

# Response to the W3C Website redesign RFP



# W3C

## Response to the W3C Website redesign RFP

The team at Studio 24 are excited to respond to the open RFP for the W3C website redesign project. We've worked with the web for over 20 years and web standards have always been important to us, from the early days when our Founder & MD Simon built accessible websites<sup>1</sup> to the modern web where we focus on building beautiful websites and apps that meet user needs, are robust, performant and usable for all.

We work with a range of large organisations such as UK Parliament, Crown Commercial Service and Crossrail and help guide them to success on digital. We believe our multidisciplinary team has both the expertise working on large digital projects alongside key strategic, creative and technical skills to help W3C achieve their goals.

We'd be delighted to work with W3C on this project and would be happy to discuss our proposal in more detail with your team.

### Created by

Simon R Jones

### Date

10/12/2019

### Head office

Studio 24 Ltd  
50 St. Stephen's Place  
Cambridge  
CB3 0JE  
UK

[www.studio24.net](http://www.studio24.net)

[twitter.com/studio24](https://twitter.com/studio24)

[github.com/studio24](https://github.com/studio24)

<sup>1</sup> As can be seen from our [first agency website](#) from the year 2000!



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# Who we are


Studio 24 is an ethical and award-winning digital agency dedicated to working on projects that make a difference to our clients.

We've always specialised on the web, since our company foundation in 1999. We believe in an open and supportive work environment that attracts staff from a range of backgrounds and nationalities and helps create digital products that work for real people.

We achieve this by uniting design and technology together to create great user experiences.

We specialise in open source development with HTML/CSS, JavaScript and the PHP technology stack (Symfony, Laravel).

We are members of BIMA, Drum, are a Google Partner and are Cyber Essentials certified.



One of our twice annual  
Company Days

# Who we are...

## Our values

Straight talking – We have an open and honest approach.

Pride in our work – We have high standards and create excellent work.

Always asking why – We're problem solvers, building solutions that meet real user needs. Listening and asking why is key to this.

Working together – We work best as a team with both the client and our colleagues. We thrive on collaborative working.

Friendly and supportive – We have a positive outlook and believe in a supportive working environment to bring out the best in our team.

Always learning – We believe in sharing knowledge and have a culture of continuous learning. We release open source software, blog and talk at community events and conferences.

# Industry recognition



**The DRUM  
Recommended**



**Google Partner**



**Cyber Essentials Certified**



**G-Cloud and the Digital  
Outcomes and  
Specialists framework  
supplier**



**Digital Services Supplier**



**Best Charity App**



**Public Sector Website -  
Crown Commercial  
Service**



**BIMA Member**

**Finalist in Website 2019  
Awards, Animal Health  
Trust**

# Our clients



# Client testimonials

“ Studio 24 are delivering us both capability and capacity. We gave them a constrained brief to deliver extremely quickly. They responded with composure, confidence and clarity.

*Nick Jones, High Speed 2*

“ I like the team at S24 very much, I like their can-do attitude, their helpfulness and generosity with their time. They are a dedicated team, professional and with fresh ideas that push the envelope with what can be done, not just visually, but technically too.

*Adam Anderson, London Heathrow Airport*

“ I could not recommend Studio 24 highly enough! The team are the best web development agency I've ever dealt with. Thorough, innovative, creative, strategic and more... they've got it all.

*Chris Loy, London Heathrow Airport*

“ Studio 24 have helped Crown Commercial Service to deliver a modern, customer centric site. With the redesign customers can now find what they need easily, helping them to save time and money, while colleagues now have a site they can be proud of, and confidently direct customers to.

*Craig MacDonald, Chief Digital and Technology Officer, Crown Commercial Service*



# Client testimonials



*It has been a real pleasure working with Studio 24 on this exciting development. Not only have they been extremely responsive and flexible, really wanting to understand and respond to CBM's requirements and specifications, but they have done this with a real grasp of and passion for the impact that this App could have on the lives of people with disabilities who are currently so often excluded from humanitarian relief.*

*Kirsty Smith, CEO, CBM*



*Studio 24 has been incredible in helping us define what we need to do, and then giving us the tools to enable us to do this. We look forward to continuing our relationship with Studio 24, ensuring the website delivers the much-needed awareness and income we so desperately rely on as a charity.*

*Farrah Owens, Marketing Manager, The Animal Health Trust*



*The festivals relationship with Studio 24 is incredibly important to us, they are not only sponsors of the festival but also an increasingly vital part of its delivery. It is no exaggeration to say that without Studio 24 and more importantly, the amazing people that make up their team, the delivery not only of the website but the Festival itself would be almost impossible. Their approach to collaboration and the importance they place on building real relationships is so inline with our own ethos that it makes working with them an absolute joy. We are privileged to be able to have Studio 24 as a vital part of our Festival family"*

*Owen Baker, Marketing Manager, Cambridge Film Festival*



# Our core skills

Studio 24 brings a multidisciplinary team of strategic, design, technology, content and marketing experts to make your digital project a success.

Our core skills are solving complex problems for our clients through design and technology. We focus on open source solutions in the PHP tech stack and offer a range of services including:

- Digital strategy
- Content strategy
- User-centred design
- Front-end build
- Technical development, including: HTML/CSS, JavaScript, Accessibility, Security, Performance, PHP, Symfony, Laravel, JavaScript, Database design, API design, API / web services integration, Content migration, WordPress CMS, Varnish, ElasticSearch
- Headless CMS
- Interactive mapping
- Digital Marketing
- SEO strategy
- Data analysis
- Technical Search Engine Optimisation (SEO)
- International SEO
- DevOps and hosting infrastructure (AWS)
- Support & Maintenance

# Your project

W3C are looking to hire a digital agency to incrementally redesign, develop and build the new W3C website.

## Key project objectives

A summary of your key objectives for this project are:

- Create a redesign for the W3C website that reflects the brand authority, meets user needs, and has a consistent and uniform appearance across different types of pages.
- Undertake user research, identify key users and user needs the website needs to address.
- Audit and improve the information architecture of the website.
- Create a content strategy that meets W3C's goals and user needs.
- Increase engagement on the site, focussed around membership and funding.
- Possible archiving of content and a redirect strategy to accompany this.
- Deliver a CMS, or way of managing content, that meets W3C's key aims of versioning, usability for editors and longevity of platform.
- Create a long-lasting partnership with a digital agency to iteratively improve the W3C website and work on other digital projects in the future.

## Project scope

The scope of pages to be redesigned depends on the outcome of the Discovery phase, at present you estimate these to be:

- Website homepage
- Primary navigation targets (e.g. Standards)
- <https://www.w3.org/Consortium/>\*
- W3C Blog (currently in WordPress)
- Vertical industries landing pages
- Public Work Groups homepages (ala IETF data tracker)
- /TR homepage (only the frame)
- Account pages (request, my profile, edit pages)

We expect to explore the content on the W3C site in more detail in the Discovery phase, the outcome of which will be a firmer set of requirements for this project.

For example, other areas of your site exist such as the Members area. We would recommend reviewing this in Discovery so we are aware of the content within this section and the possible implications on the rest of the project (e.g. CMS choice).

A magnifying glass is positioned over a document with handwritten notes and diagrams. The notes include phrases like "ALREADY OPENED", "FOR YOUR CAMSCORP", "FOR YOUR VIDEO", "FOR YOUR PLATFORM", "FOR YOUR CAMSCORP", "FOR YOUR VIDEO", "FOR YOUR PLATFORM", "FOR YOUR CAMSCORP", "FOR YOUR VIDEO", "FOR YOUR PLATFORM". The diagrams consist of rectangular boxes with a cross inside, and some text like "BUYING A HOME" and "LEASING".

# Our response

W3C is a very well known organisation in the web industry and has millions of web pages, though these follow a relatively small number of different page layouts. Content strategy and Information Architecture (IA) are two key parts of this project, alongside a robust, usable CMS strategy which can be used by W3C staff to update web pages but also enabling long-term versioning and stability.

## Key tasks

The key deliverables for this project are:

- Discovery phase – where we review, research and plan your project
- User testing
- Content strategy
- Visual design
- CMS strategy
- SEO & redirects strategy
- Front-end build
- Custom development where required
- QA testing and accessibility auditing
- Launch and support

# Project budget

After reviewing your high-level requirements we have recommended a working budget for this project.

We believe in transparency and honesty in pricing and charge for the time our team spend on your project. We recommended a budget cap, which would look to bill against at the end of each month based on time used. Your project manager will report regularly on budget used and targets met.

We always recommend starting projects with a fixed Discovery phase, which gives our team the opportunity to explore your project, understand your organisation needs and users, and review the right solution.

For this project we recommend 20 days across a team of at least 6 people. This would be include a Discovery Lead (leads the team on the technical and creative research), Project Manager (manages and co-ordinates the project), and a range of other staff in design, development and content strategy specialisms.

This is followed by a number of development sprints where we work on the project. This will include a range of activities from content strategy and design to CMS configuration and front-end build.

We always have a separate budget for QA testing, for a project of this size we recommend working with specialist third parties to provide browser / device testing and accessibility testing.

We also have a Live phase where we launch the site and post-launch support for 30-days to ensure any post-launch issues are quickly addressed.

**Our detailed pricing quotation appears in a separate document.** We also recommend reviewing the budget at the end of Discovery, when all parties are better informed about the full scope of the project and what can be achieved.

# Timeline

With current booked-in client projects our team has availability to start a new large project from mid-February 2020. In general a project of this size should be spread across at least six months.

We are very confident we can meet your timelines, which aim for an internal private beta site in July, public beta in August, and site launch in December. As a very rough idea of timeline we have detailed a few possible milestones below.

## *January*

Kick-off meeting, confirm contract, proposed timeline, initial scope of Discovery phase.

## *Mid-Feb to March*

Discovery phase

## *April to July*

Production phases

## *July*

Private Beta site (alpha)

## *August or October*

Public Beta site, the site is effectively complete and at this point is being tested by real users and being iterated before full launch

## *December*

Launch

# User research

It's important to undertake user research in order to create a website that properly reflect user needs.

You have undertaken user research in 2013. We recommend undertaking a new user research survey and making it public. The 2013 survey results will be 7 years-old in May 2020 and most respondents were either web developers or Working Group participants, which only accounts for 2 of your 5 demographic target audience.

## Accessibility user testing

We can also undertake real-world user testing with disabled users as part of accessibility testing.

We work with the Digital Accessibility Centre (DAC). They have been in operation for over 8 years, employ 48 staff, including 8 technical auditors and 30 user testers, and provide accessibility testing and auditing services for clients including GOV UK, Equality and Human Rights Commission, Lloyds Bank, Channel 4, HS2, and Reddit.

DAC's audit and certify service includes user testing, audit / certification, tech audit and device testing. Their testing and auditing service covers:

- Full user testing by 6/7 team members
- Technical compliance audit by in house accessibility experts
- Automated software test
- Detailed report itemising issues in order of criticality
- WebEx de-brief session
- Reasonable support to help make necessary adjustments

# Content strategy and IA

It's important for us to understand your users and the content you want to publish in order to come up with the best solution for your website.

Our content strategy work includes:

- Identifying core content
- Content audit (what's on your site now)
- Information Architecture (what should be on your site)
- Content modelling (how we model your content in a CMS)
- Multilingual content
- Content migration
- Advice and training on writing for the web
- SEO review

We recommend reviewing your existing content, identifying the core content and working to improve this, while archiving stale content and respecting your URI persistence policy.

On information architecture (IA) we would consider making a distinction between public and logged-in areas to improve ease of use and user expectations when navigating. Highlighting the Members area could also improve and increase engagement.

To help maintain accessibility we recommend producing writing guidelines for your content contributors. We have previously provided UK Parliament with similar guidelines to their teams. In-person training is phenomenal but not everyone benefits from this kind of training and prefer to learn in their own time.





# User-centred design

Taking a user-centered approach to design focuses us on what really matters: your users. Our creative team, led by Creative Director [Ian Axton](#), will bring your project to life. We design for mobile first, which means we focus on communicating your message on small screens first, then scaling up for larger screens. This helps focus on the really important content, and gives great results across any device; mobile, desktop and in-between.


We don't create designs early-on, instead we focus on research first and will sketch ideas, moodboards and wireframes to help build up the style and layout required for your site. This can be tested as we progress, helping gather useful user feedback on the way.

Throughout our design process we refer to user personas, making sure we surface relevant information to the identified audience, ensuring they can obtain information important to them. This helps in minimising user frustration and confusion.

We have a wide-ranging portfolio of client projects including:

- [HS2](#)
- [Crossrail Archaeology](#)
- [Cambridge University Botanic Garden](#)
- [Animal Health Trust](#)
- [London Heathrow Expansion](#)
- [Armada Tapestries, House of Lords](#)

### Accelerating the Era of Sustainable Flight



**Building a brighter future**  
Lorem ipsum is simply dummy text of the printing and typesetting industry. Lorem ipsum has been the industry's standard dummy text ever since the 1500s.  
→ [Learn more](#)

**"We're looking forward to the opportunities the expansion project will bring to our business"**  
22nd of January 2018  
Show the latest relevant documents. [Link to all](#)  
→ [Learn more](#)



**Support Heathrow expansion plan**  
→ [Find out how](#)

**CPO Announcement**  
Lorem ipsum has been the industry's standard dummy text ever since the 1500s.

**CPO Announcement**  
Lorem ipsum is simply dummy text of the printing and typesetting industry.

**View the timeline**  
Lorem ipsum is simply dummy text of the printing and typesetting industry.  
→ [Learn more](#)

#### Find the information for you

Contrary to popular belief, Lorem ipsum is not simply random text. It has roots in Contrary to popular belief, Lorem ipsum is not simply random text. It has roots in

- [I'm a local resident](#)
- [I'm a local business owner](#)
- [I'm interested in the area](#)
- [I'm a local resident](#)
- [I'm a local business owner](#)
- [I'm interested in the area](#)
- [I'm a local resident](#)
- [I'm a local business owner](#)
- [I'm interested in the area](#)

#### Making every journey a better one

Lorem ipsum is simply dummy text of the printing and typesetting industry. Lorem ipsum is simply dummy text of the printing and typesetting industry.



#### Opening up a new world of opportunities for both passengers and the UK

##### Opening up a new world of opportunities for both passengers and the UK

Contrary to popular belief, Lorem ipsum is not simply random text. It has roots in a piece of classical Latin literature from 45 BC, making it over 2000 years old. Richard Boccintino, a Latin professor at Hampden-Sydney College in Virginia, looked up one of the more obscure Latin words, consectetur, from a Lorem ipsum passage, and going through the city,

##### Opening up a new world.

Contrary to popular belief, Lorem ipsum is not simply random text. It has roots in a piece of classical Latin literature from 45 BC, making it over 2000 years old. Richard Boccintino, a Latin professor at Hampden-Sydney College in Virginia,

# User-centred design...

## Component led design

We adopt the 'mobile first' design approach, wire-framing and designing individual components at mobile size and progressively enhancing as the size of the screen increases. This ensures the content can be viewed no matter the screen size, as well as future proofing for newly released devices.

This component-driven design gives you flexibility in the CMS to add content with interesting, engaging layout but within the constraints of a structured content model.

The design team have many years experience of designing in a component based approach, we find working this way is flexible and more efficient, allowing us to share layouts across multiple pages. This reduces development workload and reliance on unnecessary page designs.

## Performance

Performance is an important aspect of web design. We recommend reviewing your current site to establish a performance budget which in turn will impact design decisions.

```
07-components > _sidebar.scss
session.html x _header.scss x _sidebar.scss x

/**
 * Suppress horizontal scrolling caused
 * in some circumstances.
 */
.l-sidebar {
  overflow: hidden;
}

/**
 * We target the intermediary wrapper
 * to create a gutter between the `s
 */
.l-sidebar > * {
  display: flex;
  flex-direction: row;
  flex-wrap: wrap;
  margin: calc(20px / 2 * -1);
}

/**
 * We apply an even, symmetrical ma
 * but halve it to to account for
 */
.l-sidebar > * > * {
  margin: calc(20px / 2);
}
1
2
3
4
5
6
```

# Front-end build

We are proud of a standards-based approach to web development, a strong value across our agency.

We build custom HTML/CSS for our client sites, focussing on accessible, robust markup and high-quality, engaging design. We prefer simple over complex, vanilla JavaScript over big frameworks, and create online experiences that work for all users irrespective of user ability, browser, or bandwidth.

Our team have built starter kit HTML/CSS frameworks such as [Apollo](#), which our team is currently updating with the latest technologies and approaches.

[Nicola](#), one of our Front-End Developers, explains our approach to front-end development:

## Users first

- As a team we take accessibility very seriously.
- We strive to follow best practice and develop inclusive user experiences.

## Mobile-first

- Performance is important.
- Content is King.
- By developing for mobile devices first, we prioritise content delivery, making it clear to read, easy to navigate and quick to load.

## HTML-first

- We believe the foundation of the web will always be HTML.
- Use native elements to lever the best functionality from browsers.
- Progressively enhance with CSS and JavaScript.

# CMS strategy

Choosing a CMS for W3C is no simple task and is one we would look to undertake as part of Discovery, led by our Founder & MD [Simon Jones](#) who has two decades of experience working with a range of different CMSs (including WordPress, Drupal, ExpressionEngine, and Perch), has built two custom CMS applications, and Headless CMS sites for clients.

We need to consider your user needs (CMS editors, management and governance), functionality required now and in the future (content editing, versioning, forms, search, members area, etc) and how well the CMS can output standards-based, accessible HTML which is essential for the W3C.

Your [requirements](#) note: "We need a CMS that is long-lived and easy to maintain, because we run our systems for decades."

In reality it's not possible to guarantee any CMS platform will be around in 10 years, even WordPress, the most popular CMS on the web, may change significantly over that time period. This represents a unique but interesting challenge!

The only truly stable format on the web is HTML, so one option would be to use a CMS that can output static HTML to be used on the W3C site. This could be combined with version control (e.g. git) which would also replicate your current full history of all page changes. This would need to be explored alongside other user needs and goals W3C have for the CMS.

## **WordPress**

We have used WordPress extensively on client projects over the past decade. It's combination of editor usability, wide community usage, open source license, and PHP tech stack make it an attractive, open source and well supported platform.

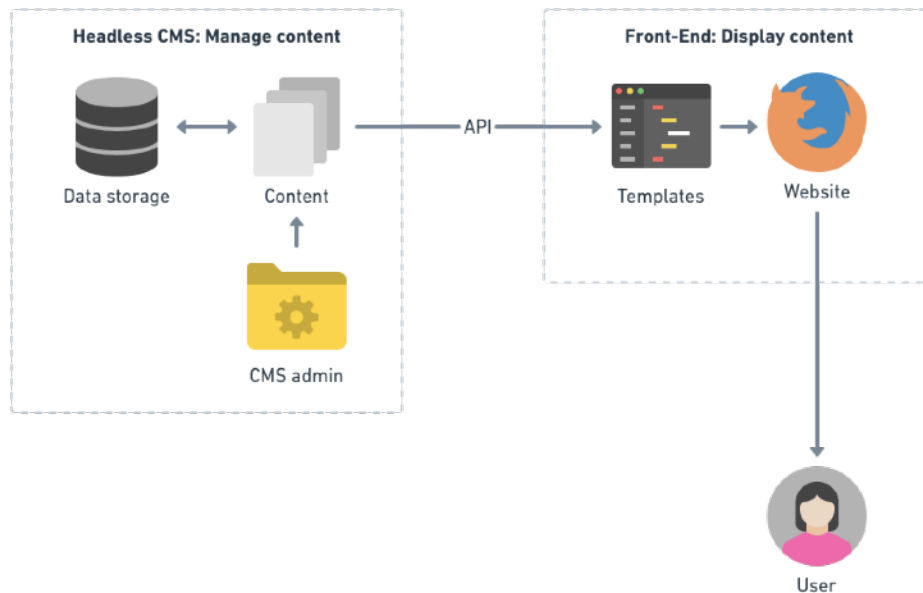


# CMS strategy...

## Headless CMS

It is possible to use a CMS just to manage content and then build a performant, secure, accessible front-end website which reads in the content over APIs. It's a popular web architecture used in a lot of JavaScript powered Single-Page Apps (SPAs).

We wrote a post about what is a [Headless CMS](#) is and why we find this approach useful for some projects.



Our preferred approach is to deliver robust, accessible HTML/CSS to the front-end, only using JavaScript via progressive enhancement to add functionality. We use the well-proven and simple approach of server-rendered web pages (built in [Symfony](#)), reading in data over an API and a [template layer](#) to provide Front-End developers with a clean, understandable way to build standards-based HTML/CSS. One of the issues with the JavaScript framework approach to Headless is the complexity of the Front-End layer, for example build tools complexity and embedding CSS within JavaScript. This excludes talented Front-End developers and adds complexity where we don't think there is a need.

We used this approach with [Crown Commercial Service](#) and [Fauna & Flora International](#).

We'll review the suitability of this approach in the Discovery phase.

# CMS strategy...

## Multilingual

Multilingual is the ability for a website to provide localised and translated content to users. In our experience this functionality can be pretty complex with requirements ranging from individual pages being translated to an entire website.

There are content-management issues (managing multiple locale websites, copying content across locales, reporting when translated content needs an update) as well as technical requirements for the front-end (locale chooser, default language through browser settings).

It's important to understand what page content WC3 intend to translate and how you plan to translate this. From the brief and your current site localised content appears to be:

- Country landing pages (e.g. <https://www.w3c.fr/>)
- Selected top-level pages (e.g. <https://www.w3c.fr/a-propos-du-w3c-france/la-mission-du-w3c/>)
- Primary navigation targets (e.g. <https://www.w3c.fr/standards/>)
- News - however at present different locales have a different number of translated news articles

You've noted a requirement for 6 languages for launch with support for bidirectional text.

We have experience of multilingual websites for clients such as Michell Instruments, [Syrris](#) and Scientia. We'll look to review and plan your requirements before coming up with a firm solution.

## Versioning

Your requirements note "Full change histories identifying who made each change."

At present W3C use a version control system (VCS) to help achieve many decades of version history for content. This is incredibly challenging to achieve in a traditional CMS. WordPress, for example, has a really nice versioning system however it is not efficient at storing very large quantities of page changes.

This is an area we would like to explore with you in Discovery to understand the requirement, how much of a real need this is, and what the most suitable options exist for you.

Using a CMS that can output static HTML may be one option, since this could then be version controlled in a VCS such as git.

# CMS strategy...

## **Collaborative editing**

Your requirements note “The CMS may need to enable collaborative editing.”

Collaborative editing works well in dedicated tools such as Google Docs, it is again a challenging feature to work reliably in a CMS. WordPress’s new Gutenberg editor is intended to support things like collaborative editing in the future, but it’s not there yet.

Again, we’d go back to user needs, review why W3C needs this, what benefits it gives, and what the best solution is for your needs.

A magnifying glass is positioned over a document with handwritten notes and diagrams. The notes include phrases like "As off to", "via platform", "your camera", "for outtakes!", "VIDEO", "ALREADY", "OPEN", "REVE", "L6-10000000", "HOLBY", "26-102 10412", and "HOLBY". There are also diagrams of rectangular boxes with a cross inside, and a pencil is visible at the bottom left.

# Data privacy

Data privacy and ethics are important on the modern web. We often advise all our clients on how to best achieve this for their own site. In the UK GDPR regulations cover data privacy. Last year, Simon wrote a series of [blog posts explaining GDPR](#) for our clients.

We recommend a privacy-first, opt-in method to cookies and analytics whereby people will not be tracked by default. This would be reflected in normalising and respecting Do-not-track (DNT) headers. We recommended a similar approach to [Heathrow Airport](#), this meant analytics tracking only activated on user consent. This is more in keeping with EU guidelines and [ICO's advice on analytics cookies](#), however it did result in a loss of around 80% of analytics traffic.

We are currently working on an open source cookie settings tool to make it easier to implement best practise cookie settings on websites.



# Working in the open

We are happy to work in the open on this project and will be happy to discuss how this may best work at the start of the project.

For example, we sometimes work in the open in GitHub via public repos for clients in the public sector. The Crown Commercial Service [front-end website](#) and [WordPress Headless CMS](#) are examples of this.

Some ideas our team have include:

- Create a small project site with key information and milestones
- Write a blog with updates at key points
- Explore the idea of recording some video conference calls which you are happy to make public (e.g. show and tell demos)
- Work in the open on a public GitHub repo, publish a high-level project timeline in GitHub and allow open issues once the site goes into Public Beta

# A long-term partnership

We thrive on creating long-term partnerships with clients, our best work is when we have the opportunity to make incremental changes to a client site or web app over time making the best use of user research.

We prefer working with clients on iterative changes to their websites, making improvements based on real-world usage.

For Barcham Trees, we originally developed their site in 2014. We have worked with Barcham every year on iterative changes, the last few years based on usability testing undertaken, which has resulted in valuable improvements that have increased sales and customer engagement. We are now working on an updated website on a modern, open source and more powerful e-Commerce platform we plan to launch in early 2020.



# How we work

## Communication

We like to talk in person as much as possible, either face-to-face meetings or over video conference calls. A Project Manager will co-ordinate the project and there will be a wider team at Studio 24 who will also get involved in client discussions. We don't hide our team behind the PM, we like to get people talking so we all understand what we're trying to achieve

We also make use of online tools to help collaboration including [Basecamp](#), [JIRA](#) and [Slack](#).

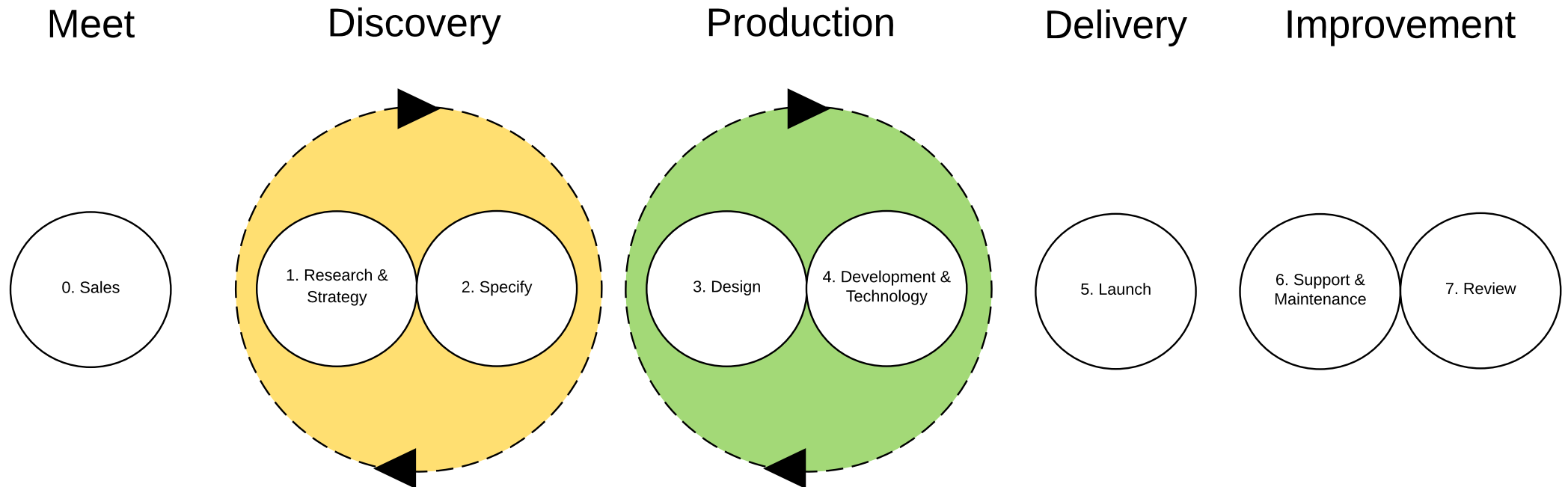
## Project methodology

We work in a number of ways with clients, normally either a hybrid agile or fully agile approach – allowing for flexibility within constraints of a project.

The following diagram summarises how a typical project runs, though this is always tailored to meet the needs of each client.



# Project Methodology



## Deliverables...

Project requirements  
Proposal  
Ballpark estimate  
Project kick off

Strategy  
Business/site objectives  
Ecosystem  
User goals & personas  
User journey / stories  
Site map  
Concept  
Prototype  
Requirements/feature list  
Content audit  
Func. audit  
Design audit  
Comp. analysis  
Hosting & dom review  
KPIs & biz goals  
Brainstorming  
Phasing / prioritisation

Final estimate  
Wireframes  
Components  
Design direction  
Content calendar  
Func & Tech spec  
Test plan  
Content strategy

Design  
Build  
Integration  
Data migration  
Content creation  
Content pop.  
Compatibility/device testing  
QA  
Acceptance / approval  
Launch plan

Launch  
Post-live QA  
Integration support  
Post project review  
Search engine submission

Success measurement  
Performance optimisation  
Maintenance  
Backup  
Support  
Optimise  
Reporting  
User tracking  
Upgrade  
Monitoring / alerting  
SEO / Digital market

# How we work...

## Meet

It's important for projects to get off to the right start. We have client kick-off meetings to introduce teams, confirm working practises and ensure governance requirements are covered. We like to create a Statement of Work to help define the next stage of the project and make sure assumptions and what we're trying to achieve is clear to all parties.

## Discovery

Discovery is all about understanding the project, the problems that need solving, learning about users and starting to define the solution. For traditional projects this usually involves work such as user research, information architecture and technical architecture. For agile projects some or all of this work is moved into production sprints and Discovery becomes more about confirming the problem to be solved and planning the best way to achieve this.

We usually tackle Discovery as a fixed timebox across a multidisciplinary team. It's important to get the right people on the project early and to have the right access to subject experts on the client side to get the best results. Discovery can also include exploring or prototyping risky features to help confirm what will and won't work for a project.

## Production sprints

Production is where we do the actual work, this will vary from project to project but will include:

- Design
- Front-end HTML/CSS build
- CMS setup & configuration
- Building & integrating the front-end site
- Custom PHP development, e.g. API integration
- Content migration
- Accessibility testing
- Security testing
- QA and device testing

For larger projects we build a backlog of prioritised tasks, then work on these across a number of two-week sprints. This allows for iterative development, the opportunity to demo work at the end of each sprint, and allows the client to reprioritise tasks as the project progresses.

Clients can be as involved or hands-off as they need, though a minimum of weekly updates are recommended and during key stages of the project more time will be required from your team.

# How we work...

## Delivery

Where we launch the website. This is a critical and there is a risk of losing rankings and online visibility when launching or migrating to a new website. At go-live we ensure that critical tasks are completed so that your new website gets the best start. This can be followed by a bespoke SEO strategy to boost online presence.

For your project, this is likely to go through a number of releases where we launch a Private Beta (which you call alpha in your RFP), a Public Beta and a Live website.

Launching a site can be a technically complex area and is one our technical team will review in detail with your technical team before anything needs to be deployed. We always plan for no-downtime deployment with minimal disruption to the existing site. To help with this our team creates Launch plans which we share with clients to make sure responsibilities are clear.

Ben, Data & Content Strategist, works closely with the development team to help ensure a smooth launch from the point of view of search engines and redirects. This strengthens our resources and broadens our skillsets, a service that few digital marketing specialists are able to offer.

## URL permanence and redirect strategy

Hyperlinks are the backbone of the web, so links to published pages need special attention on a site launch.

Where possible we recommend keeping URLs the same on a site launch, where this is isn't possible we set up a robust redirect strategy. This aligns with the [W3C URI persistence policy](#).

When we worked with [Fauna & Flora International](#) their original JavaScript powered headless CMS website had a messy set of URLs which were only two-levels deep, a restriction caused by the way the site was built. When Studio 24 rebuilt this using a Symfony-based PHP solution we came up with a more sensible URL hierarchy that reflected the site content and setup 100s of redirects from old locations to new.

We are also advising UK Parliament on a URL and redirect strategy for [Research Briefing papers](#), important guidance documents published by Parliament and referenced across the web in various ways. Due to a new digital strategy URLs will change and Studio 24 is setting up a robust redirect platform to ensure links are forwarded to the correct place using 301 redirects.

# Accessibility

Accessibility and inclusive design is at the heart of everything we do. By putting people first, we empower and enable people to access the information they need.

There are 1 billion people in the world who have some form of permanent disability, but the reality is that anyone of us can have circumstances when we're disabled, whether that's by a broken arm (temporary) or holding a child in one arm (situational).

## **Everyone benefits from an accessible web.**

All our inclusive design work is championed in-house by our accessibility specialist [Carlos Eriksson](#), a published writer and public speaker on accessibility. These are some of the tools we use for automated testing, but we encourage you to keep in mind that you can't rely on automated tools on their own, as these only catch a portion of accessibility issues.

- A11y Command-line Tools
- Tenon
- WAVE Evaluation Tool
- Chrome Accessibility Developer Tools + Accessibility Inspection (experimental feature)
- NoCoffee Vision Simulator
- VoiceOver for iOS X and OS X

We follow the WCAG 2.1 (Web Content Accessibility Guidelines) and build websites to current best practices using HTML5 and CSS3. We follow the WCAG 2.1 (Web Content Accessibility Guidelines) and build websites to current best practices using HTML5 and CSS3. We push those standards to evolve when that's not enough. We regularly refer to W3C's Web Accessibility Evaluation Tools List to assess the tools we use and improve our methods.

Part of our process and training includes empowering and educating you to create and maintain accessible content, such as writing text alternatives for images and link texts that are understandable when taken out of context. This is vital to your website's success as meeting Level AA of the WCAG 2.1 is a shared responsibility between us and you.

## **Relevant examples**

- CBM UK - we developed a [Progressive Web App \(PWA\)](#) for an international charity which was externally audited to meet strict accessibility requirements.
- HS2 - we undertake quarterly accessibility audits on the [HS2 website](#) to ensure the website is fully compliant.



# Dedicated support and maintenance team

We have a dedicated team of two developers to work primarily on technical support and maintenance work for clients, supported by the rest of the Studio 24 team.

By having dedicated resources this means we have a higher capacity for such work, can respond to clients faster and generally provide a better service. It is our aim to ensure all parts of the agency delivery excellent work to our clients and it's very important to ensure the smaller jobs, such as maintenance or support, have the same level of service as everything else we do.

For ongoing maintenance work we can work either on a monthly retainer basis, charged at our daily rate, or to a call off budget. Hours can be banked and/or carried over so that you don't lose the time not used.



# Technical support

We provide **comprehensive** technical support for peace of mind.

Technical support contracts provide clients with the peace of mind that their web applications are supported against unforeseen problems, which can often be damaging to business operations. We prioritise incoming requests from clients with technical support contracts and have a dedicated team available attend to issues.

As standard we offer technical support during normal office hours Monday - Friday (9am-5.30pm), not including Bank Holidays. This includes website monitoring to alert our team when your site suffers any downtime issues. Please note, if you require changes to your site or new features these are worked on separately as charged maintenance work.

## 24/7/365 technical support

Studio 24 also offers 24/7/365 support as a premium support service.

This gives you access to a dedicated phone line to call our team to deal with critical issues out of working hours.

## Software updates

Regularly updating CMS and other library software is important to maintain security. We cover CMS and library software updates within technical support. We will also update CMS plugins, however, if these require changes to your site to update then there may be additional charges.

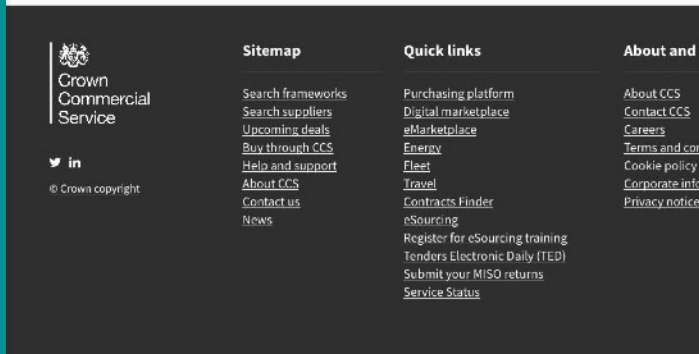
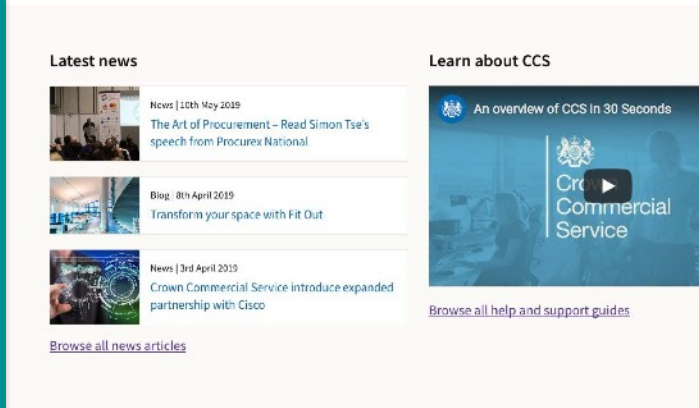
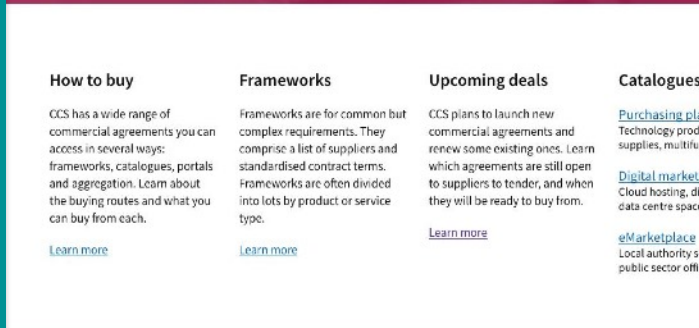
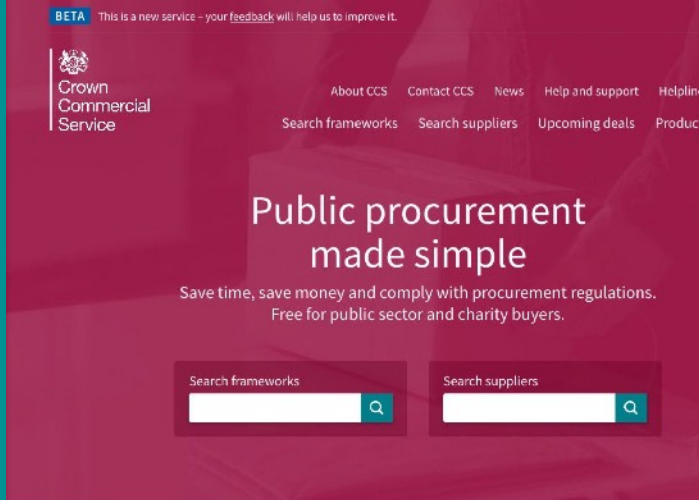
Technical Support response times

Severity	Description	Response within	Target resolution time
Critical	Complete loss of service. Web application cannot be used.	1 hour	4 hours
Major	Severe loss of service. Web application can be used in a restricted fashion.	2 hours	1 working day
Minor	Minor loss of service. Impact is an inconvenience.	2 working days	5 working days

# Case studies

STUDIO

24



Case study / Crown Commercial Service / <https://www.crowncommercial.gov.uk/>

## How we developed a new user-focussed website for the Crown Commercial Service using a Headless CMS

Crown Commercial Service (CCS) is the biggest public procurement organisation in the UK. CCS helps thousands of public and third sector buyers in the UK with billions of pounds of spending each year, saving the UK taxpayer hundreds of millions of pounds. In 2018 CCS helped 17,000 public sector customers save time and money when buying common goods and services: from laptops to locum doctors.

### Challenges

Studio 24 wanted to help the CCS website to reach to its full potential, alongside other new digital procurement frameworks such as G-Cloud and Digital Marketplace. We worked closely with CCS to ensure the redeveloped website would offer best practice User Experience, plus accessible & inclusive design standards.

### Project success would involve:

- Working effectively with a large team including independent project managers, and CCS design & development teams
- Working to a tight time frame as required by internal stakeholders. We had 8 weeks to complete the project
- Integrating complex data from a legacy CMS and Salesforce using Headless CMS.

BETA This is a new service – your feedback will help us to improve it.

Home > Search frameworks > Office Supplies for the Wider Public Sector

## Office Supplies for the Wider Public Sector

Stationery, paper, small office machines, electronic office consumables, janitorial products and personal protective equipment for the wider public sector.

[Open all](#)

### Updates

**04/03/2018 – Update** – This framework has been extended for another 2 years until 04/03/2020.

**26/11/2018 – Update** – CCS is currently reviewing procurement timescales and will provide you with more detail within the next few weeks. Please be assured our priority is to ensure continuity of framework coverage for customers.

### Products and suppliers

There are [6 suppliers](#) on this framework

#### Lot 1 : Office Supplies for the Wider Public Sector

Office stationery items such as pens, pencils, office paper, filing & presentation items, PPR, Health & Safety items, janitorial products, catering supplies, ink & toner cartridges, desktop printers, shredders, labelling machines and laminators.

Expires: 04/03/2020

[6 suppliers](#)

### Documents

+

[Print this page](#)

#### Key facts

Framework ID:  
Start date:  
End date:  
Lots:  
Suppliers:

#### Contact

CCS customer s  
Monday to Frid

Email:  
[info@crowncor](mailto:info@crowncor)

Telephone:  
0345 410 2222

Case study / Crown Commercial Service / <https://www.crowncommercial.gov.uk/>

### Working with a large team

Communication was the key to success for such a large project with such a short time frame. A hierarchy of reporting was put in place, with roles and responsibilities clearly defined. We had daily stand ups with the CCS design and development teams to identify and quickly address any blockers.

Once a week we met with the key stakeholders at CCS (for example TechOps). The Studio 24 team loved working in this way – it was energising, purposeful, respectful and very productive.

### Working to a short time frame

The successful launch was in large part due to the excellent working relationship we established with CCS. Our brief had very clear parameters and was an integral part of the wider redevelopment project.

We used an agile approach, working with the client to identify the Minimum Viable Product (MVP) to ensure we could meet the launch date. The first two weeks were spent scoping MVP. The next six weeks were split into 2 week sprints. We held a review and planning meeting with the client at the end of each sprint.

The last two weeks of the project also included User Acceptance Testing (UAT). This was completed by the client and included 200 user stories on the website functionality. The result was that at the launch all stakeholders were on board as the website looked and worked as expected.

## Complex data integration using Headless CMS

The CCS legacy CMS didn't 'talk' to the CRM data stored in Salesforce. This meant that when CCS staff updated their website with Salesforce data it was manual, time consuming work.

Given the short no-fail deadline for development (two months) we decided early on to take a more flexible approach to building the site.

We decided to build WordPress as a Headless CMS, an approach we have used on other projects such as a mobile app, but had rarely used on a more traditional website. It was our belief that this modern CMS architecture meant we could confidently hit the deadline and build a more flexible site than we're used to on purely a traditional CMS platform.

This approach transformed our build process, meaning two teams could simultaneously work on Front-End build and Back-End development.

The Headless CMS approach meant the Front-End was completely decoupled from WordPress. This meant we had complete flexibility on the HTML & CSS we built, allowing our Front-End development team to focus on what they are brilliant at: building high-quality HTML & CSS rather than battling with the idiosyncrasies of a CMS.

With the recent increasing complexity of the Front-End stack we believe this approach is more inclusive (for our team) and allows Front-End staff to shine at pure HTML & CSS, a very complex specialism in itself, without the need for JavaScript and back-end coding to muddy the waters.

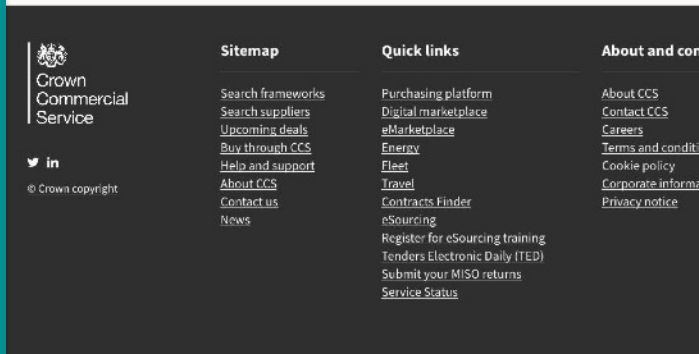
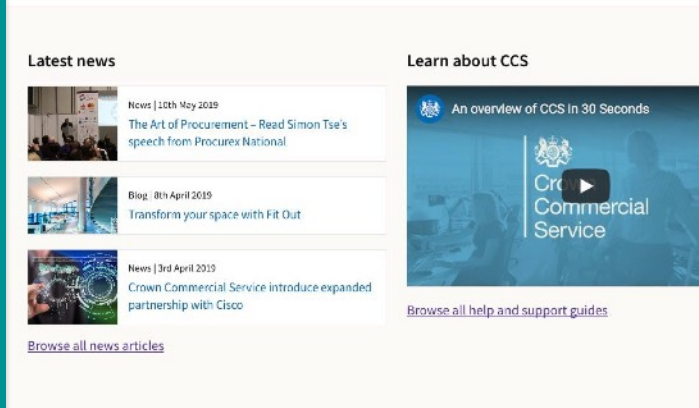
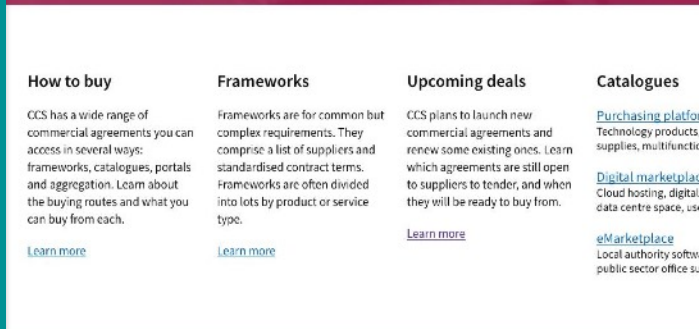
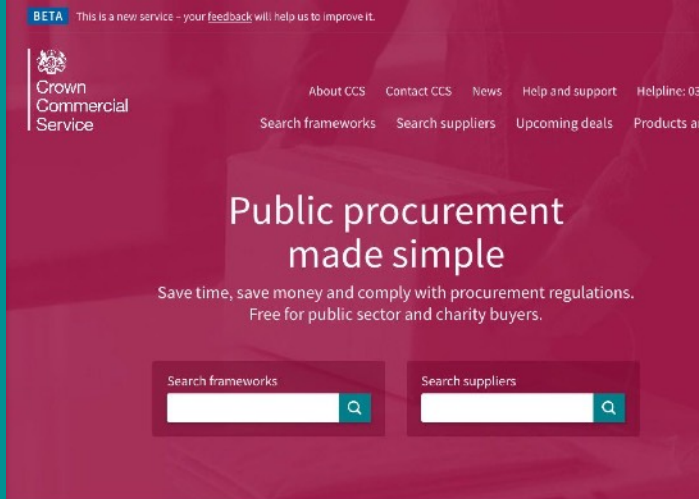
The Headless approach also helped with data integration between two systems, exposing the content and data to the Front-End via REST APIs.

We built the Front-End website in Symfony 4 (PHP). While one team worked on the Front-End templates our development team independently worked on building out website functionality and integrating templates one-by-one.



*We built this site in an agile way, developing, testing and finalising feature by feature, thereby lowering risk compared to a big-bang approach. I worked through designs and, in collaboration with the CCS, took functionality out of scope to make MVP possible.*

*Isaac Lowe, Design Strategy Director, Studio 24*



## Case study / Crown Commercial Service / <https://www.crowncommercial.gov.uk/>

### Results

The end result was delivered on time and is a fast and accessible user experience.

On time: The new website was developed in 8 weeks and launched on time to a no-fail deadline. A fantastic achievement!

Stakeholder engagement: Working so closely with the client meant that the project was well documented. All departments knew what the new website would look like and how it would work when launched.

Efficient: The Headless CMS provides search results more quickly as the front end application can cache information.

Future proofing: The key investment for the client was the Headless CMS driven by Salesforce data. Elements discussed during the scoping project, outside of the MVP, can now be considered for the future.

“ Studio 24 have helped Crown Commercial Service to deliver a modern, customer centric site. With the redesign customers can now find what they need easily, helping them to save time and money, while colleagues now have a site they can be proud of, and confidently direct customers to.

*Craig MacDonald, Chief Digital and Technology Officer, Crown Commercial Service*

## How we helped Heathrow to engage with users during the consultation phase of the expansion plan

### Methodology

We ran the project using the GDS Digital Service Standard as the basis for the project management methodology. The project started with a 4 week Discovery phase where we reviewed business goals and user / stakeholder needs.

We ran workshops that included key stakeholders from different areas within the business, we suggested that Heathrow include a website user in this workshop. Workshops resulted in a detailed IA and content guides which provided the roadmap for the rest of the project.

The workshops clarified key business goals and actions Heathrow wanted to track on the website as KPIs. This was then included within the digital marketing recommendations to set up suitable tracking for these goals.

Following this we started work on the Beta site; due to the timeframe there was not an opportunity for an Alpha phase. Studio 24 currently report back to Heathrow on key website usage monthly.



### User Needs

A major challenge was to create a site that meets the needs of a wide variety of users and stakeholders.

Understandably there are concerns in the local community about the extra flights, environmental and social impact that comes with the third runway, therefore it's imperative that these were addressed transparently and honestly and at the same time promote the benefits.

It's this fine balance that was at the core of the decision making throughout the design process ensuring that the user experience is a positive one.

“ I could not recommend Studio 24 highly enough! The team are the best web development agency I've ever dealt with. Thorough, innovative, creative, strategic and more... they've got it all.

*Chris Loy, Senior Strategic and Digital Communications Manager*





### Component-led design approach

A key consideration of the project is its 9 year lifespan; it was critical the site is able to adapt and change its messaging and grow over time. In order to achieve this we used a component-led, mobile-first design approach.

This 'mobile first' design approach involves wire-framing and designing individual components at mobile size and progressively enhancing as the size of the screen increases. This ensures the content can be viewed no matter the screen size, as well as future proofing for newly released devices.

This resulted in a component-driven design that gave London Heathrow the flexibility in the CMS to add content with interesting, engaging layout, but within the constraints of a structured content model.

Content can be selected, re-ordered and components can be stacked to create pages which are crafted for that particular user group's needs, rather than a fixed template dictating its content. The is component approach is particularly useful when creating Landing pages for specific audiences.



**Key project achievements:**

- Understanding and IA recommendations on a set of complex user and stakeholder needs. The project is controversial and we undertook detailed user workshop exercises to help understand all user types and how best to communicate with them
- Dealing with a range of internal stakeholders during the Discovery Phase (including IT, marketing, community engagement, procurement and an external PR firm)
- Capability to respond to tight timelines and flexibility to respond to changing demands within the initial project. The project originally had a 4 week Discovery Phase, then a 6 week Beta phase. We had the site ready for this deadline, though due to content entry challenges the launch date was extended by 4 weeks – which our flexible process allowed for
- Capability to support Heathrow's digital teams on security and privacy issues
- Experience in using Enterprise level hosting with hosting provider WP Engine.



*I need to say a big thank you to you all for your hard work on the website over the last few months - and your patience in these final stages.*

*The website looks amazing, and the functionality you've built in is superb. I have been beyond impressed with the quality and professionalism of both Studio 24's work and approach.*

*Chris Loy, Senior Strategic and Digital Communications Manager*



## How we provided HS2 with a user-friendly website to communicate with the public, contractors and job seekers

HS2 is the new high-speed rail network, connecting North and South. The new railway will:

- free up space on congested rail lines
- relieve overcrowding
- improve reliability for millions of people using Britain's railways.

HS2 will serve existing and new stations across the UK. 345 miles of new high-speed track will connect London, Birmingham, Manchester, and Leeds. Their trains will serve more than 25 stations and will connect 8 out of Britain's 10 largest cities. HS2 is expected to carry over 300,000 passengers a day – around 100 million a year.

### Project goals

- Create a high-quality website to clearly communicate the project to a wide variety of stakeholders
- Engage with stakeholders fairly and meaningfully: including the general public, contractors and job seekers
- Introduce a flexible Content Management System (CMS), making it easy for HS2 to manage their content as the project progresses
- Organise the website content in a clear manner to help users reach the information they need quickly (information architecture)
- Content strategy work: planning, development and guidance on content



## Content for the future

The HS2 project is organised into phases. Phase One is underway, and will link London and Birmingham by 2026. Phase Two, which will complete the network by 2033, will run from the West Midlands to Manchester in the west, and Leeds in the east.

We took an agile approach, to handle a challenging deadline and competing priorities. This helped us manage features and requests from different stakeholders and deliver on time.

One challenge was to create a CMS to guide the client's editorial team from website launch to the day when the first passengers start boarding.

The HS2 team had previous experience with WordPress, so we decided this would be the best solution. A multi-level administration system supports an editorial workflow and guards against accidental core changes.

We introduced flexible components to WordPress, these helped HS2 build more flexible content within a page rather than be restricted to a set number of content fields. We also provided helpful user guides, these made sure that editorial staff could manage their content today and tomorrow, updating it as their needs change.

“ Studio 24 are delivering us both capability and capacity. We gave them a constrained brief to deliver extremely quickly. They responded with composure, confidence and clarity.

*Nick Jones, Head of Digital, HS2*



### **Putting people first**

The website needs to work for a wide range of people, from the general public and local residents to contractors and job seekers.

By prioritising content hierarchy and modeling early on we were able to focus on user experience and information architecture (IA, or how website content is organised to best serve users). Working with HS2 we prepared a detailed sitemap to provide users with an efficient route to the information they need.

### **Testing our assumptions**

The client held a user testing session at the Government Digital Service (GDS) research lab. This allowed us to check that the content and information architecture worked for real users.

Tasked with questions representing people's needs, such as, "Where are the new stations?" we watched the test group browse the website.

The user testing session proved invaluable for both the client and us. It helped us understand what was working well. It also offered insights on how we could improve the content and navigation. Positive user feedback reassured the client that the website was meeting their goals.

The website was well received and scored high on both ease-of-use and visual appeal, but some areas of improvement were flagged.

Responding to the user testing we looked at the navigation and the use of technical language. For example, people struggled to understand whether "Community," meant the HS2 community or an HS2 club. This was improved by changing it to, "In your area," though we'll continue to track it.



### All aboard

After the website launched, the next step was to gather direct feedback from more users. Being such a high profile project, a significant number of users will visit the website.

We continue to collect feedback to fuel our discussions with the client and aid us in moving forward with future work.

“*HS2 has been a fascinating project to work on. The key challenges were addressing a wide range of user needs and managing a large array of content.*

*The Studio 24 team worked hard with HS2's excellent internal team and I'm proud of what we've achieved. I look forward to being part of the website's evolution in the coming months and years.*

*Simon Jones, Managing Director, Studio 24*

