

Requirements Document

Kingfisher Offshore Hazard News

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Seafish

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2 Introduction

The Kingfisher team of Seafish (the Sea Fish Industry Authority), are looking to develop a system that will allow 'news' of offshore activities and potential fishing hazards, to be collected, stored, managed and supplied to the fishing industry.

The purpose of this system is to improve the internal efficiency and data management capabilities of acquiring and maintaining offshore news, whilst also improving the quality, timeliness and effectiveness of offshore news that is delivered to the fishing industry. This is to streamline internal operations and improve safety, prevent dangerous interactions and reduce damage to structures or fishing equipment.

This includes the offshore sectors of: oil & gas, subsea cable, renewable energy, marine aggregates; and marine environment (marine protection).

The system includes the creation of a database and management system; a website with news, mapping functionality, user subscription management and upload of news content from offshore operators; an app for use on mobile and tablet; and; connectivity to push news to existing websites, social media and text and email alerts.

This document is intended to provide a high level view of the key requirements for the new Kingfisher Offshore News system. It is not:

- A complete and/or detailed representation of every requirement for the project
- Prescriptive and may be subject to change

The intention is to provide enough information for you to put forward a recommendation based on the best possible fit for our needs. We fully expect to define the detail within the project itself where it can be based on requirements gathering in-depth planning and use-case development.

It's important to note that we do not have a preferred system for this project – we are equally at home with open source and commercial offerings, and do not shy away from bespoke development when it can be demonstrated to deliver the right benefits. That said, we would require you to consider and appraise the use of a system that is capable of engaging and communicating with ESRI software. We are also conscious of the potential for change to be required over time, and would need to be convinced that any 'from scratch' bespoke development was capable of not only adapting and growing with us, but also of being maintained internally by our teams or potentially by other partners in the future.

The system will require integration or direct connection into existing systems that will be detailed further in this document.

We have a completion deadline of 28 February 2019.

2.1 Background

Seafish is a UK Non Departmental Public Body established by the Fisheries Act 1981. The organisation is sponsored by Defra, the Scottish Government Marine Directorate, the Welsh Assembly Government and Department of Agricultural and Rural Development, Northern Ireland. Seafish is funded by levy paid on all seafood landed or imported into the UK (excluding salmon and canned product). Our work cuts across all segments of the seafood value chain – from catching and farming; through primary and secondary processing, importing and distributing through to retail and foodservice operators. Seafish are currently working to a three year Corporate Plan (2018-21), with key activities determined by three industry Sector Panels. More information is available on our web site www.seafish.org

Kingfisher are a team within Seafish (the Sea Fish Industry Authority), tasked with improving safety in the fishing industry by ensuring fishermen have the most up to date positions of offshore structures and news of offshore activities and hazards. This project relates to the latter – the supply of offshore activity and hazard news.

The Kingfisher Bulletin has been a Kingfisher service since the 1990s, informing fishermen of potentially conflicting offshore operations and hazards to fishing.

Initially, the service consisted of a fortnightly newsletter of 1-3 pages, highlighting the latest oil & gas rig movements. It has increased in size and scope greatly over the past 20 years – increasing exponentially over the past 8 years – with the growth of the offshore sectors such as renewable energy, subsea cables and marine aggregates.

2.2 Current Services

The current services provided by Kingfisher in relation to delivery of offshore news, fall under the project of the 'Kingfisher Bulletin'. This includes:

- i. daily updates to sister websites (www.fishsafe.eu and www.kis-orca.eu);
- ii. daily updates to social media and;
- iii. fortnightly printed/pdf summary documents - equating to in excess of 60 A4 pages of *content*.

These services, or the method used to deliver these services, will be superseded by the new system and its delivery forms.

2.3 Broad Areas for Improvement

The current services continue to provide the UK and wider EU fishing industry with crucial offshore news. However, a requirement has been identified to improve this service to address two main areas:

- i. To streamline the internal operation, reducing duplication of effort, improving the management of information and opening up new avenues for information supply;
- ii. To improve the delivery method and user experience of accessing the information, modernising and taking advantage of new technologies to display and deliver information to the EU fishing industry.

2.4 Acronyms, Abbreviations and Technical Terminology

- i. **Content** = reports/news items placed within the system for supply to the end user. These may take form of offshore vessel activities, hazards to fishermen/mariners, new offshore developments, the creation of protected sea areas, etc.
- ii. **ESRI** = Environmental Systems Research Institute (www.esri.com). International supplier of geographic information system software, web GIS and geodatabase management applications.
- iii. **External input** = *submission, update or removal of 'content' by an external operator via an online portal (usually by an offshore operating or construction company).*
- iv. **Hazard** = *objects at sea, either on the seabed, midwater, or on surface of the sea, that may create a hazard to fishing. This includes potential damage to fishing equipment and risk to vessel and crew.*

- v. **Internal input** = input of 'content' by a Seafish member of staff. It is likely this would have been received by email.
- vi. **News or offshore news** = 'Content' that has been exported outside of Seafish, to the wider fishing industry, for the purposes of alerting or informing fishermen of potential danger.
- vii. **Operators** = offshore operating companies working in the oil & gas, subsea cables, renewable or other industries. They submit 'content' to Seafish regarding their activities and potential hazards.

3 Project Overview

3.1 Key Objectives

The key objectives of this project are to:

- i. Provide a database and management system, allowing offshore news *content* to be inputted, managed and maintained in a user friendly manner (Internal input, by Seafish staff);
- ii. Provide a system capable of receiving offshore news *content* from external stakeholders, for prior approval by Seafish staff, before automatic incorporation into the live database (External input, by offshore *operator*);
- iii. Provide a system capable of 'pushing' offshore news *content* to pages within existing websites (www.fishsafe.eu and www.kis-orca.eu);
- iv. Provide a system capable of 'pushing' offshore news *content* to social media accounts (Twitter, Facebook, etc)
- v. Provide a website (viewable on desktop, mobile and tablet) capable of allowing users to register and login to set preferences for receipt of offshore news *content* (*including compliance with General Data Protection Regulations (GDPR)*);
- vi. Provide an Application (app) for use on mobile and tablets, capable of displaying the latest news *content* with filter and personalisation options;
- vii. Provide a website capable of presenting offshore news *content* with an excellent user experience – text and mapping view/capabilities;
- viii. Provide a website capable of extensive filtering of offshore news *content* and personalisation;
- ix. Provide a system capable of delivering offshore news *content* to registered users via email and text;
- x. Provide a system capable of full management and use of all facilities, both internally and remotely;
- xi. Provide a system that can be easily modified and grown in the future without requiring extensive re-configuration or development;
- xii. Provide a system capable of extensive internal querying/reporting of offshore news *content* and the various elements, including system audit trails of inputs, approvals and outputs;
- xiii. Provide a system that can integrate with our existing IT infrastructure;
- xiv. Provide detailed workflows to our specific needs;
- xv. Provide flexible, multi-tiered access with a number of layers of security modelling of the system;

These objectives can and will be developed further during the project scoping stage once a tender is accepted.

3.2 Proposed Project Phases

The following project phases are proposed:

- i. Project scoping and discussion with developer
- ii. Assessment of internal workflow
- iii. Assessment of external requirements
- iv. Create/Update functional specification of proposed systems for agreement
- v. Development of database and management system
- vi. Development of new website and application
- vii. Testing import/export and data processing
- viii. Testing with 3rd party data delivery
- ix. Internal UAT, including sign off and platform updates
- x. User testing and refinement (internal/external)
- xi. Completion of fully complete system
- xii. Delivery of onsite training
- xiii. Launch

3.3 Expectations

We expect that any solution proposed to us will:

- i. Be easy to use, consistent, intuitive and user friendly;
- ii. Deliver exceptional levels of user experience via multiple platforms/devices;
- iii. Be adaptable to our current and future needs;
- iv. Have a clearly identified support and maintenance structure for a minimum of 12 months;
- v. Come with fully bespoke training manuals and structured training sessions - for Seafish staff relating to the full system; and for external users (a user guide including a standalone film);
- vi. Come with detailed technical and functional specifications;
- vii. Be compliant with GDPR and utilise servers only located within Europe;
- viii. Come with the ability to be extended, modified and integrated in the future without reliance on a single company or team;
- ix. Have clearly identified licensing model (if required) and defined ownership rights regarding any custom development;
- x. Work with our nominated hosting infrastructure, or have a compelling and just reason to be hosted independently.

4 Technical Requirements

For the below items Seafish wish to hold all intellectual property (IP) rights, including any source-code. If third party plugins are required, then these will need to be licensed appropriately.

4.1 API and database systems

This proposed system will need to look at and include an API system to allow transparent interaction with the website/database for transmitting and receiving its news *content*. This will aid the delivery of data to the mobile phone application as well as 3rd parties.

Kingfisher currently utilises ESRI ArcGIS Desktop edition, but with our API requirements, we'd envisage a system similar to ESRI Enterprise. This will need to be factored into the tender document and must have inclusive costs.

4.2 Website

The website will be the public facing front-end to the new system. We're open to suggestions on what platform this should be run, along with a durable CMS system. The website must be fully compliant with General Data Protection Regulations (GDPR).

The CMS will need to be easy for non-web-developers to use, and must have a proven copy & paste facility to allow data from Microsoft Word to be used, as well as exceptional content management capabilities, with speed of entering and updating items essential. We're aware of CMS' that detail this sort of facility, but many do not have a good track-record of delivering it.

4.3 Application for mobile and tablet

We require a form of mobile/tablet application that users can use to receive updates of the latest news *content*, including hazard information and be able to show mapping of the hazard. Generally speaking we envisage this to be similar to a rolling newsfeed app, with personalisation and categorisation of items that is intuitive for its users.

This application should be created using technologies that allow it to be portable between both Android and Apple devices.

4.4 Web-based Content Submission Via Operators

A key element to the new system will require accessibility for our clients to submit and manage/maintain *content* online. This will require both an on-line form by way of a secure web portal and also a secure API driven system to allow bulk communication between client systems and the system.

The web portal will require a simple yet secure way for clients to register via verification to use the facility. This will allow for the form-based data to be transferred through to the new system. At this point it will be ready verification, approval and authorisation.

A bulk API system will allow clients to use a pre-designed format to upload their information into the system in a secure manor. This should include things like: secure keys or tokens, pre-known field & data formats and should allow for file transfer. Any data files transferred into the system will need to be checked for malicious *content*.

4.5 Supporting of Existing Websites

News *content* will need to be delivered to existing websites. This will include the automated 'pushing' of content to the 'News' pages of KIS-ORCA.eu and FishSAFE.eu (which website will be dependent on the industry the *content* relates to: oil & gas = FishSAFE; cables & renewables = KIS-ORCA). This is to help reduce the admin burden of the multiple sites.

The delivery of the news *content* is open for discussion. This could be pull mechanism within the above mentioned sites, or a transparent page that pulls its data from the main Kingfisher website.

4.6 Communications

The proposed system will need to deliver its news *content* to people in a number of formats, ranging from SMS (text), email to mobile application(s).

Seafish currently use Microsoft Dynamics CRM 2016 (on premise) along with ClickDimensions newsletters and subscription management. Detail of the users registration, personal information storage and data protection (GDPR), will need to be discussed in this proposal.

Ideally this system will need to interact with our CRM system to allow for a single repository of contact data.

4.7 Client Side Specifications

Please note, the list below is by no means exhaustive

- *Android 5+*
- *Apple IOS 6+*
- *Scalable from Mobile phones to large tablets*

4.8 Hosting

We are open to suggestion on the hosting requirements, though we will have to ensure that the hosting platform of registered to Seafish and is located within the United Kingdom.

As well as hosting, we require that patching, upgrading and backups are carried out on a regular basis and assurances are given that our site(s) are secure.

4.9 Planning and Process

Whilst our current processes – those being replaced by the new system – are well known, we are fully accepting that it is inefficient and often detrimental to be too specific with requirements at this stage. With that in mind, we are looking to source a system that is as adaptable as possible to our current and future needs, and a supplier who can demonstrate the in-depth knowledge of their proposed solution required to ensure the best possible development, backed up by a project process that means we'll be able to work collaboratively to research, define and agree the final requirements and deliverables.

We **do not** see this project as an 'out of the box' delivery, and your response should allow for adequate requirements gathering and confirmation of scope.

4.10 Data Management

As a non-departmental public body (as well as a responsible organisation), we have an obligation to ensure that the data we collect and store on our partners, stakeholders and contacts is done so according to legislation and best practice.

With that in mind, any solution you propose **must** be compliant with UK data protection laws and General Data Protection Regulations (GDPR). We would require you to confirm the rule and regulations that would be applicable in this instance, but generally speaking we would expect that:

- i. All data collected and stored is done so on servers based in the United Kingdom;
- ii. All data processed, analysed or shared in any way with any system does not leave the boundaries of the United Kingdom, directly or by an intermediary partner;
- iii. The system(s) proposed have been subjected to robust, current and proven penetration and security testing to minimise as much as possible the risk of intrusion;

A great amount of emphasis is required when it comes to Terms of Use for the contact data we're collecting. We need to be able to display evidence when dealing with Stakeholders, specifically external communications like mailshotting.

4.11 Training & Supporting Documentation

At an absolute minimum, we require:

- i. Full project documentation, including database and entity relationship diagrams;
- ii. Full training manual, bespoke for the end user;
- iii. Full on-site training at our Grimsby office for <6 end users;
- iv. Detailed functional and technical specifications detailing the configuration of the project deliverables.
- v. A short explanatory film for end users (external to Seafish) describing the key elements and capabilities of the system.

4.12 Future-proof

To us, future-proofing takes two key forms:

1. The ability for any system we invest in to adapt and change without requiring a fundamental re-write.
2. The ability to maintain the system internally and/or with a partner other than those who delivered the project for us. This is purely to ensure that we are not dependent on a single supplier.

Any system you propose should be able to demonstrate how the above requirements can be met.

4.13 Ongoing Support and Maintenance

As part for this tender process we expect a minimum of 12 months support and maintenance for the delivered system with allotted hours/days pre-agreed.

This will need to include:

- *Support on software upgrades and patches throughout the period*
- *Further customisation to existing systems, which are deemed not additional functionality*
- *Support with work flow, GUI and reporting systems*
- *Technical advice to the IT team*

5 Functional Requirements

5.1 Context

To give context to the present system, its workflow and the perceived workflow of a new system, please see the below diagrams. Please note that *figure 2* is included as an example only and we are keen to hear the thoughts on suggested workflows for this system.

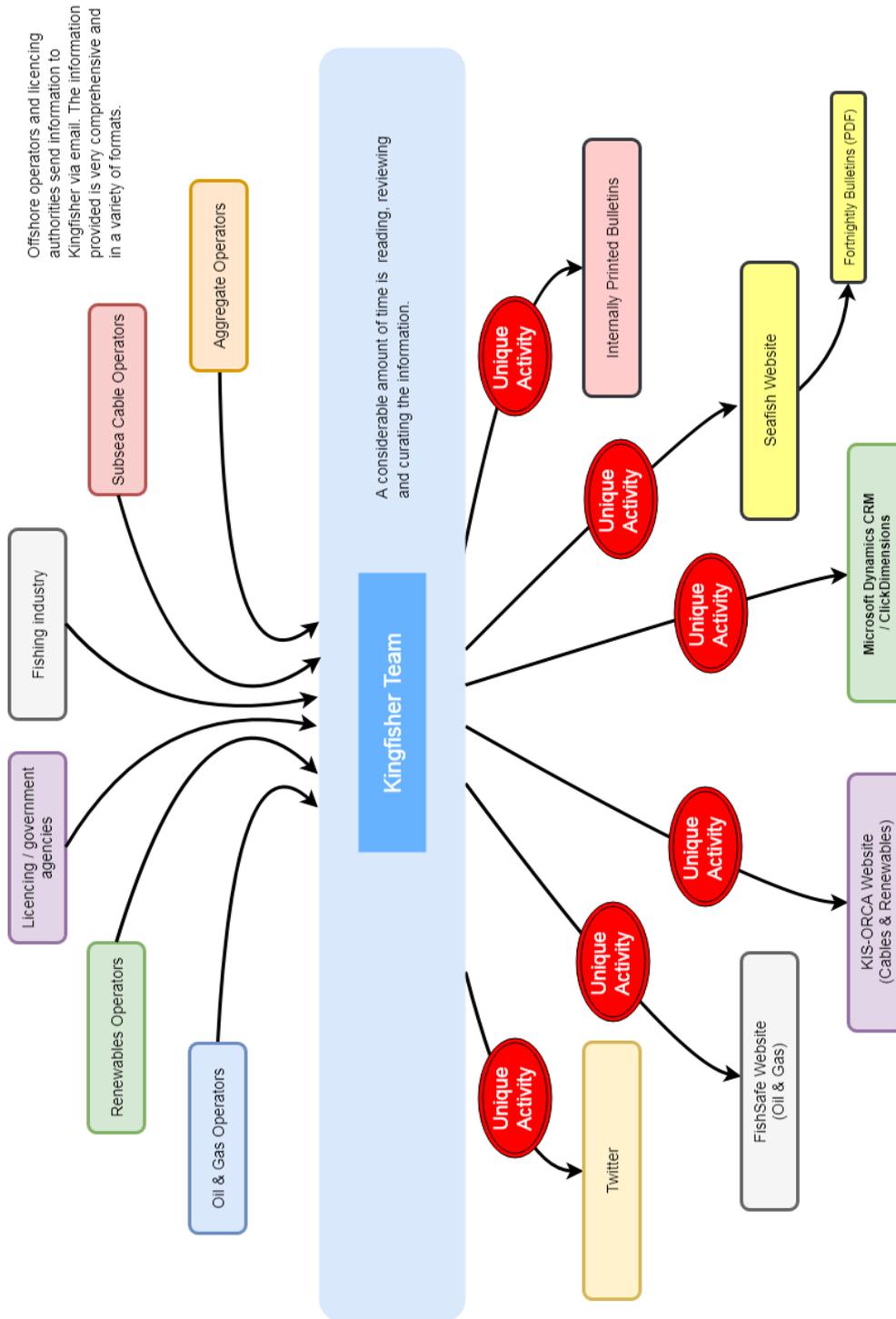


Figure 1: Workflow diagram highlighting the current situation

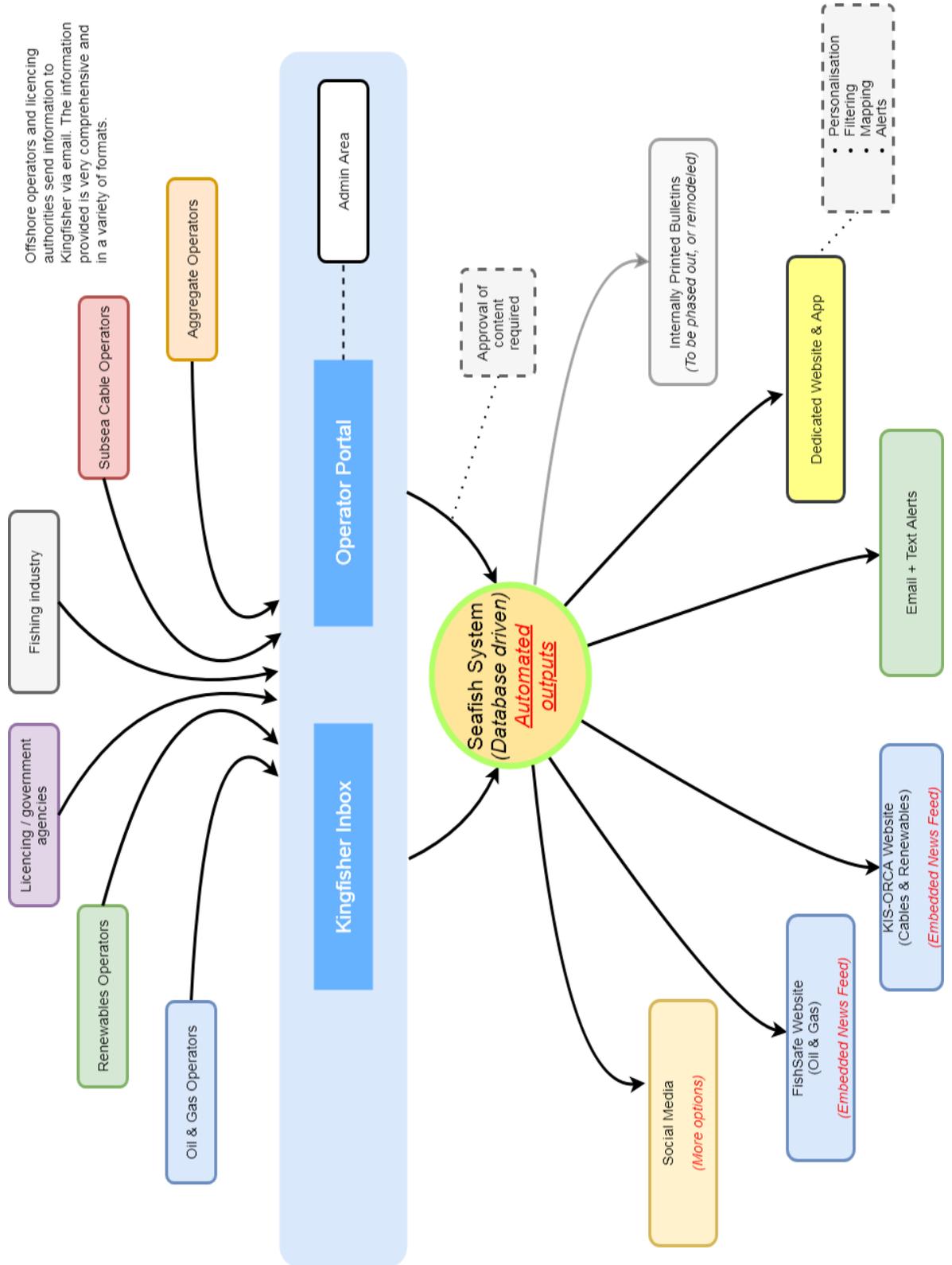
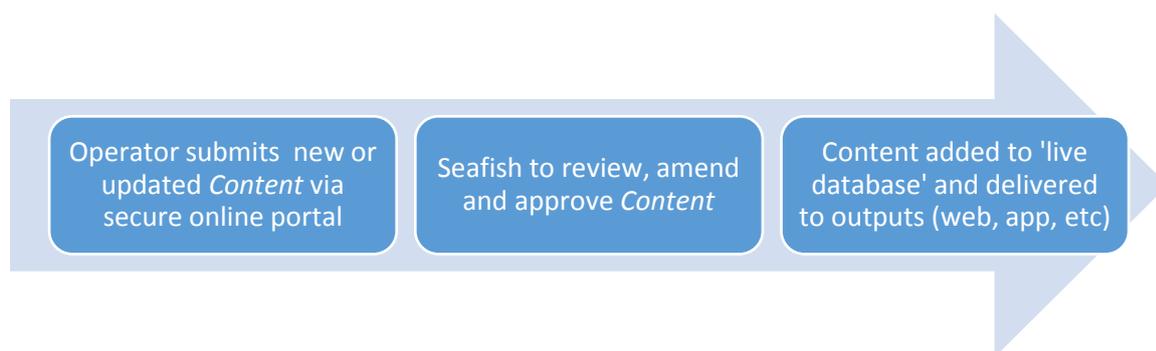


Figure 2: Perceived workflow diagram of a new system

5.2 External Input (Content Submission by Operators)



Functions should exist to allow external input of content. External contacts should be able to submit, update and remove *content*. This should be possible with or without login and *content* must adhere to predefined standards, as held within a template of mandatory and non-mandatory fields, with word count restrictions and guidance on *content*.

All *content* will be required to be 'signed off' via an authorisation/quality check by a member of staff, prior to the *content* being added to the 'live' database and subject to external delivery protocols. Whilst *content* is held within the 'intermediate' database (pre sign-off) it must be possible for full modifications by a member of staff to take place (this would not require approval by the submitter).

5.2.1 New content submission (via online portal)

Offshore operating industries submit *content* to Seafish under marine licence. This is undertaken on an adhoc basis (when activities, developments, or hazards occur) and received via email.

The new system should have a facility for external operators to enter new *content* for automatic entry into the database. This should be held in an 'intermediate' database, to allow for a member of staff to quality check, modify and authorise the submission, prior to inclusion in the 'live' database. Modifications will not require the approval of the submitter. Operators will be required to submit basic personal information (e.g. name, operator, email) and will receive an email confirmation of submission, with unique link to make future changes.

5.2.2 Updating existing content (via online portal)

Operators wishing to make changes to previous *content* submissions may do so by clicking on the unique link sent when content was submitted.

The new system should also have a facility for operators to login (creating a password) and review all *content* submitted from their email address.

5.2.3 Security of content submission

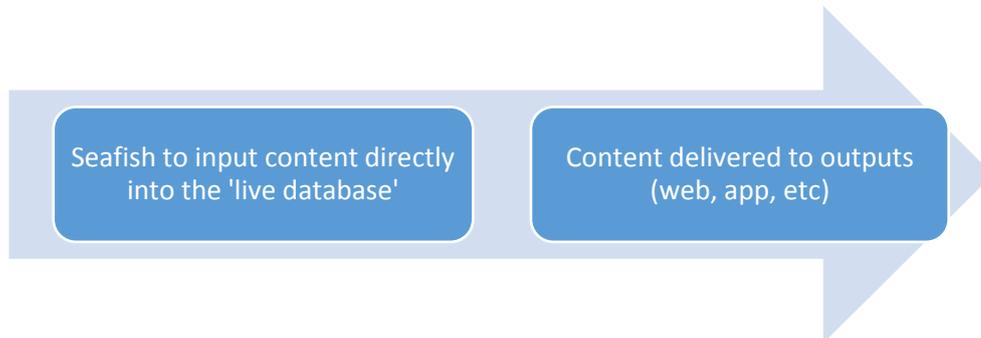
The new system should have a security facility, checking the authenticity of the submission via an email check loop, with the capacity to confirm the recipient submitted the *content*.

5.2.4 Reminder of 'live' content

The new system should have a facility to remind operators that they have 'live' *content* on the system (this will not be required for any pre-authorised submissions). The frequency may be set by a Seafish

member of staff, although default should be weekly. There should also be a reminder facility for *content* about to expire. The frequency may be set by a Seafish member of staff, although default should be 24 hours prior to content expiring. With these reminders, a unique link should be included in the email to allow modification without logging in.

5.3 Internal Input (Content input by Seafish staff)



Functions should exist to allow Seafish staff to input *content* and manage and maintain this until it is no longer required to be 'live'.

5.3.1 New content input (by Seafish staff)

Offshore operating industries submit *content* to Seafish under marine licence. This is undertaken on an adhoc basis (when activities, developments, or hazards occur) and received via email. This is then entered manually into the various systems by a Seafish member of staff (website CMS', Word, Twitter, etc).

The new system should have an interface, enabling easy and quick entry of this *content* by a Seafish member of staff into a database. Inputted *content* into the 'live' database will then be able to be automatically 'pushed' to the various customer facing elements (website, app, social media, email, text, etc).

5.3.2 Updating existing content (by Seafish staff)

Updated content is received via email on a regular basis. *Content* is then updated manually within the various systems (website CMS', Word, Twitter, etc).

The new system should have an interface, enabling easy and quick update of this *content* into a database. Updated *content* will then be able to be automatically published to the various customer facing elements (website, app, social media, email, text, etc), with a date field present stating 'last updated: ## ## #####'.

5.3.3 Archiving of content (by Seafish staff)

When *content* expires (e.g. initial timeframe submitted has passed or notification is received via email) notices are presently manually removed from websites, etc.

The new system should automatically archive *content* when dates expire and also have the facility for a member of staff to manually archive. Archived content should easily be retrieved back into the main system if required.

5.3.4 Deletion of content (by Seafish staff)

For erroneous *content* submissions, they are deleted from various systems (website CMS', Word, Twitter, etc).

The new system should allow deletion of *content*, by a member of staff only. This deletion should be automatically reflected from customer facing elements (website, app, social media, email, text, etc). Deletion of content should only be possible by high level Administrator access, as oppose to User. Deleted content should be held within a separate area (e.g. trash) for a period e.g. 30 days, before complete removal from the system. At any point during the '30 day period' content should easily be retrieved back into the main system if required.

5.4 Publish/supply

The delivery of *content* to the end users is critical to this system. Ease of access, excellent user experience and highly effective delivery of content are very important. To achieve maximum coverage and reach users with unique preferences for accessing/consuming news (e.g. fishermen at sea), it is essential that all methods to 'push' *content* to users is considered (website, app, email, text, sharing, social media etc.)

5.4.1 New website

Presently there is no dedicated website for this *content*.

The new system should provide a 'live' feed of database *content* to a new website as discussed in section 5.5.

5.4.2 New app (for mobile and tablet)

Presently there is no dedicated app for this *content*.

The new system should provide a 'live' feed of database *content* to a new app as discussed in section 5.6.

5.4.3 Existing website (news pages)

Two websites exist which we populate via the back-office (Umbraco) with *content*. These are www.kis-orca.eu and www.fishsafe.eu. It is the 'news' pages of these websites that is updated, with highlights shown on the home pages (<http://www.kis-orca.eu/news> and <http://www.fishsafe.eu/en/offshore-news.aspx>).

The new system should provide a 'live' feed of database *content* to the 'news' pages of these websites with *content* selected for each website from a field detailing the type of industry (e.g. 'oil & gas' to FishSAFE, 'cables' and 'renewables' to KIS-ORCA). Content may be new, updated, or removed/archived from these pages of the websites and this should be managed from the same central database as used by the new website. Content should be able to be filtered and highlight prominent *content* to the home page.

We are open to suggestions of how the news pages of these websites can be maintained.

5.4.4 Social media / Sharing

Currently, Kingfisher's Twitter account is the sole form of Social Media (<https://twitter.com/Kingfisherinfo>). *Content* is manually added to this account on an hourly/daily basis.

The new system should allow *content* to be automatically 'flagged' to be sent to Twitter (and all other mainstream forms of social media) and automatically 'pushed' to these mediums. It is likely that less notable *content* will not be required to be included on social media.

Content should allow for the embedment of a graphic/map (or multiple graphics) and a link to the main websites' 'News'/'Map' interface to access the full content.

5.4.5 Email Alerts

Currently, a fortnightly summary of *content* is produced on PDF files (via Word), uploaded to the Seafish website, with alerts sent via Campaign Monitor to registered users.

The new system should allow *content* to be sent 'live' to subscribers, IF the content falls within their preferred geographical region and IF they have requested such alerts. *Content* should allow for the embedment of a graphic/map (or multiple graphics) and a link to the main websites' 'News'/'Map' interface to access the full *content*.

Summary email alerts may also be requested/sent on a weekly basis, following the same above criteria.

5.4.6 Text Alerts

Currently, no text alerts are issued.

The new system should allow *content* to be sent 'live' to subscribers, IF the content falls within their preferred geographical region and IF they have requested such alerts. *Content* should allow for the embedment of a link to the main websites' 'News'/'Map' interface to access the full *content*.

5.4.7 Query of Database

Currently *content* is manually added to a Word file for sending via PDF to users on a fortnightly basis.

The new system should allow Seafish staff to be able to query *content* via shortcuts/wizards and print to a 'designed' pdf for upload to website or sending to users. The practical use of this will be to summarise activity within each sea area and making this available via PDF each week - for users to download to take to sea/digest.

More detailed queries may be required for internal purposes as discussed in below.

5.5 End User Capabilities – New Website

Currently, no dedicated website exists for this *content*, only sister websites of www.kis-orca.eu and www.fishsafe.eu.

The new website should deliver *content* using methods employed by commonly found news websites (e.g. BBC, Daily Mail, etc). This includes creating an enhanced user experience to filter/select *content* that is interesting to them, 'graze' in condensed form, digest more detailed *content* easily with the use of graphics and supporting maps. The user should have the ability to switch to and from List View (majority textual) or Map View (full mapping interface).

5.5.1 View content (List View / Map View)

The new website should allow the end user to view detailed content in 'List View' (majority textual) or 'Map View' (full mapping interface with markers highlighting location and summary text and link to full text).

List View should be a concise summary, with a thumbnail map of the area/item in question (ideally automatically created), potential for additional images, ability to extend for more detail and ability to select 'View On Map' for a more visual experience.

Map View (preferred ESRI solution) should display the spatial element of the *content* (markers for small scale and actual point, line or area for larger scale) that is easy to interrogate with commonly used navigation (click, drag, pinch, etc). Upon selecting, high level information should be seen, with the ability to include a graphic and a link to more detail (pop-up) and click 'List View' for full detail.

5.5.2 Filtering

The new website should allow users set filter options via an easy to use filter bar, or column, with the ability to select an advanced filter option. An example of the filter options are:

- i. Area/Region (List and Map)
- ii. Type of Industry (List and Map)
- iii. Type of Activity (List and Map)
- iv. Date Period (List and Map)
- v. Key word Search (List and Map)
- vi. Most Viewed/New/Most Commented content (List and Map)
- vii. 'Drawable' Boundary Area/Region (Map)

5.5.3 Sharing (Social media, Email, Messenger, etc)

The new website should allow users to share individual *content*, in an easy to use way. There should also be consideration taken to allow users to share pre-filtered content, or a set view on the Map (settings pre-embedded in url). Sharing should be allowed to: Twitter, Facebook, Facebook Messenger, Pinterest, Email and other mainstream options.

5.5.4 Interaction / feedback

The new website should allow users to report/feedback any issues, concerns or comments relating to individual pieces of *content*. This should be via a feedback loop/button at the foot of each individual piece of content (news article), via a pop-up or concise feedback box.

5.5.5 Print / Print to PDF

The new website should allow users to be able to print and print to PDF, individual *content* and filtered/personalised *content*. This allows user to take content offline for digesting whilst away from a device, or internet connection (e.g. whilst at sea).

5.5.6 Personalisation (via login area)

The new website should allow users to login to a secure area, create an account in an extremely simple way and select basic options relating to how they wish to receive *content*. There should be a quick and easy security loop to confirm user and user email. Basic information collected includes:

- i. Name
- ii. Email
- iii. Mobile phone (non-mandatory)
- iv. Area of interest (1-6 – with potential to ‘draw’ boundary)
- v. Live updates and/or weekly summary
- vi. Update method – email or text, or both.

5.5.7 Monitoring and analytics

The new website should allow Seafish staff to monitor and analyse website traffic, including details of access to individual content and sharing of content. Also the monitoring of emails, such as bounce detection, open and read reporting, and click-throughs. We would like the system to utilise Google Analytics.

5.6 End User Capabilities – New Application (App)

Currently, no dedicated app exists for this content.

The new app for mobile and tablet should deliver *content* using methods employed by commonly found news apps (e.g. BBC, etc). This includes creating an enhanced user experience to view Top News, create personalised content via My News, view Popular News and Search for specific news. Users should be able to ‘graze’ headlines and a supporting graphic, before selecting and digesting more detailed *content* easily with the use of graphics and supporting static map images. Specific important news items should be promoted via an onscreen pop-up, with link to further information. When users are offline, *content* should be visible (from prior download) in at least summary /shortened form.

5.6.1 Top News

The new app should provide users with a tab to view sorted *content* based on its predefined rank (most recent/importance), logged on the database. This should be sorted by region/sea area or type of content and display a heading and a supporting image. Interrogation of a *content* item, should allow users to read the item in more detail with the support of images.

5.6.2 My News

The new app should provide users with content based on their defined personal preferences. The initial view of the app should allow this to be set (sea area/region, type of news, etc) and edited if needed. Sorted news should have sub-tabs to switch to each predefined preference. Within each area *content* should be displayed with a heading and a supporting image. Interrogation of a *content* item, should allow users to read the item in more detail with the support of images.

5.6.3 Popular News

The new app should provide users with sorted *content* based on the level of user views on the website/app, logged on the database. This should be sorted by region/sea area and display content heading and a supporting image. Interrogation of a *content* item, should allow users to read the item in more detail with the support of images.

5.6.4 Search News

The new app should provide users with the ability to search *content*. The results should be displayed according to relevance and display *content* heading and a supporting image. Interrogation of a *content* item, should allow users to read the item in more detail with the support of images.

5.6.5 Interaction / feedback

The new application should allow users to report/feedback any issues, concerns or comments relating to individual pieces of *content*. This should be via a feedback loop/button at the foot of each individual piece of content (news article), via a pop-up or concise feedback box.

5.6.6 Monitoring and analytics

The new app should allow Seafish staff to monitor and analyse traffic, including details of access to individual content and sharing of content. We would like the system to utilise Google Analytics if feasible.

5.7 Reporting/Querying

The system should be capable of delivering both pre-defined and bespoke reports/queries for Seafish staff, on various types of data held within the system, using a wizard based front end that is intuitive and simple to use. The system is required to include summary information about *content* within the database (with the ability to include 'archived' and 'deleted' content) and also extract content that meets the requirements of the query, for inclusion in published news releases.

It should be possible to save queried *content* to a 'designed' pdf (cover, header, footer, styled text, etc) for upload and wider circulation.

It should be noted that reporting is a key part of ensuring we can demonstrate the amount of critical news within or passing through the system.

Query example:

- Entry Type (Live and/or Archived and/or Deleted)
 - +
 - Type of notice
 - +
 - Within sea area '1'
 - +
 - 6 month timeframe
 - +
 - Last updated by user "X"
 - +
 - Containing words "Suspended Wells"

5.8 Audit Trail / Management of Content

The system should be capable of maintaining and displaying a full audit trail for each record/item of content. The majority of these records should be automated avoiding manual input and include, but not be limited to:

- i. Origin (internal or external input)*
- ii. Source (external contact)*
- iii. Submission Date*
- iv. Submission User*
- v. Approval Date*
- vi. Approval User*
- vii. Last Update Date*
- viii. Last Update User*
- ix. Archive Date*
- x. Archive User*
- xi. Content Views (log of users and dates)*

6 Your Response

In putting your response together, we would like you to demonstrate your response to the below. Please note these requirements are in addition to any requirements from our requirements documentation as a whole.

6.1 Itemisation of costs

It is important that tenders include as detailed itemisation of costs as practicable, with these structured into:

- i. Database and management system*
- ii. Website*
- iii. Application*
- iv. Communications functions (email/text alerts)*
- v. Misc*

6.2 Delivery

Please define the process you will take, from kick-off meeting to deployment, to ensure that you fully understand our requirements and how you will deploy your solution to meet those requirements. Please include detail of how you will deliver a system capable of growth with your chosen solution, ideally through demonstration of proof of concept delivery resulting in best practice configuration within the software.

We have a firm deadline for the delivery of this project no later than 28 February 2019. Because of the time pressures of this project, we would require a detailed project timeline be maintained, capturing not just your development time but also the requirements on our time. Given the sometimes busy schedules our staff maintain, it's vital that we know when our time will be required for meetings, review and feedback; and that we always have an up to date timeline from which we can report and monitor progress. We also request weekly updates of progress throughout the project from start to end.

The following table and Gantt chart provides an overview of the aspirational timeline we are committed to for this project:

| | Start | End | Duration | Milestones | |
|---|-----------|-----------|----------|------------|-----------|
| 1. Tender | 08-Aug-18 | 08-Oct-18 | 62.0 | | Activity |
| 1a. Tender 'open' | 08-Aug-18 | 07-Sep-18 | 31.0 | | Activity |
| 1b. Tender submission deadline | 07-Sep-18 | 07-Sep-18 | 0.0 | 1.0 | Milestone |
| 1c. Tender scoring | 10-Sep-18 | 21-Sep-18 | 12.0 | | Activity |
| 1d. Face to face presentations | 01-Oct-18 | 05-Oct-18 | 5.0 | | Activity |
| 1e. Review of presentations | 08-Oct-18 | 16-Oct-18 | 9.0 | | Activity |
| 1f. Awarding of contract | 17-Oct-18 | 17-Oct-18 | 0.0 | 1.0 | Milestone |
| 2. Project scoping and discussion with developer | 22-Oct-18 | 18-Nov-18 | 28.0 | | Activity |
| 2a. Assessment of internal workflow | 22-Oct-18 | 28-Oct-18 | 7.0 | | Activity |
| 2b. Assessment of external requirements | 29-Oct-18 | 11-Nov-18 | 14.0 | | Activity |
| 2c. Create/Update functional specification | 07-Nov-18 | 18-Nov-18 | 12.0 | | Activity |
| 3. Development of database and management system | 19-Nov-18 | 21-Dec-18 | 33.0 | | Activity |
| 4. Development of new website and application | 07-Dec-18 | 18-Jan-19 | 43.0 | | Activity |
| 5. Testing | 21-Jan-19 | 27-Feb-19 | 38.0 | | Activity |
| 5a. Testing import/export and data processing | 21-Jan-19 | 27-Jan-19 | 7.0 | | Activity |
| 5b. Testing with 3rd party data delivery | 28-Jan-19 | 06-Feb-19 | 10.0 | | Activity |
| 5c. Internal UAT, including sign off and platform updates | 07-Feb-19 | 15-Feb-19 | 9.0 | | Activity |
| 5d. User testing and refinement (internal/external) | 11-Feb-19 | 24-Feb-19 | 14.0 | | Activity |
| 5e. Import of full content | 25-Feb-19 | 27-Feb-19 | 3.0 | | Activity |
| 6. Completion of fully complete system | 28-Feb-19 | 28-Feb-19 | 0.0 | 1.0 | Milestone |
| 7. Delivery of onsite training | 04-Mar-19 | 05-Mar-19 | 2.0 | | Activity |
| 8. Content update (Seafish staff) | 11-Mar-19 | 22-Mar-19 | 12.0 | | Activity |
| 9. Launch | 27-Mar-19 | 27-Mar-19 | 0.0 | 1.0 | Milestone |

Figure 3: Proposed project delivery timeline

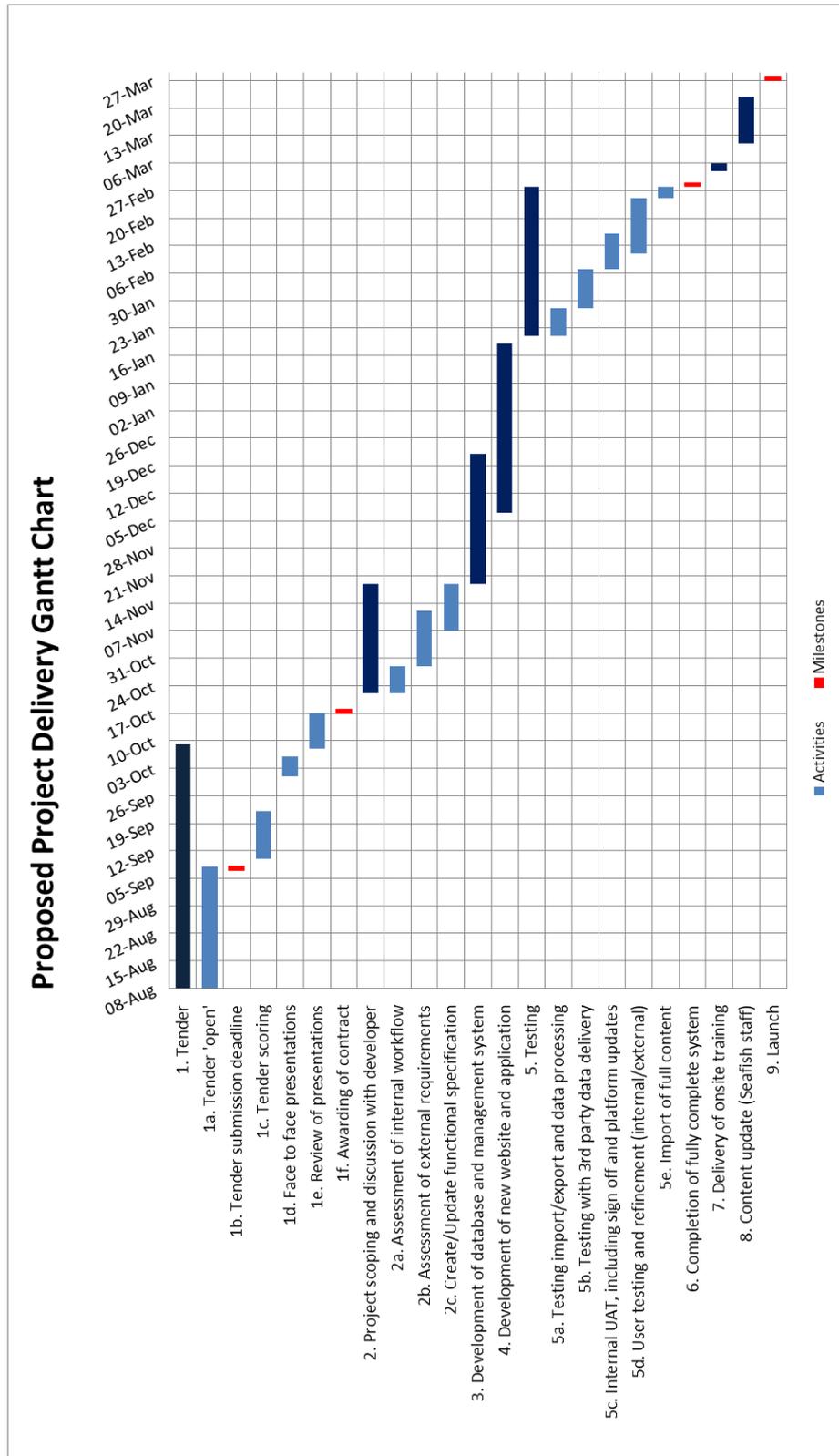


Figure 4: Proposed project delivery Gantt chart

6.3 User Acceptance Testing

We believe in thorough and frequent testing, and will make available to you the resources to conduct testing at any time within the project. At the very least, we would expect to conduct extensive user acceptance testing, including multiple phases, following the completion of development and configuration (this should include the use of test information from within Seafish and external (offshore operating company)).

6.4 Overview of the system

Please provide an overview of your proposed solution, including heritage, current usage and USPs compared with other solutions in reference to our requirement.

6.5 Practical Demonstration

Whilst it is not expected that you provide a demonstration bespoke to our requirements, it would be beneficial for us to receive a demonstration of the system you intend to deliver and how configuration and options can be tailored to suit our requirements. This can be in the form of an in-person demonstration, or a video – we are flexible on this matter.

6.6 Clearly detailed user licensing costs

Where you are proposing a solution with per-seat cost, or communication options per release, we require a detailed breakdown of how such costs accumulate, and where there are opportunities to reduce such costs, for example through bulk purchasing.

In all circumstances, please explicitly detail any user limitations and associated costs, including if accounts such as developer and admin accounts are included in such limitations; please also confirm if any access to staging or development environments provided as part of your solution are included in the total user count.

6.7 Explanation of workflow configuration

Given the nature of our user requirements, we would like to see how your proposed solution can offer us a shortened, but flexible workflow with improved data management and modern delivery/publishing capabilities.

6.8 Explanation of database options

Please explain which database your proposed solution will utilise, including systems similar to ArcGIS Server/Enterprise. Kingfisher have experience with the Umbraco Content Management System for inputting and managing content for the FishSAFE and KIS-ORCA websites. This has been found to be inadequate, with slow and awkward input/update of content and poor management capabilities for larger sets of content.

Please explain your proposed database solution, whether this is hosted by Seafish or in the cloud and how it allows exceptional management of content, from input to supply to user. An explanation and demonstration of ease/speed of input and update of content is required.

6.9 Explanation of mapping options

Please explain which mapping interface your proposed solution will utilise. Kingfisher utilise ESRI mapping software and would prefer the solution to be capable of engaging and communicating with ESRI software for internal assessment and delivery of the external mapping element.

Assessment should be undertaken to evaluate whether ESRI's capabilities are appropriate and can be suitably integrated. If it is found ESRI is not appropriate, an explanation should be included and other suitable options identified.

6.10 Delivery of content to user by email/text/app

Please explain the underlying system which will be used to supply content to registered users via text/email and the pros and cons of this system against other options. Please also include details of delivery speed and process from input into database to receipt by user.

6.11 Design/presentation of end products

Please provide examples of appropriate live websites, to demonstrate high quality design and capabilities of displaying content in simple and easy to understand way. Examples of appropriate apps and email/text delivery, with particular focus on their design and simplicity of user experience.

6.12 Details of support and maintenance

Please detail your suggested (or required) support and maintenance package for this contract, bearing in mind that we require at least 12 months suitable support. Please detail the on-going costs of any licensing for updates, the potential cost (if any) of applying those updates, and if the software you propose is available to us only on a licensed basis.

6.13 Details of training material delivery

Please detail the level and range of training material along with delivery mechanisms. Please note that this relates to Seafish users, which equate to <6 people.

6.14 Details of integration capabilities

Please detail the ability for your proposed solution to integrate with other systems, and the limitations and assumptions around this. Of particular interest is if your solution comes with cost-effective (or free) modular plugins to allow integration with other systems, or a standards-based API, or if integration is only possible through expensive, proprietary development or software purchase.

6.15 Overview of any technical, infrastructure or browser requirements

If your solution has any specific requirements, such as a browser plugin or incompatibility with certain operating systems, please list them.

6.16 Detailed list of any omissions or assumptions

Against our listed requirements, please detail any assumptions you have made as to the depth of that requirement and any areas that you know you cannot deliver against.

By understanding up-front the potential pitfalls and limitations of any solution, we can be sure to weigh them up properly against the benefits of that system to ensure that we ultimately settle on the best possible solution for our needs.

7 Appendix 1 – Links to existing content

Existing content is currently provided in full via the suite of Kingfisher Bulletins. These may be found at the below links. Please note a rationalisation process will be undertaken on all 'types' of *content*, to simplify and ensure it is possible to deliver all offshore industry *content* together.

- *Latest Kingfisher Bulletins*: <http://www.seafish.org/industry-support/kingfisher-information-services/kingfisher-bulletins>
- *Archive Kingfisher Bulletins*: <http://www.seafish.org/industry-support/kingfisher-information-services/kingfisher-bulletins/bulletin-archive>