Marine Management Organisation

User Story Analysis Report

As a…..
I want ….
So I can…..

User Story Analysis Report May 2017

Report prepared by: Jess Churchill-Bissett and Nick Boase

Project funded by: MMO Marine Planning

Version	Author	Note
0.1	Jess	First draft
0.2	Nick	Expanded initial draft with suggestions for discussion
0.3	Nick	Expanded initial draft with suggestions from CS and JCB
1	Jess	Added to the report
1.1	Jess	Added to the report
1.2	Nick	Added to the report
1.3	Jess	Added results to report and developed some attainment criteria
1.4	Nick	Added to the attainment criteria
2.0	Jess	Added conclusions to the report
2.1	Nick	Added to the conclusions
3.0	Jess	Completed the report
3.1	Mel	checked and suggested amends as track changes
3.2	Hannah	Reviewed and track changes
3.3	Jess	Made amendments
3.4	Nick	Made amendments
4	Jess	Submitted final report

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Summary

User stories are short simple descriptions of requirements, expressed from the perspective of the end user. These requirements can help shape and inform the development of a product, in this case marine plans. This helps ensure the marine plans are fit for purpose and meet our customers' needs.

The aim of the user story activity was to gather stakeholder's views on how they would like:

1. to **use** a marine plan
2. to be **engaged** during development of the marine plans
3. marine plans to be **displayed**

During the spring 2017 iteration 1 engagement period, user stories were gathered from stakeholders via several means. These means included: workshops across the four remaining plan areas (north east, south east, south west and north west), an online consultation, directly approaching supportive 'champion' stakeholders, and the MMO's Stakeholder Focus Group.

User stories were analysed to identify the dominant requirements from stakeholders, and their reasons for these requirements. Additionally, analysis considered the type of stakeholders that responded to the process and the sectors they represented.

1061 user stories were received. These represented stakeholders from across all four remaining plan areas, and the online consultation. The largest number was received in the south west, likely due to an extra workshop being held in this area compared to other areas.

Results indicated a diverse range of user stories, with some common patterns but also differences between plan areas. Findings are summarised below.

Stakeholders represented 28 sectors. Overall, the joint most common stakeholder sectors were conservation and planning authorities, which each represented 15% of user stories. However, there was variation between remaining plan areas in the sectors represented.

Firstly, for the general user stories, stakeholders across all plan areas had some similar requirements, such as wanting plans to provide environmental protection, and to assist developers and applicants. However, the priority of requirements differed between plan areas. For example, ensuring compatibility between the marine plan and other statutory documents was less important for stakeholders in the north east, compared to other remaining plan areas. One of the primary stakeholder reasons was so they can inform others of marine plan requirements.

Secondly, for the engagement user story, stakeholders across all areas wanted to be engaged. This included regularly, and face to face, for example workshops. Two dominant reasons for this were that stakeholders could both provide input to the development of marine plans, and also build their own knowledge and understanding.

Lastly, for the display user stories, 79% all display user story stakeholders requested an online or digital plan, a pattern which was consistent across plan areas. This figure compared to just 2% who wanted a paper only version. Other requirements included multiple formats, such as a printable version. The reasons included so that stakeholders could link quickly to relevant information, and also so they could save favourite policies for future easy access.

These headline results and this report provides valuable insights into stakeholders' requirements for marine plans. However, the narrative (i.e. written user stories) contributes additional useful information not captured by the analysis. It is therefore recommended the database of user stories is used in conjunction with this report, to help inform and guide appropriate development of marine plans.

Limitations to the current project include recruitment of the stakeholder sample: it cannot be assumed these findings are fully representative of the overall stakeholder population. Some sectors might be overrepresented due to their having the means to contribute more extensively to the user stories process, compared to other sectors.

To conclude, the user stories process has generated a large amount of data which should inform development of the remaining marine plans over the next few years. Next steps include prioritising user story requirements and setting targets to achieve these, and subsequently incorporating findings into our work over the next few years.

1. Introduction and aims

What are user stories?
User stories are short, simple descriptions of requirements expressed from the perspective of the end user. They typically follow the template: '***As a*** *<type of user>*, ***I need*** *<users goal>* ***so that*** *<users reason>.'*
User stories therefore include both a requirement ('*…I need…'*) and a reason ('*…so that…'*).

How are we using them in marine planning?
User stories are used in marine planning to help ensure we are developing marine plans that meet the wants and needs of our stakeholders. User stories will identify how stakeholders would like to use the marine plans, once adopted. User stories will also help identify how we can best engage with stakeholders throughout development of the marine plans.

Three user stories were developed iteratively by the marine planning team. The questions were refined following feedback from several champion stakeholders, prior to main data collection.
User stories provide invaluable insights into stakeholder views and will be added to our internal evidence base. They will:

- Enhance our understanding of how organisations/businesses will utilise marine plans.
- Help the MMO Marine Planning Team identify how we can adapt or improve marine plans to work best for our stakeholders.
- Support the implementation and monitoring of marine plans.
- Improve our knowledge of how all stakeholders would like to be engaged in marine planning.
- Contribute to decisions on how marine plans should be displayed and made available to stakeholders.

User stories are focussed on the remaining plan areas (i.e. SW, NW, NE and SE), rather than the adopted East and draft South plans.

What do we want to find out?
We want to find out:

1. How stakeholders would like to **use** a marine plan?
2. How stakeholders would like to be **engaged** during development of the marine plans?
3. How stakeholders would like marine plans to be **displayed**?

Each of these three aspects is described in more detail below.

1. The way stakeholders want to use a marine plan:

Marine plans should reflect what people want from marine plans. What are the needs of people who will use, or whose interests are affected by, the plans? These needs will include both people who will use the adopted marine plans in their day to day work, such as marine developers, the MMO marine licensing team, local planning authorities, and also other stakeholders who will use the plan less frequently. The User Stories will also help identify requirements of those stakeholders that may not use the final adopted marine plan in their line of work, but would like to influence the development of a marine plan (e.g. for environmental, community or commercial reasons). Understanding what this broad range of users want from marine plans can help shape plan development to ensure it is appropriate to their needs.

2. The way stakeholders want to be engaged:

Stakeholder engagement is a core activity in the development of marine plans. This engagement is vital to ensure we are aware of stakeholders' views and ideas, and that these are considered in the marine plan. Stakeholder engagement is also an obligation set out within the [Statements of Public Participation](#) for remaining plan areas. However, stakeholders will likely differ in their preferences for engagement, for example their availability, or the parts of the marine planning process they would like or feel able to contribute towards. To ensure we understand our stakeholders' needs and preferences, and can therefore engage them appropriately we need to find out how they would like to be engaged. The second user story aims to address this.

3. The formats that stakeholders would like the adopted marine plan to be displayed in:

Displaying the remaining marine plans in formats appropriate to stakeholders should help ensure effective implementation. Additionally, by better understanding specific user requirements related to format, we can not only provide a document that they will use, but one that is simpler and more efficient. This should ultimately:

- Streamline the process for developers to understand what needs to be considered in an application for a marine licence/planning permission.
- Assist marine licensing team and local planning authorities (and other authorities/decision makers) in applying the marine plan in their work.
- Save time, effort and money through providing a display format better suited to stakeholders' needs.

Each of the above three areas reflects a different user story. These three user stories are respectively referred to as the 'use', 'engagement' and 'display' user stories.

To help guide this project, four research questions were applied to each of the three user stories:

i)   Which requirements are important to stakeholders?

ii) How do these requirements differ between plan areas?
iii) Why are these requirements important to stakeholders?
iv) What important ideas are within the user stories narratives that are not captured by the coding?

One important limitation to consider when interpreting the findings of this project is that sample representativeness cannot be claimed. There is a huge range of stakeholders who will use and be affected by marine plans and who reflect the many diverse uses of the marine plan areas. Some stakeholders may be more willing (or more able) to provide user stories than others. For example, individuals representing large organisations (e.g. local planning authorities) may be more likely to attend workshops and complete user stories, compared to members of the public who may not be paid for their time and are therefore less likely to attend the workshops. To partly address this bias user stories were collected using several methods (e.g. online and workshops), which should reduce sample bias as several different means to seek stakeholders' views were provided. Additionally, user types were recorded and are presented below, to help determine the extent to which different sectors were represented. Nevertheless, this limitation should be noted when interpreting the results and deciding how to adjust our subsequent work towards marine plan development and stakeholder engagement.

Another limitation relates to some stakeholders completing more than one set of user stories (e.g. where they had several roles). Therefore there is potential for some individuals/organisations to be over-represented in the process. However this effect is expected to be limited, as most stakeholders completed just one set of user stories and stakeholders were advised to complete more than one user story **only** if they represented more than one organisation/role.

2. Methods

This early stage of plan development provided a timely opportunity to understand user needs so they can be incorporated into plan production over the next few years.

The following groups were asked to provide user stories:

1. Champion stakeholders – stakeholders that have shown a strong support of marine planning since the launch of our work on remaining plan areas, and who have a good understanding of the marine planning process.
2. Stakeholder Focus Group (SFG) – key MMO stakeholders.
3. Citizen Space – stakeholders were invited to contribute towards the online engagement via Citizen Space (open to the public; from 3 February17-31 March /2017). The link to this online questionnaire was sent out via email to the stakeholder database; the link was also posted on social media and linked via MMO website.
4. All delegates at the Marine Planning workshops (open to the public) were invited to complete User Stories. They took place between 13 February 2017-23 March 2017 in the following locations; Scarborough, Newcastle, Blackpool, Carlisle, London, Colchester, Falmouth, Plymouth and Taunton.
5. In addition to the workshops two drop- in sessions were held at Amble on 13 February /2017 and Falmouth on 20 March 2017.
6. A Coastal Marine Planner also collected user stories from the Essex Coastal Forum which was attended over the engagement period.

These were the questions we asked stakeholders i.e. the user story wording

Aims of marine plans: (Use)
Question 1: With your work area or organisation in mind, please complete the following statement:
As a _____ I want to use an adopted marine plan to _____ so I can _____

Engagement with marine planning: (Engagement)
Question 2: With your involvement in the marine planning process in mind, please complete the following statement:

As a _____ I would like to be engaged _____ so I can _____

Format of marine plans: (Display)
Question 3: Display and use of marine plans

As a _____ I want marine plans to be displayed _____so I can _____

The questions were intentionally open, to ensure minimal influence over stakeholders' user stories (i.e. multiple choice and other closed formats were not used).

When the data was collected:

The data was collected prior to, and during, the Iteration 1 engagement period between 2 January 2017 and 31 March 2017.

How the data was collected:

The Champion stakeholders had previously been identified through the MMO's stakeholder mapping exercise. These 'Champion stakeholders' are stakeholders for who marine planning had a particularly high relevance, that the marine planning team were already in contact with, and who had a good understanding and support for the marine planning process. These individuals were approached via email for their User Stories. Instructions were emailed to them and could be copied and pasted or added to the word document. This meant there was unrestricted space for their response. Following their responses some of these stakeholders were approached to film their User Stories. A selection of stakeholders was filmed reading their User Stories, this film was then used at the workshops in each area to provide an example and encourage more User Stories.

Double sided Postcards (Appendix A1) were used to collect the User Stories from the SFG, Workshops, drop-in session and Essex Coastal Forum. The postcards, although user friendly, provided limited space for responses, although most delegates chose to overlap their text and wrote in blank space on the postcard, their wording was still limited by this layout.

The online engagement tool Citizen Space presented the stakeholders with the same questions and some additional ones about the format of adopted marine plans. This layout gave the delegate as much room as they required when completing their User Story.

Analysis of User Stories:

What we did:
- A Coding Framework (Table 2) for the three questions seeking Requirements and their Reasons was created by two people (Jess Churchill-Bissett JCB and Nick Boase NB). The coding framework evolved from the responses and was added to logically when the Requirements or Reasons required a code that had not yet been created. Reliability was then tested by four people blind-coding user stories, and comparing responses. The coding was refined following this process with further codes being added or coding explanations expanded.
- There was minimal disagreement between coders, though sometimes coding was applied considering the Stakeholder User Type rather than just the comment alone. This was sometimes helpful and sometimes misleading. It was agreed to put the User Type towards the end of the coding database so as not to influence the coding, but still present if required.
- Once the User Stories had all been input into the SharePoint database there were extra columns added and the columns were re-positioned to allow for the most effective coding layout. The coding framework was then used by a limited number of staff to code. See coders below:

Table 1: Table showing which marine planners completed the coding

AREA	CODER
NE – NE Drop-in, Scarborough and Newcastle	Milly Metcalfe
NW – Blackpool and Carlisle	Sam Wright
SE – London, Colchester and Essex Coastal Forum	Tom Pavitt
SW – SW Drop- in, Falmouth, Plymouth and Taunton	Neal Gray
Citizen Space – online engagement	Nick Boase

- The coding was completed to identify up to three codes pertinent to each section of the User Story – both for the 'Requirement' and the 'Reason'.
- There were check points and contact with NB over the coding period. This led as expected to some new codes being added to the coding framework. Three new codes were added and rolled out to the coders.
- Once coding was completed, JCB and NB moderated a sample of the coding. Subsequently, a decision was made for all the coding to be divided up and moderated by JCB or NB to ensure consistency. Whilst only a few errors were identified in the coding (and corrected), JCB and NB both added significantly to the coding.
- During the analysis JCB found some discrepancies with the coding across different marine plan areas for the Display question and so took the decision to moderate all the coding for the Display question.

See a copy of the coding framework on the next page:

Table 2: showing the coding framework

CODING FRAMEWORK

Use Abbreviation	Use Description	Use Abbreviation	Use Description	Engagement Abbreviation	Engagement Description	Engagement Abbreviation	Engagement Description	Display Abbreviation	Display Description	Display Abbreviation	Display Description
BAL	Balancing interests (e.g. environmental, economic, social)	COL	Co-location	ENG	Engaged	LK	To contribute local knowledge to the plan	ONL	Online / Digital	LINK	Links within the plan to information required by the user (e.g. further detail, or to areas relevant to the stakeholder)
ENV	Environmental protection, MPA's and flood management	IO	Inform others (i.e. so the stakeholder is able to pass on relevant information and promote to their colleagues, team and stakeholders)	ASP	Plans to provide area-specific information	REP	Represent marine users	UTDD	Data (up to date)	IA	Inform impact assessments
WAP	Want a plan	POL	To help achieve policy and regulatory requirements (e.g. government direction)	EAS	Easy access / user friendly	INP	Input towards plan development	NL	Newsletter	PC	Highlight or avoid potential conflicts
DATA	Access all relevant data (potentially including knowledge gaps)	CBD	Cross border issues, e.g. aligning with other plans (including internationally)	WS	Workshops / face to face	KNO	Knowledge and understanding	NOTE	To be notified of changes / Alert of changes	IDM	Inform decision making
INF	Fully informed	IDM	Inform decision making	EM	Email / Online	IDM	Inform decision making	MIS	MIS / interactive plan / specific reference to MIS	IO	Inform others (i.e. so the stakeholder is able to pass on relevant information and promote to their colleagues, team and stakeholders)
COMP	Joined up / compatible with other statutory plans (including terrestrial)	STR	Strategic plans, to allow stakeholders to plan activities accordingly (e.g. long-term future considerations)	SIM	Simple	PRO	Proof / scrutinise plans	ONE	One plan (not several documents) OR in one place	KNO	Knowledge and understanding
SPR	Spatially prescriptive / allocates space for certain activities	UMP	Understand marine Plans/ planning	REG	Regularly incl. between iterations	IO	Inform others - pass on relevant information to colleagues, team or stakeholders	COMP	Joined up / compatible with other statutory plans (including terrestrial)	GIS	Spatially / GIS (not specifically referring to MIS) Polygon
SEC	Socioeconomic e.g benefit business / protect livelihood	ENH	Enhance marine e.g environment or economy	NAT	National level	CIM	Understand cumulative impacts	SUM	Summaries	QUI	Quick access
ASP	Plans to provide area-specific information	ENF	Enforcement mechanism	LK	Local level / Local MO			CL	Clear and concise content	LIC	Links to licence applications to apply or view
EVB	Evidence based	SUS	Sustainable development	WEB	Webinars			PAP	paper version ONLY	FAV	Save 'favourite' policies online (e.g. those used most frequently). Bookmark.
APP	Assist developers / applicants	INP	Input towards plan development	SSM	Sector Specific Meetings			SIM	Simple / Plain English	SRC	Search or searchable
PC	Highlight or avoid potential conflicts	IA	Inform impact assessments	OONH	Out of normal office hours (e.g. evenings, weekends)			EM	Email		
UAI	Understand or assess impacts of marine activities on a specific sector or activity		If a **specific sector** is mentioned please use the following codes:					PDF	pdf / printable		
		FISH	Fishing or Aquaculture					MTP	Multiple formats (If User asks for two or more formats)		
		PORT	Port / harbours mentioned					DB	As a database		
Common codes are shaded grey		SHIP	Shipping								
		REC	Recreation or Tourism								
		HER	Heritage								
		AGG	Aggregates								
		REN	Renewables								

3 Results

We received a good number of User Stories from the Iteration 1 engagement period and will firstly look at the numbers and sources of this sample.

3.1 Overall results

Table 3: Table showing the amount of sample data received

User story	Number received
Q1 Use – What stakeholders want from marine plans	376
Q2 Engagement with marine plans	351
Q3 Display of marine plans	334
TOTAL	1061

Figure 1: Pie chart showing the sample of user stories per marine plan area
Of the total number of Q1 User Stories
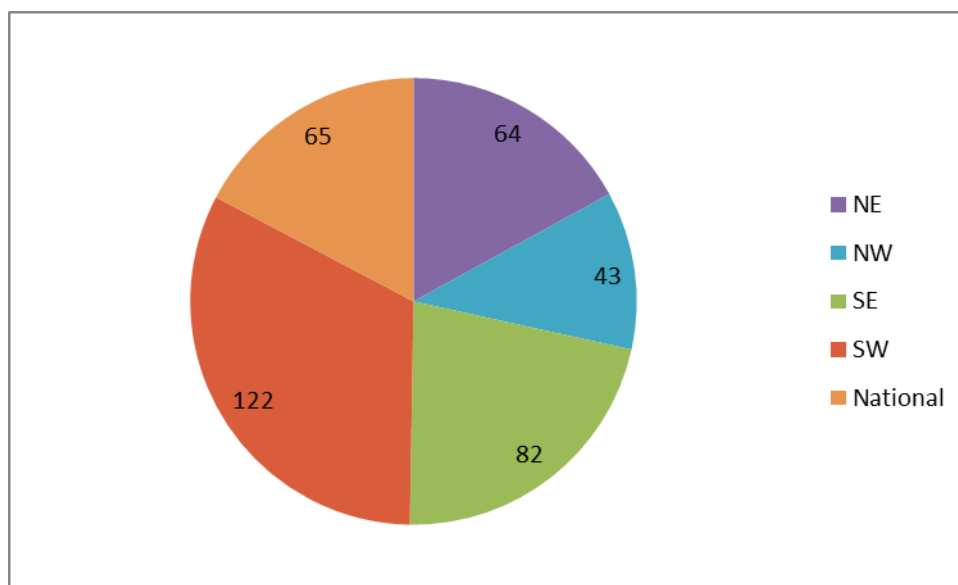
The results show that the most sample data was collected from the SW and SE, which was probably due to three workshops in the SW, compared to two in the other marine plan areas and the Essex Coastal Forum also contributing to the SE sample. For this reason percentages were used to analyse the results so as to avoid a SW and SE bias.

Table 4: Table showing the sources of (Q1) User Stories and where requested from

User stories came from the following sources		
	Received	**Requested**
Champion	11	31
SFG	13	17
Citizen Space	41	Open consultation
Email	1	Open consultation
NE Drop-in	5	9
Scarborough workshop	17	16
Newcastle workshop	42	46
Blackpool workshop	31	32
Carlisle workshop	11	14
London workshop	46	45
Colchester workshop	25	30
Essex Coastal Forum	11	11
SW Drop-in	3	3
Falmouth workshop	34	32
Plymouth workshop	46	43
Taunton workshop	39	45
TOTAL	376	343+

It is noticeable that the number of User Stories received from our Champion stakeholders compared to the number requested is less than 36% response rate. This may be due to the fact that at this initial request we were also asking if our Champion stakeholders would be willing to be filmed providing their User Stories and also may be due to time constraints. The rest of the stakeholder groups, e.g. workshops and the online consultation, were given more concise instructions and were not asked to film or record their User Stories.

Table 5: Top 5 stakeholder types who submitted User Stories by plan area

Stakeholder type in TOTAL

	Type	%
1	Conservation	15%
2	Planning Authorities	15%
3	Recreation	10%
4	Consultant	9%
5	Non Dept. Public Body	9%

National stakeholder types

	Type	%
1	Conservation	23%
2	Non Dept. Public Body	17%
3	Planning Authorities	14%
4	Ports and shipping	8%
5	Renewables	8%

NE stakeholder types

	Type	%
1	Consultant	19%
2	Planning Authorities	13%
3	Recreation	9%
4	Fishing	9%
5	Non Dept. Public Body	8%

NW stakeholder types

	Type	%
1	Planning Authorities	19%
2	Conservation	19%
3	Flood and Coast. Erosion Risk Man.	14%
4	Recreation	12%
5	Ports and shipping	12%

SE stakeholder types

	Type	%
1	Planning Authorities	20%
2	Ports and shipping	15%
3	Consultant	12%
4	Recreation	10%
5	Conservation	7%

SW stakeholder types

	Type	%
1	Conservation	20%
2	Recreation	14%
3	Planning Authorities	13%
4	Academia	11%
5	Non Dept. Public Body	7%

Table 6: Stakeholder type analysis

NB: This data is not a true representation of everyone who attended the workshops as some did not complete User Stories and / or some had previously submitted their User Story, so therefore were not counted in this sample.

The **shaded sections** indicate which stakeholder types were not represented in the user stories (Q1 sample representation):

Stakeholder types	Total	SW	SE	NE	NW	Nat
Conservation	15%	20%	7%	6%	19%	23%
Planning Authorities	15%	13%	20%	13%	19%	14%
Recreation	10%	14%	10%	9%	12%	3%
Non Dept. Public Body	9%	7%	6%	8%	5%	17%
Consultant	9%	6%	12%	19%	5%	2%
Ports and shipping	8%	4%	15%	6%	12%	8%
Academia	6%	11%	5%	8%	0%	2%
Devolved administrations	5%	0%	0%	0%	5%	0%
FCERM Flood and Coastal Erosion risk management	4%	2%	2%	2%	14%	3%
Fishing	4%	2%	4%	9%	0%	3%
Renewables	3%	2%	1%	2%	0%	8%
Other Government Depts.	3%	1%	1%	5%	7%	3%
General public	3%	3%	6%	0%	0%	2%
Coastal Partnership	2%	2%	2%	0%	0%	8%
Business other	2%	3%	2%	2%	0%	3%
Inshore Fisheries & Conservation Authorities	2%	2%	0%	6%	2%	2%
Aggregates	2%	3%	2%	0%	0%	0%
Energy	1%	1%	0%	0%	2%	2%
Cables	1%	0%	1%	2%	2%	0%
Local Nature Partnerships	1%	0%	1%	2%	0%	0%
Water companies	1%	1%	0%	2%	0%	0%
Aquaculture	0%	0%	1%	0%	0%	0%
Rivers and catchments	0%	1%	0%	0%	0%	0%
Tourism	0%	1%	0%	0%	0%	0%
Carbon Capture & Storage	0%	0%	0%	0%	0%	0%
Heritage	0%	0%	0%	0%	0%	0%
MP's and MEP's	0%	0%	0%	0%	0%	0%
Nations other	0%	0%	0%	0%	0%	0%

- There are very few stakeholders from bordering nations (with the exception of Scottish stakeholders in the NW) though the engagement strategy for this sector is bilateral meetings and specific meetings at a national level.
- Aquaculture is an under-represented sector.
- Water companies are still poorly represented, though those who did attend contributed well during the engagement.
- Carbon Capture and Storage sector's low representation in this study may reflect the national pause in its development.
- Tourism, Rivers and Catchments and MPs and MEPs were all poorly represented during the engagement period.

This work led to a further analysis and moderation of the stakeholder 'types' so that this work would better link with the stakeholder mapping and targeting work previously undertaken.

Were all the User Stories relevant for marine planning?

Table 7: User Stories that were not relevant to marine planning

Not for marine planning	
Q1 Use	11
Q2 Engagement	2
Q3 Display	0

Out of those Q1 User Stories not for marine planning:
- 4 were specifically focused on marine Licensing issues.
- 2 were about Marine Protected Areas (MPA).
- 2 were about defining Mean High Water Springs (MHWS).
- 1 was about developing ballast water management protocols.
- 1 was about enforcement for littering on the coast.
- 1 referred to farmers removing hedges.

Out of the above Q1 User Stories, all 11 still provided useful information towards the User Story analysis, yet had other elements not for marine planning included in their response.

Out of those Q2 User Stories not for marine planning:
- 1 was specifically focused on marine Licensing issues.
- 1 was about developing ballast water management protocols.

Those that concerned marine Licensing or other areas of the MMO will be collated and passed to the relevant individuals.

Results are now considered in three parts, which reflect the general, engagement and display user stories respectively.

3.2 (Use) User Stories results – aims of marine planning

i) Which requirements are important to stakeholders?

Figure 2: Bar chart showing the top 10 Requirement codes for Q1 Use of marine plans
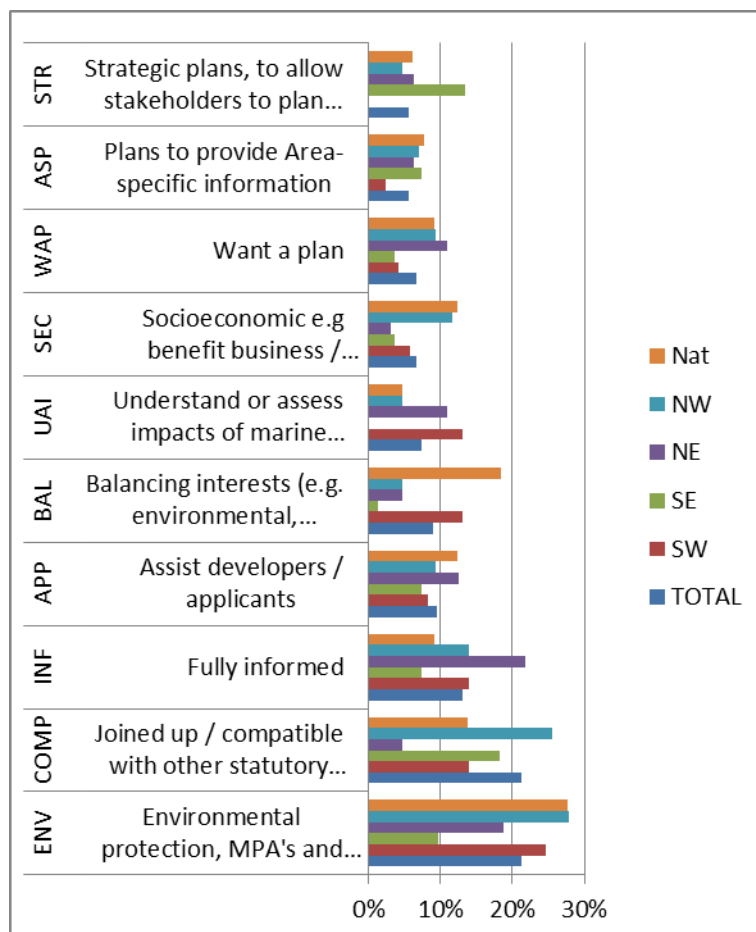
Table 8: Table showing the top 10 Requirements for Use of a marine plan
Highlighted codes show the most frequently occurring

	NE	NW	SE	SW	Nat	Total
Top ten Requirements of Use of a Marine Plan by marine plan area						
1	INF	ENV	COMP	ENV	ENV	ENV
2	ENV	COMP	STR	COMP	BAL	COMP
3	APP	SUS	UMP	INF	COMP	INF
4	INP	INF	ENV	BAL	SEC	APP
5	WAP	POL	IDM	UAI	APP	BAL
6	UAI	SEC	INF	APP	SPR	UAI
7	FISH	APP	APP	SEC	INF	SEC
8	STR	WAP	ASP	PC	WAP	WAP
9	UMP	IO	INP	FISH	POL	ASP
10	ASP	ENH	SIM	HER	ENH	STR

The five most featured codes for the Requirement of marine plans:

1. ENV   = Environmental protection/MPAs/Flood management
2. COMP   = Joined up/compatible with other statutory plans
3. INF   = Fully informed
4. BAL   = Balancing interests (e.g. environmental, economic, social)
5. APP   = Assist developers/applicants

ii) What are the reasons for the above requirements above?

Figure 3: Bar chart showing the top 10 Reason codes for Q1 Use of marine plans

Table 9: Table showing the top 10 Reasons Use of a marine plan
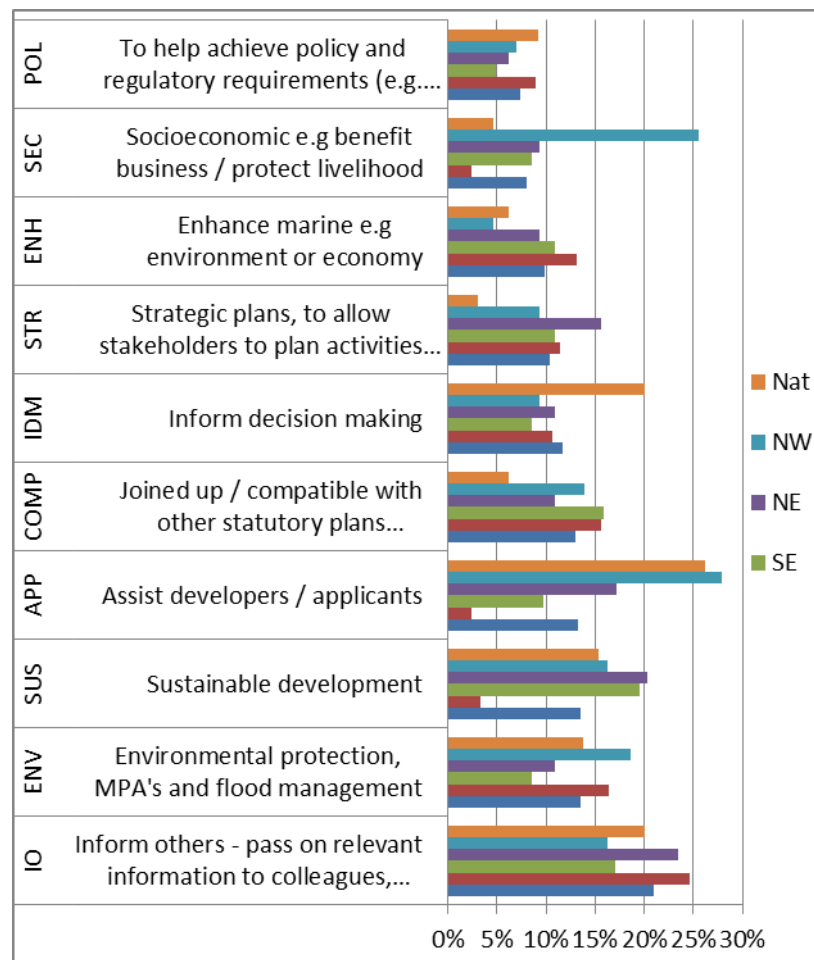Highlighted codes show the most frequently occurring

Top ten Reasons for Requirements of Use of Marine Plan					
	NE	NW	SE	SW	Nat	Total
1	IO	APP	SUS	IO	APP	IO
2	SUS	SEC	IO	ENV	IO	ENV
3	APP	ENV	COMP	COMP	IDM	SUS
4	STR	IO	ENH	ENH	SUS	APP
5	COMP	SUS	STR	STR	ENV	COMP
6	ENV	COMP	APP	IDM	BAL	IDM
7	IDM	UAI	ENV	POL	POL	STR
8	UAI	STR	IDM	UMP	COMP	ENH
9	ENH	IDM	UMP	INP	ENH	SEC
10	SEC	POL	SEC	IA	SEC	POL

The five most featured codes for the Reasons for the requirement of marine plans:

1. IO   = Inform others
2. SUS   = Sustainable development
3. ENV   = Environmental protection/MPAs/Flood management
4. COMP   = Joined up/compatible with other statutory plans
5. APP   = Assist developers/applicants

iii) Are there any particularly important ideas within the user stories narratives that are not captured by the coding?

- Have confidence that activities and ecosystems taking place across borders are planned and managed with different processes in mind.
- Ensure the protection of coastal habitats and species despite potential impacts of EU Exit as we need in-house protection.
- Protect and pro-actively manage the small scale sustainable inshore fisheries.
- Establish the MHWS – MMO could provide this service and develop a revenue stream, if there is considered a demand for this service.
- Get marine licenses quicker and have a more appropriate/personal service. Regional licensing MMO Representative.
- Help create ballast water management protocols.

3.3 Engagement User Stories results

i) Which requirements are important to stakeholders, with regards to how they want to be engaged in marine planning?

Figure 4: Bar chart showing the top 10 Requirement codes for Q2 Engagement
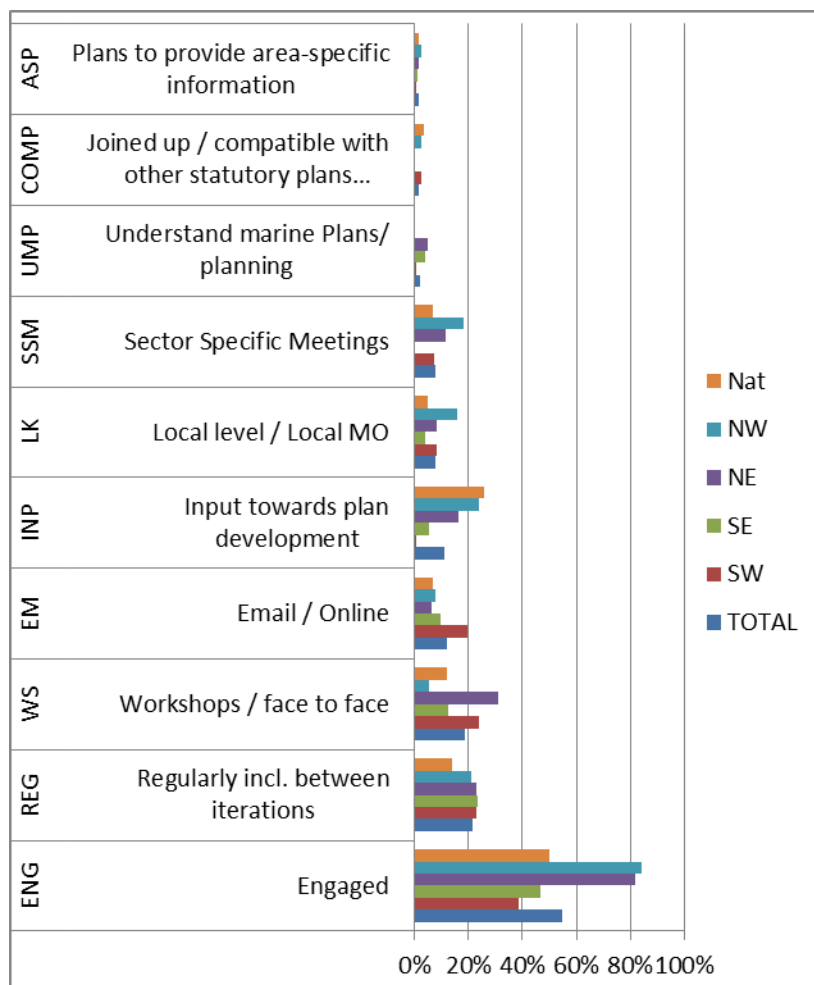
Table 10: Table showing the top 10 Engagement Requirements of a marine plan
Highlighted codes show the most frequently occurring

	NE	NW	SE	SW	Nat	Total
1	ENG	ENG	ENG	ENG	ENG	ENG
2	WS	INP	REG	WS	INP	REG
3	REG	REG	WS	REG	REG	WS
4	INP	SSM	EM	EM	WS	EM
5	SSM	LK	INP	LK	SSM	INP
6	LK	EM	LK	SSM	EM	LK
7	EM	PRO	UMP	COMP	LK	SSM
8	UMP	WS	ASP	NAT	POL	UMP
9	ENF	ENV	DATA	INP	COMP	COMP
10	ASP	ASP	APP	UMP	DATA	ASP

The five most featured codes for the Requirements of engagement in marine planning:

1. ENG = Be engaged
2. REG = Regular engagement/between iterations
3. WS = Workshops/face to face
4. EM = Email/online
5. INP = Input towards plan development

ii) What are the reasons for the requirements above?

Figure 5: Bar chart showing the top 10 Reason codes for Q2 Engagement

Table 11: Table showing the top 10 Engagement Reasons for Requirements of a marine plan
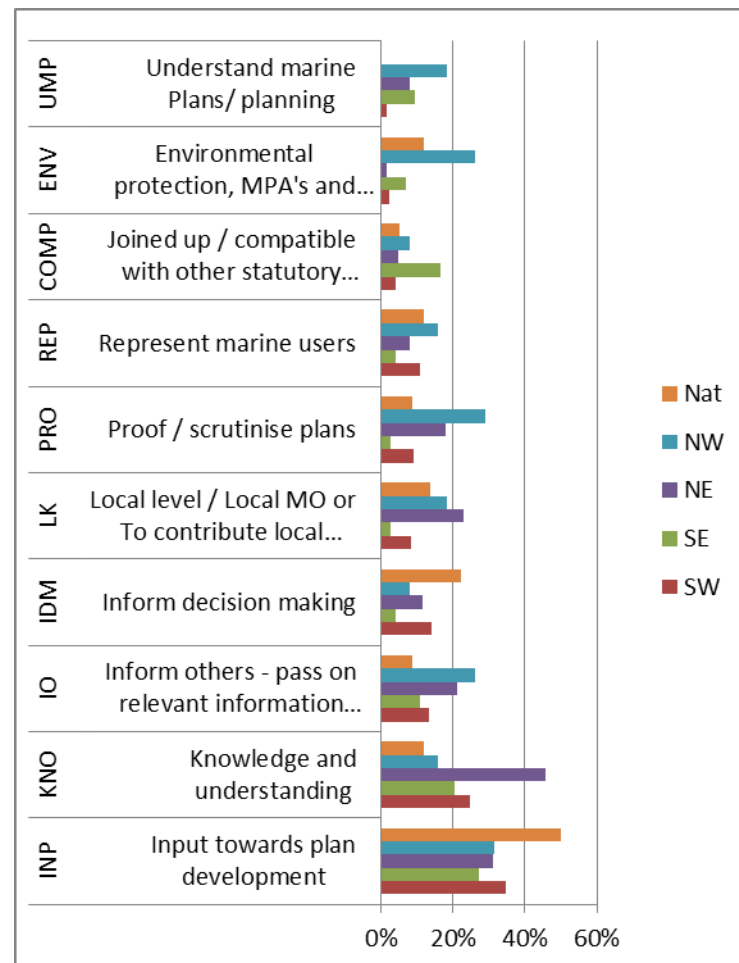
Highlighted codes show the most frequently occurring

Top ten Engagement Reasons for Requirements by marine plan area						
	NE	**NW**	**SE**	**SW**	**Nat**	**Total**
1	KNO	INP	INP	INP	INP	INP
2	INP	PRO	KNO	KNO	IDM	KNO
3	LK	IO	COMP	IDM	LK	IO
4	IO	ENV	IO	IO	ENV	IDM
5	PRO	LK	UMP	REP	KNO	LK
6	IDM	UMP	INF	PRO	REP	PRO
7	BAL	KNO	SUS	LK	PRO	REP
8	POL	REP	ENV	COMP	IO	COMP
9	UMP	APP	STR	ENV	REC	ENV
10	REP	IDM	FISH	SEC	APP	UMP

The five most featured codes for the Reasons for the requirements of engagement in marine planning:

1. INP = Input towards plan development
2. KNO = Knowledge and understanding
3. IO = Inform others
4. IDM = Inform decision making
5. LK = To contribute local knowledge to the plan

iii) Are there any particularly important ideas within the user stories narratives that are not captured by the coding?

- Ensure this isn't just another layer of obstructive bureaucracy.
- Ensure the seascape concept is better understood.
- Continue to feel a sense of ownership over the marine environment.
- Be engaged throughout, by specific meetings on spring tides, late in the day.
- Involve MMO in creation of ballast water management protocols.
- Coordinate employment opportunities.

3.4 Display User Stories results

i) Which requirements are important to stakeholders with regards to the display of adopted marine plans?

Figure 6: Bar chart showing the top 10 Requirement codes for Q3 Display
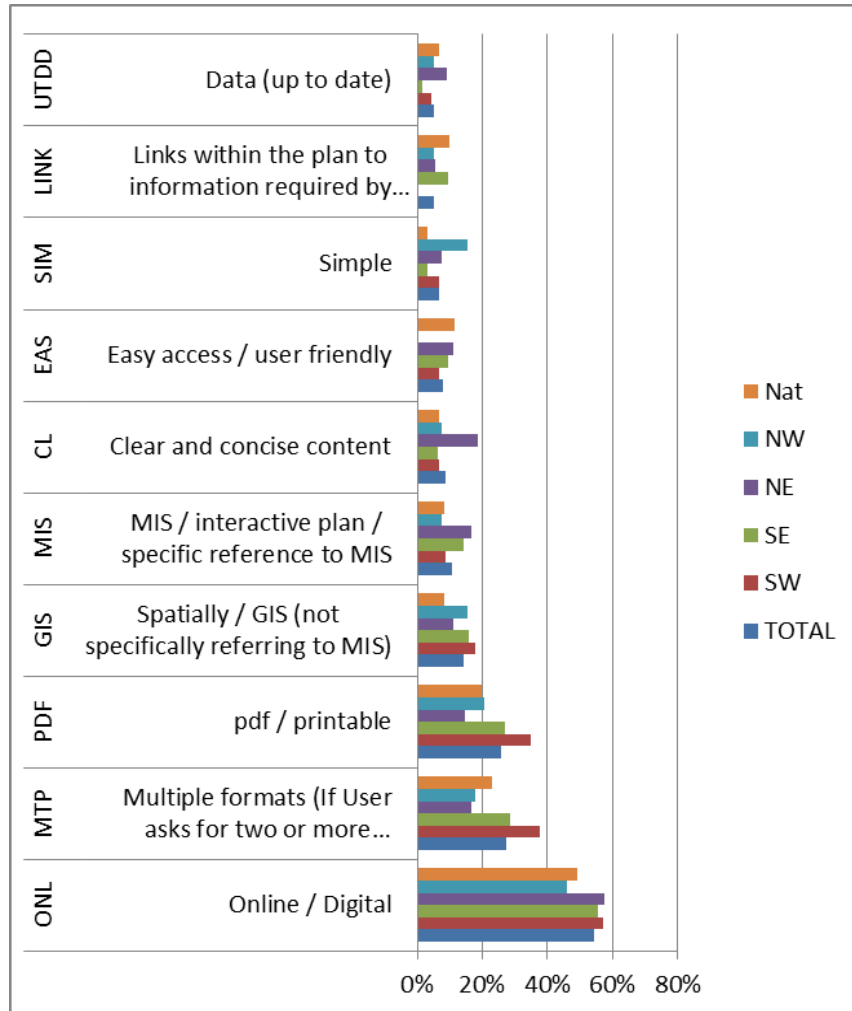
Table 12: **Table showing the top 10 Display Requirements of a marine plan**
Highlighted codes show the most frequently occurring

	Top ten Display Requirements of a Marine Plan by marine plan area					
	NE	**NW**	**SE**	**SW**	**Nat**	**Total**
1	ONL	ONL	ONL	ONL	ONL	ONL
2	CL	PDF	MTP	MTP	MTP	MTP
3	MTP	MTP	PDF	PDF	PDF	PDF
4	PDF	GIS	GIS	GIS	EAS	GIS
5	MIS	SIM	MIS	MIS	LINK	MIS
6	GIS	CL	EAS	EAS	ONE	CL
7	EAS	MIS	LINK	CL	GIS	EAS
8	UTDD	UTDD	CL	SIM	MIS	SIM
9	SIM	LINK	COMP	UTDD	CL	LINK
10	SUM	SUM	SIM	COMP	UTDD	UTDD

The five most featured codes for the Requirements of the display of adopted marine plans:

1. ONL = Online/Digital
2. MTP = Multiple display formats (if user asked for 2 or more display formats)
3. PDF = pdf/printable
4. GIS = Spatially/GIS (not specifically mentioned MIS)
5. MIS = MIS/Interactive plan (incl. specific reference to MIS)

ii) What are the reasons for the requirements above? (figure below)

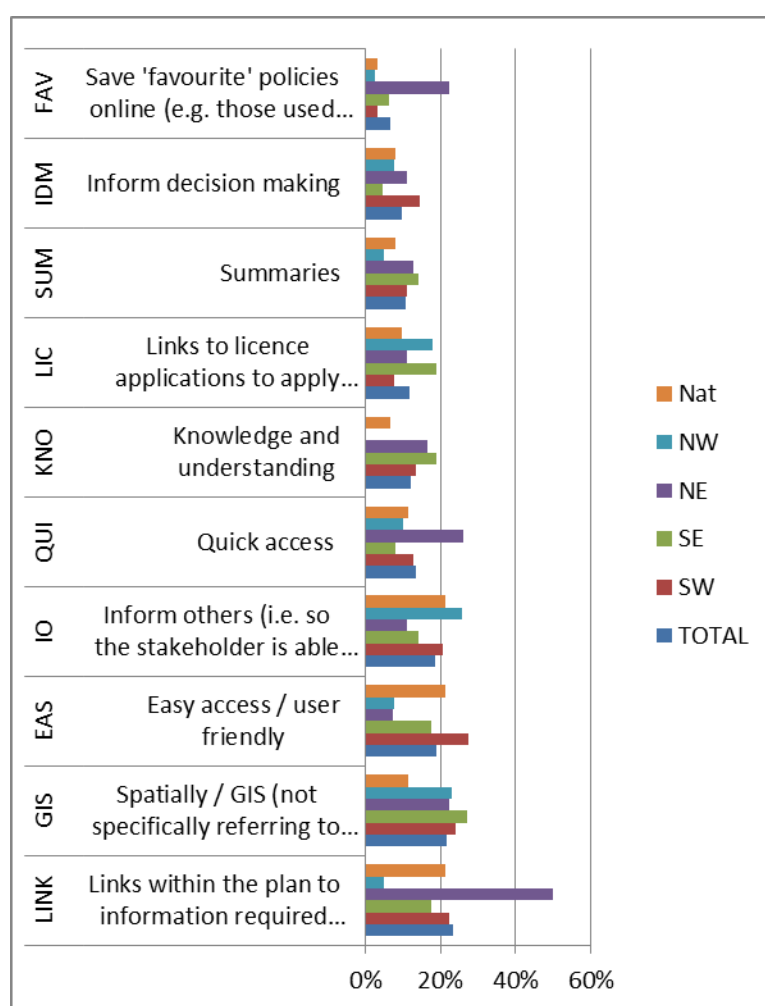**Figure 7: Bar chart showing the top 10 Reason codes for Q3 Display**

Table 13: Table showing the top 10 Display Reasons for Requirements of a marine plan
Highlighted codes show the most frequently occurring

	Top ten Display Reasons for Requirements by marine plan area					
	NE	**NW**	**SE**	**SW**	**Nat**	**Total**
1	LINK	SIM	GIS	EAS	EAS	LINK
2	QUI	IO	EAS	GIS	IO	GIS
3	GIS	GIS	KNO	LINK	LINK	EAS
4	FAV	LIC	LIC	IO	GIS	IO
5	KNO	PDF	LINK	KNO	QUI	QUI
6	SUM	UTDD	IO	IDM	LIC	KNO
7	LIC	QUI	SUM	QUI	IDM	LIC
8	IO	IDM	MTP	SUM	SUM	SUM
9	IDM	EAS	QUI	LIC	KNO	IDM
10	EAS	LINK	COMP	UTDD	ONE	FAV

The five most featured codes for the Reasons for the requirements of the display of marine plans:

1. LINK = Links within the plan to information required by the user
2. GIS = Spatially/GIS (not specifically mentioned MIS)
3. EAS = Easy access/User friendly
4. IO = Inform others
5. QUI = Quick access

iii) Are there any particularly important ideas within the user stories narratives that are not captured by the coding?

- To establish the proportion of user stories which requested an online digital plan, the number of stories which had been coded either 'Online', 'GIS' or 'MIS' were added. This resulted in 79% user stories, which is a contrast to the 2% stories who requested paper only.
- Paper copies sent to libraries.
- Alerts.
- Match up plans with cross- border plans.
- The term 'Database'.
- Search function (could add a code).
- Avoid GOV.UK as not easy to use.
- Printable maps.
- 4D with video interaction.
- Consider an education version.
- Interactive lectern type displays in public places.

4 Discussion and conclusion

The results within this report aim to indicate the broad themes emerging from the user stories exercise. Additionally, this report suggests how the findings from the user stories exercise could be incorporated into our marine planning work. However, this is not the end of the story. As outlined below, work going forward could include:

- Further analysis of specific codes, for example by theme groups.
- Application of the user story approach to other stakeholders, e.g. internal colleagues.
- Further analysis of the data by other colleagues, depending on emerging needs of the team going forward.

Care should be applied in prioritising codes and subsequent areas of work for marine planning based on the frequency of codes. Whilst the frequency is important (i.e. prioritising those requirements asked for by a larger number of stakeholders above requirements asked for by a smaller number), it should not be the only factor used to decide priority. The detail of the request should also be taken into account, i.e. there may be a point raised by a relatively small number of stakeholders that might present a greater priority, compared to a more numerically prevalent request. In short: frequency is important, but should not be the only factor used to prioritise subsequent actions. Therefore, in the conclusion, we have taken into consideration both high frequency codes and interesting comments from individual user stories.

4.1 Use of marine plans User Stories conclusion

There were no major unrealistic expectations from stakeholders regarding what marine plans could deliver. It was more a case of the findings refining and guiding the current work of the marine planning team. These findings are positive and lend support to the already identified work within the marine planning team. Specifically, the results suggest that many aspects of our approach towards developing, and engagement on, marine plans is, generally aligned with stakeholders' needs.

Codes with a conservation focus featured highly in the analysis, for example ENV (environmental protection), BAL (balancing interests), SUS (sustainable development) and ENH (enhance marine environment/economy) all featured within the top 10 codes for either Requirements or Reasons. This could be further explored by the Environment Theme Group as to whether a more detailed analysis would be required. Do we need a better understanding of what users' expectations are with regards to conservation/protection of the marine environment from marine plans?

There have already been discussions within the marine planning team about the compatibility of marine plans and other statutory plans; this includes cross-border marine plans and terrestrial plans. Again does this requirement need further exploration, could we re-visit these high frequency Requirements during the summer 2017 engagement?

The APP code (to assist developers/applicants) appeared within the top five for both Requirement and Reason. This suggests there may be an opportunity for marine plans to provide applicants with guidance towards the marine licence application process. This is an ongoing consideration during the development and implementation of marine

plans and the opportunities will further be investigated through ongoing development of user-centred digital products

4.2 Engagement User Stories conclusion

Again, with regards to how stakeholders would like to be engaged in marine planning, there were no major unrealistic expectations. The results went some way to confirming the success of the stakeholder engagement strategy so far.

The results of their requirements showed that stakeholders wants to be engaged regularly, and in a variety of ways including workshops, face to face, emails, online and locally through Coastal Marine Officers.

Overall the reasons for engagement are appropriate at this stage of marine plan development. Stakeholders want to have input towards plan development, receive knowledge and understanding of the process, represent marine users and proof-read or scrutinise the plans.

Stakeholders also want to be able to inform others and inform their decision- making using a marine plan.

The COMP (joined up/compatible with other statutory plans) code also featured within the top 10 codes for both Engagement Requirement and Reason, strengthening the results and adding weight to the pervasiveness of this code.

One thought-provoking result from this analysis is the amount of stakeholders requesting sector specific meetings (SSM).

Table 14: Table showing the frequency of SSM code

Abbreviation	Description	TOTAL	SW	SE	NE	NW	Nat
SSM	Sector Specific Meetings	8%	7%	0%	11%	18%	7%

Further analysis of this code revealed that although these were requested by a variety of stakeholder types, the main requests came from: Non Departmental Public Bodies, Other Government Departments, Inshore Fisheries and Conservation Authorities (IFCAs), Recreation, Conservation and Coastal Partnership groups. Although some sector specific meetings are planned as part of Iteration 2 it would be interesting to seek further information on this request from stakeholders. Would they like themed group meetings e.g. environmental focus, or more specific topics e.g. estuaries or fishing? (These have both been requested in the SW marine plan area). It is interesting to note that the highest request for SSM was in the NW marine plan area and there were no requests for SSM in the SE marine plan area.

There are still a few stakeholders that want to 'understand' marine planning. Through further analysis of the codes and identification of which stakeholders this refers to, this Requirement information can be provided to Coastal Marine Officers to help focus their stakeholder engagement.

4.3 Display User Stories conclusion

The results of the Display user story question strongly indicated that stakeholders would like to see a digital marine plan (see the figures below). It has to be noted that this question was put to stakeholders at the workshops immediately following a presentation of a possible digital format to display marine plans. Though, as with all the user story questions, there were no leading statements or advice given that would influence what stakeholders should write or could write on their user story.

Table 15: Table showing the total frequency of ONL, GIS and MIS codes

	Requirement	TOTAL	SW	SE	NE	NW	Nat
Total of	ONL / GIS / MIS	265	98	54	46	27	40
% of	ONL / GIS / MIS	79%	84%	86%	85%	69%	66%

For the above figures the results were further moderated to check that the codes ONL (online/digital), GIS (spatially/GIS) and MIS (Marine Information System/interactive plan) did not appear together on the same line. The codes were then added together to give an overview of the more precise figure of 79% of stakeholders requesting digital marine plans. This can be compared to only 2% who requested paper copies only.

There was still, however, a strong request for multiple display formats (26% overall), these included: pdf, printable and paper copies.

Further requests from a digital version of a marine plan include: clear/concise content, easy access, user friendly, simple, links within the plan to information required by the user, up to date data (sound data), quick access, links to licence applications to view or apply, and summaries of the policies/information. Another two codes that featured fairly frequently (both 7% of the total) for Reasons for the requirements were FAV (save favourite policies/pages online) and SRC (search function/searchable), which would need to be considered when designing a digital format of the plan.

As well as assisting developers/applicants appearing within the top five codes for both the Use Requirement and Reasons of marine plans, the LIC (links to licence applications to apply or view) code also appeared within the top 10 codes for the Display Reasons (see figures below).

Table 16: Table showing the frequency of LIC code

Abbreviation	Description	TOTAL	SW	SE	NE	NW	Nat
LIC	Links to licence applications to apply or view	12%	8%	19%	11%	18%	10%

Again the frequency of this code supports our aims in marine planning:
- To promote plan-led management within the MMO through more joined-up working with marine licensing.

- To backup any stakeholder engagement that licensing feel we could support them on.
- To make the most of any opportunities where marine planning and licensing can align for the benefits of our shared stakeholders.

It is hoped that this User Stories analysis will feed into further joined- up work by the marine licensing and marine planning teams.

The code DB (database) did not appear significantly within the results. However, it is not clear from the comments in the User Stories exactly what is meant by this term and so this would need further investigation during the Digital Discovery Project to find out what the users requirements are regarding this comment.

Table 17: Table showing the frequency of DB code

Abbreviation	Description	TOTAL	SW	SE	NE	NW	Nat
DB in Requirement	As a database	1%	2%	0%	4%	3%	0%
DB in Reason	As a database	1%	1%	2%	2%	0%	0%

5 Recommendations

Four particular recommendations relate to firstly attainment criteria, secondly informing subsequent stakeholder engagement activities as part of iteration 2 (Comms and Engagement plan), thirdly informing further analysis on the Display responses and recommendations and lastly informing the Benefits and Evaluation framework activity:

   1. Attainment criteria

Possible or suggested attainment criteria have been identified below:

Rather than relying solely on the codes to identify the attainment criteria, the user stories have been read and considered. However, the codes have helped to organise this process, by enabling those user stories that share the same code to be considered collectively.

5.1 Use of marine plans User Stories recommendations

Table 18. Suggested attainment criteria for marine plans

Possible or suggested attainment criteria for marine plans	
To achieve	**How**
Environmental protection	Sustainability Appraisal (SA)/Habitat Regulations Assessment (HRA) define this. No net harm to marine environment.
Compatible with other plans	Potential attainment criteria for this code could be incorporated into current team discussions (Hannah Marriot, Jo Stockill, Paul Gilliland) about how to ensure plan compatibility. Attainment criteria might include some areas which are already business as usual, e.g. working closely with local authorities to make them aware of development of marine plans and the terrestrial/marine interface; and the iterative approach and formal public consultation which are part of the project, and will provide an opportunity for stakeholders to comment on plan compatibility. Criteria could also include a renewed focus on engaging with neighbouring countries (e.g. Wales for the SW and NW plans), and setting a number of meeting dates to discuss compatibility.

Balancing interests	The Sustainability Appraisal provides an independent check as to whether the marine plans fairly balance environmental, economic and social aspects of sustainability. Additionally, the iterative approach (with regular engagement periods) and formal public consultation provide stakeholders with the opportunity to comment on whether the plan is balanced. As such, the attainment criteria might therefore be 'business as usual' for this code.
Stakeholders fully informed	Knowledge and Support scores provided by Stakeholders themselves as part of ongoing Stakeholder Analysis
Better assist developers/applicants	Digital discovery project / products - licensing
Better assist developers/applicants	Provide information of comments and contacts from this work to Licensing
Socio-economic benefits	Need to define which socio-economic benefits we are interested in e.g. local GDP? People's experience of / engagement with the marine environment? Various potential data, including local authority stats, or conducting surveys and case studies of stakeholders. We also need a baseline if we are interested in whether the marine plans are associated with an overall benefit.
Plans to provide area-specific information	Marine Information System (MIS) or Digital Discovery Project - marine planning
Strategic plans	Further work is required to identify what stakeholders would like in relation to strategic plans. Marine plans already provide an indication as to development throughout their 20 year timespan. However, it will be important to clearly articulate this within an even longer term view in the plans (e.g. in the background information) to help fulfil the strategic aspirations of stakeholders.

Enhance the marine environment	Attainment criteria for this code hinge on how 'enhance' is defined. For example, which aspects of the marine environment should be enhanced? E.g. biodiversity, water quality, habitats and connectivity, MPA protection, management of marine areas outside of MPAs, reducing terrestrial run-off (agricultural and Combined Sewer Overflows) etc. How far should they be enhanced? Suggest further analysis of the code to understand stakeholder requirements, and discussion with the environment theme group to define the attainment criteria required.
Sustainable development	The SA provides an independent check of the marine plans ability to meet the SEA directive. To what extent sustainable development is achieved can be monitored via the statutory reporting periods following plan adoption.
Inform others	Increase in the general public's understanding of marine plans and marine planning.
Help achieve policy and regulatory requirements	Several attainment criteria might be suitable for this code, including some activities which are already business as usual. For example, government write-round is already part of plan production, and provides an opportunity for other government departments to help ensure the marine plans achieve policy and regulatory requirements. Existing work with local authorities, and the sub-national policy analysis, also contributes towards achieving policy and regulatory requirements.
Based on sound science / up to date data	Quality assurance (QA).
Establish MHWS	Could the MMO provide this as a paid service? Is there a sufficient demand?

5.2 Engagement User Stories recommendations

Table 19: recommendations from engagement user stories

From Engagement with marine planning	
To achieve	**How**
To engage stakeholders	Stakeholder mapping and Coastal Officers
Regular engagement	See below:
Workshops/face- to-face	2 checkpoints of face -to -face engagement throughout the year
Email/online	At least 2 email newsletters across the year.
Email/online and Input towards marine planning	2 Online engagements (consultations) per year.
Email/online and Input towards marine planning	Feedback on engagements to also be regular and inform stakeholders how their efforts have contributed to marine planning
Input towards plan development	Summary of engagements/transparent communication
Input towards plan development and Sector Specific Meetings	Sector specific meetings working on problem trees and options/Theme Working Group meetings etc.
Local engagement/Local MOs	Local MOs to maintain engagement and bilateral meetings with local stakeholder groups
Local engagement/Local MOs	Local MOs to identify unengaged local stakeholder groups
Understand marine plans/planning	Further analysis to pull out stakeholders and engage with them locally through Local MOs
Understand marine plans/planning	New stakeholders identified and scored on the stakeholder mapping work stream
Plans to provide area specific information	Marine plan area specific policies and vision
Knowledge and understanding	Stakeholder mapping/self-scoring
Local engagement/ Proof/Scrutinise plans	Increased attendance at engagements and/or input towards engagements
Inform others	Increase in general public's understanding of marine plans and marine planning.
Inform others	Increased subscribers to marine planning Newsletter.

5.3 Display User Stories recommendations

There will be no Attainment Criteria identified for the Display requirements of marine plans (see iii. below).

5.4 Further action

2. Informing subsequent stakeholder engagement as part of iteration 2. (Informing the Comms and Engagement plan)

From this work we have moderated the stakeholder mapping analysis and modified the stakeholder 'types' categories to be able to link the User Stories analysis with the Stakeholder mapping work already underway.

Through this work we can identify which stakeholders have responded to User Stories and which have been under represented. This can help us to identify the extent to which we are engaging with priority stakeholders and secondly where we need therefore to focus subsequent engagement activities over Iteration 2 or the following year.

3. Informing further analysis on the Display responses and recommendations (NP).

The MMO is using this User Stories analysis to feed into a bigger Digital Discovery Project about digital transformation, investigating further what the users require from the display format of adopted marine plans.

4. Informing the Benefits and Evaluation framework activity (PG).

The MMO are re-visiting the benefits and aims of marine planning at regular intervals. This work will feed into the analysis of what users of marine plans are asking for from marine plans.

Appendix

Figure 8: Marine planning User Story postcards

Marine Management Organisation

Marine planning: User stories

Name: Organisation:

Question 1: With your work area or organisation in mind, please complete the following statement:

As a _____ I want to use an adopted marine plan to

_____ so I can _____

Question 2: With your involvement in the marine planning process in mind, please complete the following statement:

As a _____ I would like to be engaged _____ so I can

_____

www.gov.uk/mmo
http://mis.marinemanagement.org.uk

Marine Management Organisation

Marine planning: User stories

Question 3: In considering the format of an adopted marine plan, please complete the following statement:

As a _____ I want marine plans to be displayed

_____ so I can _____

Any other comments:

www.gov.uk/mmo
http://mis.marinemanagement.org.uk