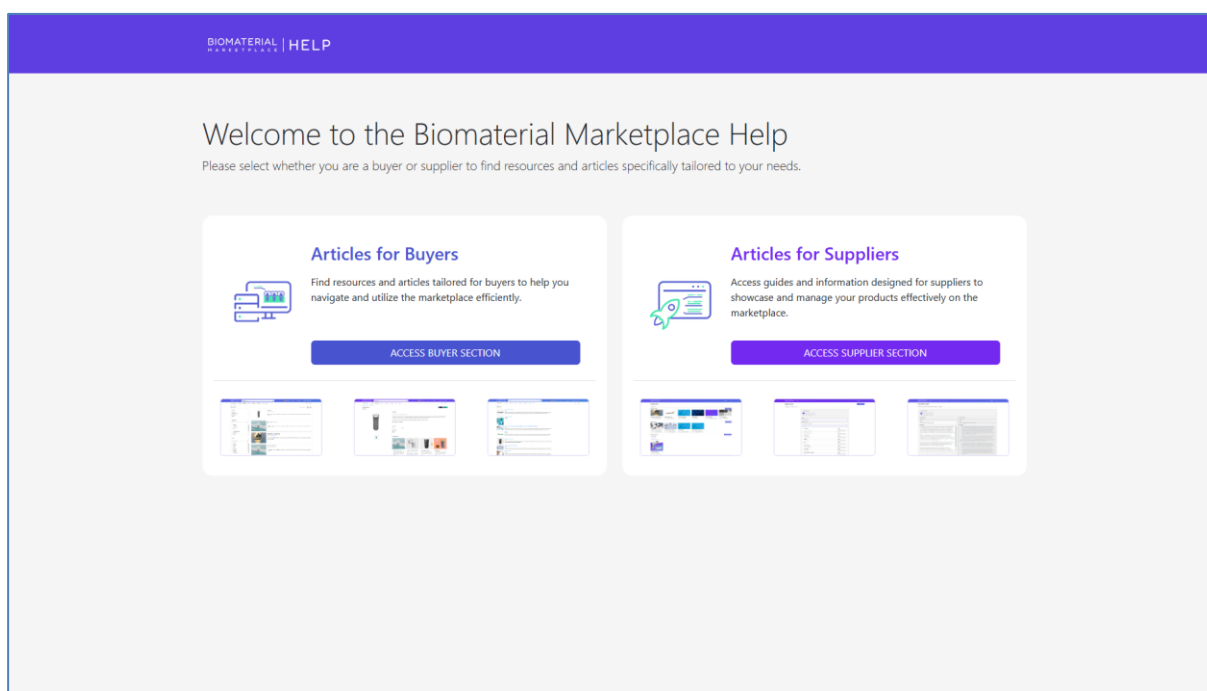


Figure 28: Index Page (Marketplace Help)

As soon as the user enters one of the sections, also the colour scheme is changing to either blue (buyers) or purple (suppliers). Like all other pages, the home page of both sections follows the same structure and only differs by colour and content. It contains a search, a section with the most read articles, a topic grid, and most viewed FAQs. The two home pages can be seen in Figure 29 – on the left side for buyers, on the right side the one for suppliers.

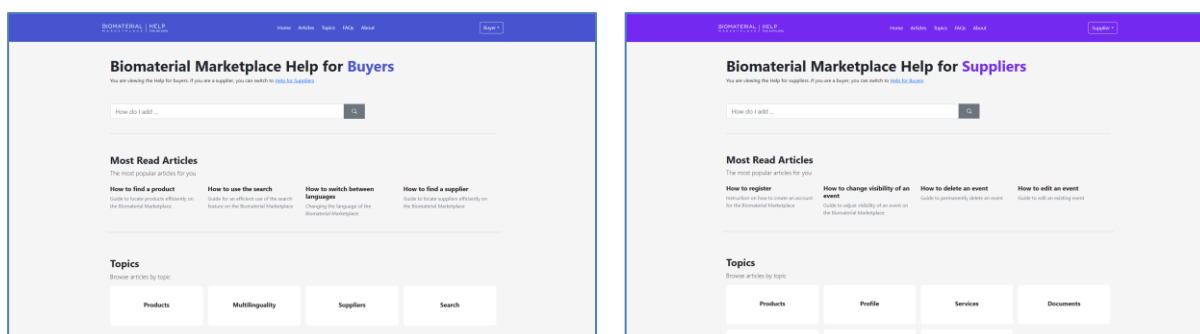


Figure 29. Buyers Home (Marketplace Help)

As shown in Figure 30, users can also view a list of all articles available, grouped by their topics.

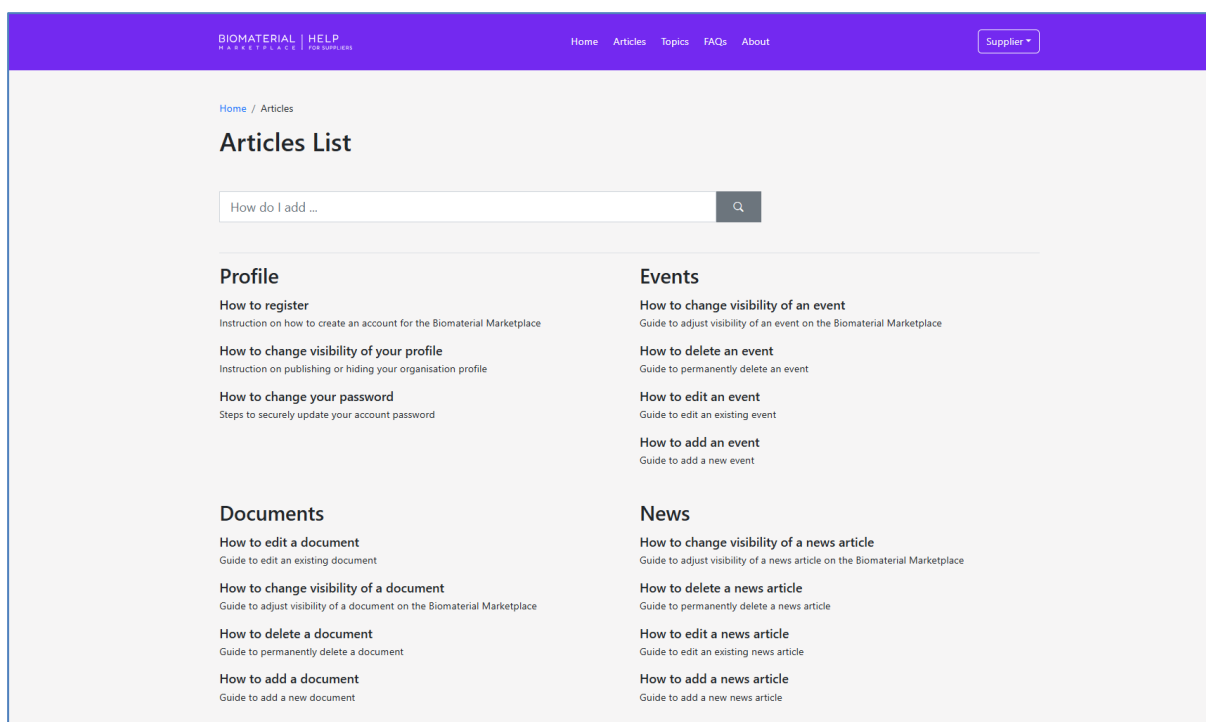


Figure 30. Articles List (Marketplace Help)

Figure 31 and Figure 32 show actual help articles on the Biomaterial Marketplace Help. While the former of the two shown articles is text-only, the latter one also contains images. As already mentioned, images can also be of type GIF (Graphics Interchange Format) to show animated images. The help articles also have a menu on the left side, to quickly jump to other articles within the same topic.

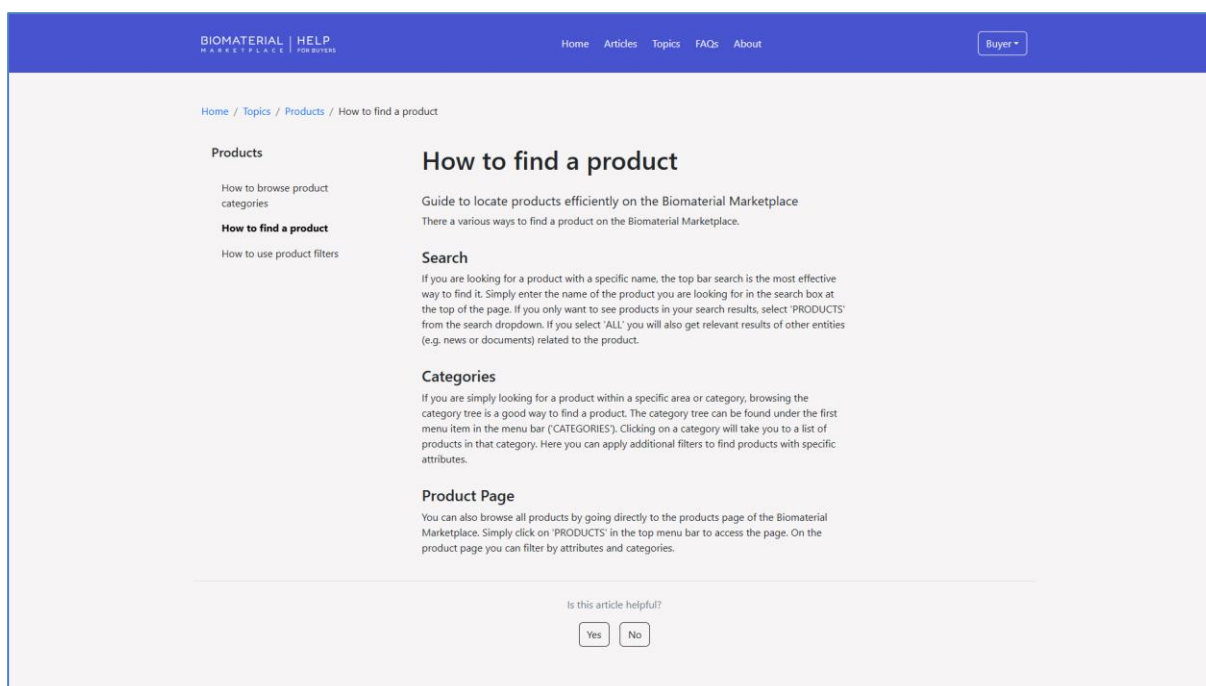


Figure 31. Help Article Example for Buyers (Marketplace Help)

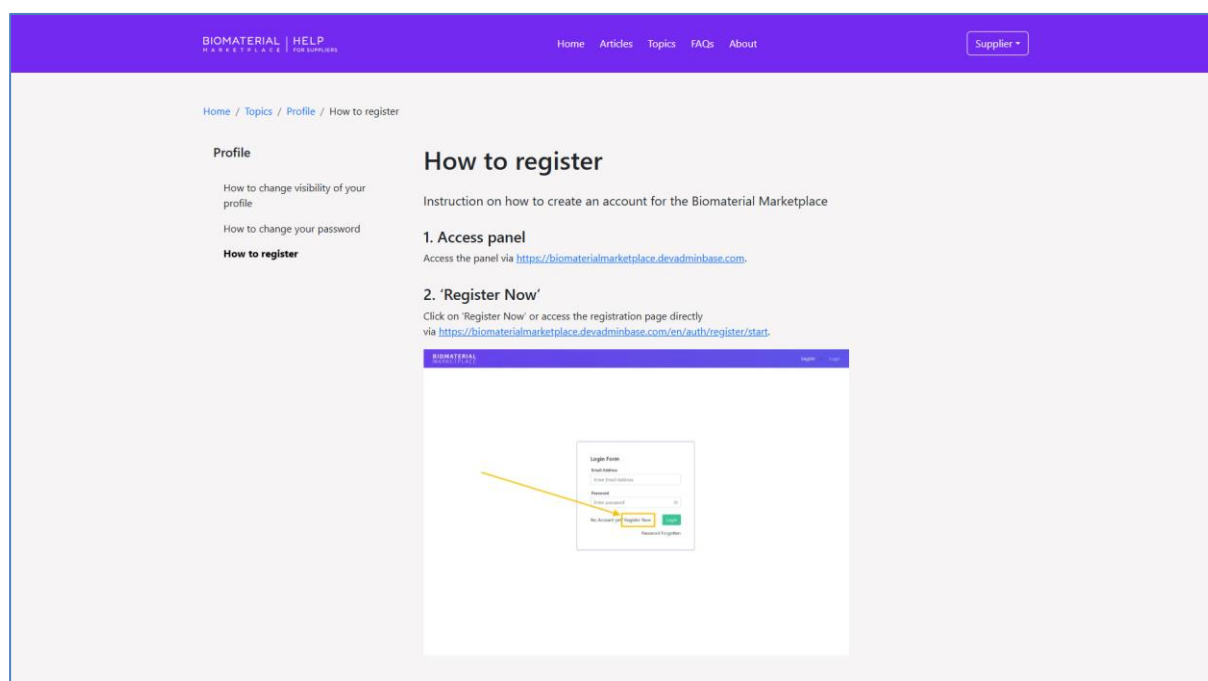


Figure 32. Help Article for Suppliers (Marketplace Help)

Furthermore, the Biomaterial Marketplace Help offers users the option to provide feedback on articles. To do so, the user has to indicate whether the article was helpful or not and can then provide additional feedback. This feedback feature is placed below each help article and is demonstrated in Figure 33.

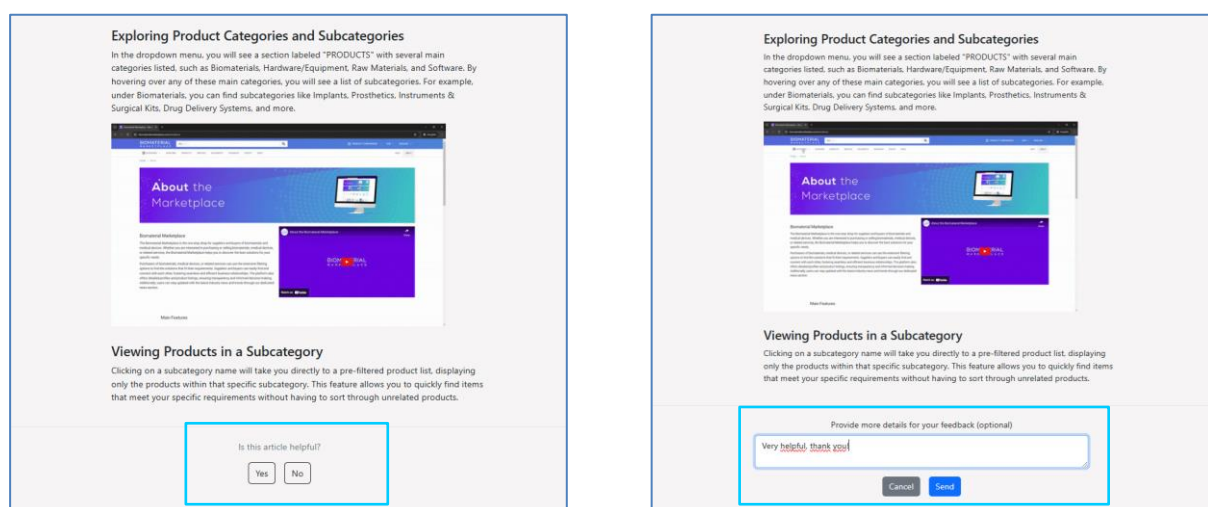


Figure 33. Article Feedback Section (Marketplace Help)

For the FAQ section (shown in Figure 34), so called collapsible elements are used for the user interface. This means, by default, only the questions are shown. With a click on a question, the corresponding answer is made visible as well.

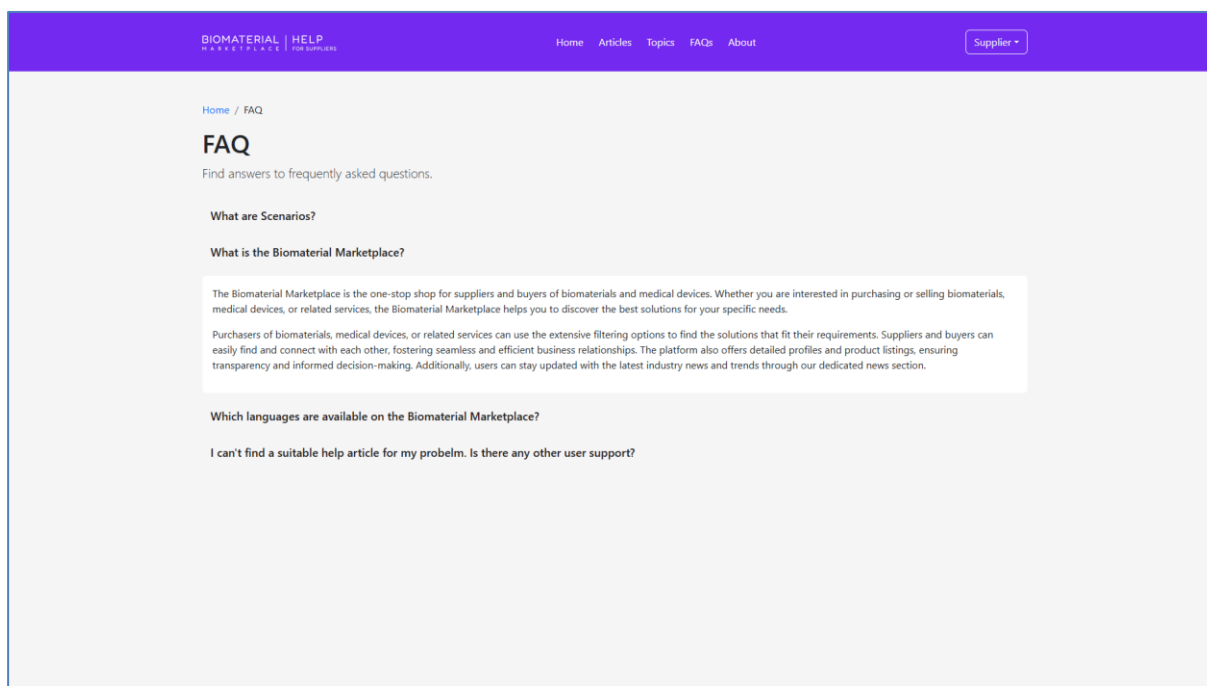


Figure 34. FAQ List (Marketplace Help)

In case users cannot find a suitable article or FAQ for their problem or question, a contact form is provided for individual requests. The form is accessible via a menu point in the footer of the page (see also Figure 36). Figure 35 shows the contact form for buyers. At this stage, the contact form for suppliers looks identical. If needed, the forms can be customised quickly during a later stage. All contact forms are protected by Google reCAPTCHA to prevent spam and other forms of misuse.

The screenshot displays the 'Contact Form (Buyer)' on the Biomaterial Marketplace Help page. The header is identical to Figure 34, but the 'Supplier +' button is replaced by a 'Buyer +' button. The main content area features the title 'Contact Form (Buyer)' and the instruction 'Please fill out the form below to get in touch with us.' The form consists of several input fields: 'Name *' and 'Email *' (small text boxes), 'Subject *' (a single-line text box), 'Your Message *' (a large multi-line text area), 'Organisation Name' and 'Phone Number, including country code (+ or 00)' (small text boxes). Below the form, a small disclaimer states: 'This site is protected by reCAPTCHA and the Google Privacy Policy and Terms of Service apply.' A blue 'Submit' button is located at the bottom of the form.

Figure 35: Contact Form (Marketplace Help)

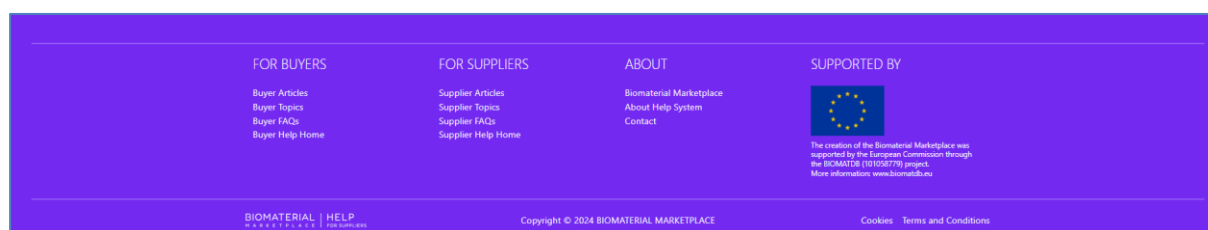


Figure 36. Footer (Marketplace Help)

In previous deliverables, most recent in D4.2, a ticketing system for suppliers was aimed for a later development stage. The ticketing system remains a nice-to-have feature that would further improve user support. The contact form shown in Figure 35 can be seen as a simplified version of it at this stage, as it also fulfils the intended main purpose of individual user requests about a specific problem or question about the Biomaterial Marketplace or the AdminBase.

3.3 Content

The content for the help system is organised into topics, articles and frequently asked questions, developed to address the needs of both buyers and suppliers. Content differentiation is based on the target user group, with each help article tailored to provide relevant information for either suppliers or buyers.

In developing the current help articles, careful attention was given to ensure that all main modules and key functions of the Biomaterial Marketplace, as well as the associated administration panel (AdminBase), are covered. To ensure consistent organisation, each article has been assigned a unique code, visible in the accompanying spreadsheet shown in Figure 37 below. For translations, the language abbreviation (e.g., EN for English or DE for German) is appended to the code, allowing for easy management of multilingual content.

Type	Sub Typ	A.No	Area	Code	Title (max 100 characters)	Code EN	Title EN
Help	Article	01	Biomaterial Marketplace	CHA01030001	Profile Registration How to register	CHA01030001EN	How to register
Help	Article	01	Biomaterial Marketplace	CHA01030002	Profile Change Password How to change your password	CHA01030002EN	How to change your password
Help	Article	01	Biomaterial Marketplace	CHA01030003	Profile Change Visibility How to change visibility of your profile	CHA01030003EN	How to change visibility of your profile
Help	Article	01	Biomaterial Marketplace	CHA01030004	Products Add How to add a product	CHA01030004EN	How to add a product
Help	Article	01	Biomaterial Marketplace	CHA01030005	Products Edit How to edit a product	CHA01030005EN	How to edit a product
Help	Article	01	Biomaterial Marketplace	CHA01030006	Products Delete How to delete a product	CHA01030006EN	How to delete a product
Help	Article	01	Biomaterial Marketplace	CHA01030007	Products Change Visibility How to change visibility of a product	CHA01030007EN	How to change visibility of a product
Help	Article	01	Biomaterial Marketplace	CHA01030008	Services Add How to add a service	CHA01030008EN	How to add a service
Help	Article	01	Biomaterial Marketplace	CHA01030009	Services Edit How to edit a service	CHA01030009EN	How to edit a service
Help	Article	01	Biomaterial Marketplace	CHA01030010	Services Delete How to delete a service	CHA01030010EN	How to delete a service
Help	Article	01	Biomaterial Marketplace	CHA01030011	Services Change Visibility How to change visibility of a service	CHA01030011EN	How to change visibility of a service
Help	Article	01	Biomaterial Marketplace	CHA01030012	Documents Add How to add a document	CHA01030012EN	How to add a document
Help	Article	01	Biomaterial Marketplace	CHA01030013	Documents Edit How to edit a document	CHA01030013EN	How to edit a document
Help	Article	01	Biomaterial Marketplace	CHA01030014	Documents Delete How to delete a document	CHA01030014EN	How to delete a document
Help	Article	01	Biomaterial Marketplace	CHA01030015	Documents Change Visibility How to change visibility of a document	CHA01030015EN	How to change visibility of a document
Help	Article	01	Biomaterial Marketplace	CHA01030016	News Add How to add a news article	CHA01030016EN	How to add a news article
Help	Article	01	Biomaterial Marketplace	CHA01030017	News Edit How to edit a news article	CHA01030017EN	How to edit a news article
Help	Article	01	Biomaterial Marketplace	CHA01030018	News Delete How to delete a news article	CHA01030018EN	How to delete a news article
Help	Article	01	Biomaterial Marketplace	CHA01030019	News Change Visibility How to change visibility of a news article	CHA01030019EN	How to change visibility of a news article
Help	Article	01	Biomaterial Marketplace	CHA01030020	Events Add How to add an event	CHA01030020EN	How to add an event
Help	Article	01	Biomaterial Marketplace	CHA01030021	Events Edit How to edit an event	CHA01030021EN	How to edit an event
Help	Article	01	Biomaterial Marketplace	CHA01030022	Events Delete How to delete an event	CHA01030022EN	How to delete an event
Help	Article	01	Biomaterial Marketplace	CHA01030023	Events Change Visibility How to change visibility of an event	CHA01030023EN	How to change visibility of an event
Help	Article	01	Biomaterial Marketplace	CHA01030024	Translations How to manage translations	CHA01030024EN	How to manage translations
Help	Article	01	Biomaterial Marketplace	CHA01030025	Products How to find a product	CHA01030025EN	How to find a product
Help	Article	01	Biomaterial Marketplace	CHA01030026	Search How to use the search	CHA01030026EN	How to use the search
Help	Article	01	Biomaterial Marketplace	CHA01030027	Multilinguality How to switch between languages	CHA01030027EN	How to switch between languages
Help	Article	01	Biomaterial Marketplace	CHA01030028	Suppliers How to find a supplier	CHA01030028EN	How to find a supplier
Help	Article	01	Biomaterial Marketplace	CHA01030029	Products Compare How to use the product comparison tool	CHA01030029EN	How to use the product comparison tool
Help	Article	01	Biomaterial Marketplace	CHA01030030	Products How to browse product categories	CHA01030030EN	How to browse product categories
Help	Article	01	Biomaterial Marketplace	CHA01030031	Products How to use product filters	CHA01030031EN	How to use product filters
Help	Article	01	Biomaterial Marketplace	CHA01030032	Suppliers How to contact a supplier	CHA01030032EN	How to contact a supplier

Figure 37. Article Spreadsheet

The content creation process uses article template documents, as shown in Figure 38, allowing contributors to create and organise content outside the administration panel. The left screenshot in Figure 38 shows the raw template with short instructions for the content creators, the right one demonstrates a filled template with text, links and screenshot – ready to be added to the system via Help AdminBase. The procedure on how content can be added on Help AdminBase was already demonstrated in section 3.2.1.

Figure 38. Article Template

The content of the Biomaterial Marketplace Help is continuously improved. This includes both the addition of new articles and the enhancement of existing ones. Alongside internal reviews and evaluations, the user feedback function is also used for ongoing assessment. This feedback is incorporated into the ongoing development to ensure that the content remains up-to-date and aligned with users' needs.

In addition to the articles and resources within the help system, two additional videos have been created and integrated directly into the main marketplace application. The first video, accessible on the About page (www.biomaterialmarketplace.com/about), provides general information about the marketplace. The second video, available on the "Register" page (www.biomaterialmarketplace.com/register), demonstrates the supplier registration.

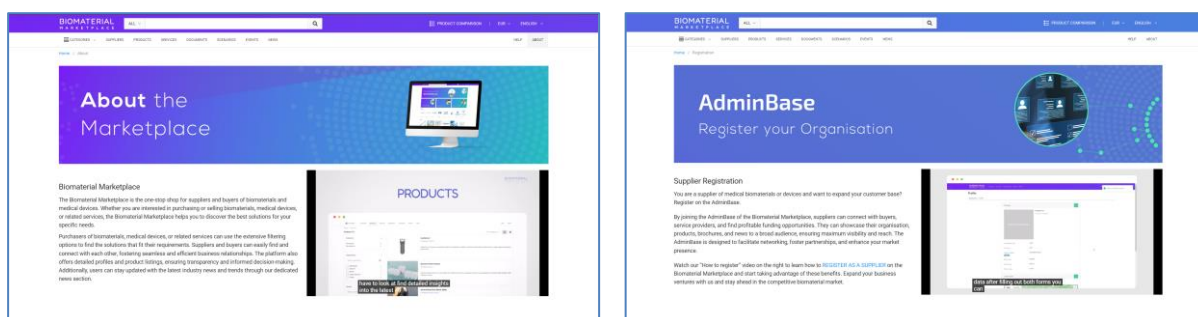


Figure 39. Videos on the Biomaterial Marketplace

4 Conclusion

The development of the help systems for both the Biomaterial Database and the Biomaterial Marketplace marks a significant milestone in supporting users within the BIOMATDB project. These help systems, designed specifically for buyers and suppliers in case of the Biomaterial Marketplace, provide targeted resources that support users to navigate each platform. Through structured articles and other resources users are offered clear guidance on key functions and understanding platform features.

While the core implementation and integration of the help systems are complete, ongoing data integration and feedback may lead to further updates to the content and functionality. The flexible architecture will allow for efficient modifications, ensuring that the help systems remain aligned with user needs and project goals.