Annex F: User Experience (UX) Design

UX Assumptions to Date

Around consumers:

- Consumers want to feel in control of their data: the CEGs should define techniques to ensure that information presented to them is clear and obvious.

- Consumers are keen to lower their exposure to risk: the CEGs should document how the CCS should reduce this perception of risk and propose techniques to help ATPs achieve this.

- That consumers will be driven to use the CCS by support from, and adoption by, recognised organisations.

- That consumers do not want to shoulder additional cognitive load to manage their consents.

- That consumers are driven by their social and moral self-image, and that clarity around why they are being asked to share their data will be beneficial to adoption.

Around ATPs:

- That all ATPs will be able to implement the CCS in accordance with the CEGs.

- That ATPs will be able to meet the CEGs' accessibility requirements and have the relevant expertise available to test and verify that their implementation works for the widest possible audience.

- That participants will want to differentiate their implementation of the CCS.

- That the proposed accessibility requirements are the floor, and not the ceiling: accessibility requirements will evolve upwards over the course of the project.

Behavioural Research Approach

This section sets out how research will be used to inform the design, build, and validation of the CCS to ensure that CCS interactions are clear, usable, accessible, and trustworthy for consumers in practice.

Research will be used to understand how consumers experience requests to share their half-hourly meter data, how they interpret consent and data access, and where risks of confusion, exclusion, or loss of trust may arise at CCS touchpoints. This evidence will directly inform how the CCS is designed and how consumers interact with it, including across digital, assisted, and non-digital contexts.

The research approach combines exploratory insight with structured evaluation of proposed CCS interactions. This ensures that design decisions taken for the CCS are grounded in real consumer behaviour and experience, and that accessibility and inclusion are embedded into the solution from the outset, rather than treated as a final check.

Research will be undertaken on an iterative basis, with learning from each stage used to refine subsequent work and inform the ongoing development of the CCS and its associated CEGs. This approach allows us to test assumptions early, respond to emerging evidence, and progressively strengthen the CCS consent experience over time. By iterating research alongside the evolution of the CCS, rather than relying on a single point-in-time assessment, we can reduce the risk of unintended consequences and help ensure the solution remains effective, accessible, and trustworthy as it matures.

Research Scope

The research will focus on areas that are directly relevant to the design and operation of CCS interactions, including:

- Consumer understanding and interpretation: How consumers understand energy data, consent, and data sharing in practice, including where misunderstandings or incorrect assumptions commonly arise.

- Consent comprehension and control: Whether consumers understand what they are being asked to agree to, what data is involved, who will have access to it, and how consent can be viewed, managed, or revoked through the CCS.

- Trust, confidence, and perceived value: What helps consumers feel informed, reassured, and in control when interacting with the CCS, and what may cause hesitation, concern, or journey abandonment.

- Usability and effort: Whether CCS consent interactions can be completed without unnecessary friction, confusion, or reliance on specialist knowledge.

- Accessibility, inclusion, and non-digital support: How CCS consent interactions work for consumers with different capabilities and access needs, including how consent is understood and supported through assisted and non-digital channels.

- Failure, recovery, and support: Consumer expectations of good practice when things do not go as planned, including clarity of communication, error handling, and routes to support at CCS touchpoints.

The research will also consider differences in how consumers approach consent and decision-making. To do this, it draws on behavioural archetypes, which reflect common patterns such as levels of confidence, caution, and effort, rather than demographic characteristics. This ensures the research focuses on how people actually behave in practice. Further detail on the behavioural archetypes used is set out below.

Research Outcomes

The primary outcome of this research is to inform how the CCS is designed and built, and to define the standardised consumer experience delivered by the CCS through the CEGs.

The evidence generated will be used to establish what CCS interactions must include and how they must behave to deliver clear, accessible, and trustworthy consent journeys in practice. In particular, the research will inform the CEGs by setting requirements for:

- Consent clarity: What information the CCS must present, how it should be structured, and where clarity is essential to ensure consumers understand what they are agreeing to.

- Trust and confidence safeguards: The elements of the CCS experience that are critical to building and maintaining consumer trust, and interaction patterns that risk undermining confidence if handled inconsistently.

- Accessibility requirements: The minimum accessibility standards that CCS-built interactions must meet to support consumers with different capabilities and access needs across digital, assisted, and non-digital implementations.

- Experience consistency across journeys and channels: How to ensure that the experience remains consistent wherever the CCS is used, to ensure predictable and reliable interactions for consumers regardless of channel or context.

By grounding the design of the CCS and the CEGs in this evidence, we can develop a customer-centric, standardised consent experience that provides a strong foundation for the MMP. The research will help identify early priorities, risks and constraints, and inform design choices that can be refined over time.

Behavioural Archetypes

The current set of archetypes reflects the diversity of consumer engagement styles relevant to the CCS, including:

- Digitally Confident Maximisers are comfortable with technology and actively engaged in managing their energy use. They value insight, control, and efficiency, and expect the CCS to provide clear data access and transparency without unnecessary friction, even with minor cognitive challenges.

- Cost-Conscious & Financially Constrained Consumers find that energy costs cause significant anxiety. They require clear, accessible information and reassurance. They are particularly sensitive to complexity, poor design, or unclear consent processes, sometimes due to neurodiversity or other disabilities.

- High-Need, High-Load Households are managing multiple pressures, including low income, caring responsibilities, and neurodivergence. They are at higher risk of disengagement and error, and benefit most from guided, step-by-step journeys that reduce cognitive load and decision fatigue.

- Time-Poor, Digitally Capable Families are confident using digital services but lack time and mental capacity. They value automation, smart defaults, and fast completion, and expect the CCS to "just work" with minimal effort.

Behavioural archetypes, needs, risks, and implications for the CEGs

Archetype	Primary need	Risk if unmet	CEG implication
Digitally Confident Maximisers	• Speed and minimal friction; access to detailed data if desired	• Frustration with over-simplified interfaces; journey abandonment	• Progressive disclosure: essential information by default, with "show more" options for detail. No unnecessary confirmation steps for experienced users.
Cost-Conscious & Financially Constrained Consumers	• Reassurance, clarity, and explicit confirmation that consent is safe	• Anxiety-driven abandonment; distrust of the system	• Clear trust signals (Ofgem branding, accreditation badges). Plain language throughout. Explicit "what happens next" confirmation screens.
High-Need, High-Load Households	• Guided, step-by-step journeys; ability to pause and return	• Errors in consent; unintended data sharing; disengagement from energy market benefits	• "One thing per page" pattern. Mandatory save-and-return functionality. Extended session timeouts. Review screen before final submission.
Time-Poor, Digitally Capable Families	• Speed; smart defaults; automation where possible	• Abandonment if journey takes too long; resentment of unnecessary steps	• Pre-populated fields where data is known. Clear indication of journey length. Option to batch-manage multiple consents.

These archetypes are not mutually exclusive and are used to shape test scenarios and interpretation of findings rather than to categorise individuals rigidly. They may evolve as further insights are gathered.

Implementation

We propose that High-Need, High-Load Households should serve as the primary design benchmark. The requirements that serve this archetype's needs benefit all consumers without disadvantaging those who need less support:

- Clear structure

- Plain language

- Opportunities to review

- Flexible timeouts

Accessibility and device constraints

We propose that all CCS interfaces must meet Web Content Accessibility Guidelines (WCAG) 2.2[1] Level AA. The WCAG are made up of principles, guidelines, success criteria (SC), and techniques. The four principles of the WCAG state that content must be:

- "Perceivable": it is accessible across differences in human senses,

- "Operable": it is accessible across differences in technologies,

- "Understandable": it is accessible across differences in cognitive needs, and

- "Robust": it is accessible across differences in software and hardware

From the guidelines, we propose that user interfaces created by ATPs should meet the following guidelines:

- 1.4 Distinguishable, which helps users to see and hear content, including separating foreground information from the background. For example, not embedding text in graphics. This helps meet the principle of content being Perceivable.

- 2.1 Keyboard Accessible, make all functionality keyboard available by the keyboard alone. Achieving this goes some way to ensuring that assistive technologies are not excluded from the CCS. This works towards achieving the principle of content being Operable.

- 3.1 Readable defines SC to ensure text content is readable and meets the principle of content being Understandable.

- 3.3 Input Assistance aims to help users avoid and correct mistakes.

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[1] Web Content Accessibility Guidelines 2.2

We also propose that ATPs pay particular attention to the following SC:

- 2.4.8 Location requires ATPs to provide a way for the user to orient themselves within a set of web pages, a website, or a web application and find related information[2].

- 3.3.7 Redundant Entry specifies that previously entered information can either be selected from existing user interface controls or copied from the page itself: essentially, we do not want the user to have to input information more than once[3].

- 3.3.9 Accessible Authentication (Enhanced) sets the goal of reducing the cognitive effort required to login: there must be no cognitive function tests unless the CCS provides an accessible alternative[4].

SC 2.4.8 and 3.3.9 go above and beyond WCAG 2.2 Level AA, but we believe that meeting each of the above SC will make a significant difference in helping consumers in this context.

Examples of proposed design responses catering to differing disabilities

	Mental health conditions: conditions that interfere with daily life	Physical disabilities: limitations in mobility, dexterity, or stamina	Sensory disabilities e.g., sight, hearing, or speech loss	Cognitive disabilities: memory and/or processing conditions, e.g., dyscalculia
Functional impact	Anxiety triggers abandonment of consent journey.	Inability to complete time-limited actions; difficulty with precise touch/click targets; fatigues prevents completion in single session	Exclusion from verification methods; inability to access visual or audio content; reliance on assistive technologies that may not be supported	Forgetting where they are in a process; difficulty understanding complex consent language or comprehending numbers.
Example	Pop-up notifications about data sharing trigger an anxiety response, causing them to close the browser entirely.	A consumer with arthritis struggles to tap small checkboxes on a mobile device. Session timeouts expire while they rest their hands, forcing them to restart the consent process.	A consumer with a visual disability cannot complete the IDV process by taking a photograph of their passport.	A consumer cannot retain information long enough to make an informed decision on the next screen. They "agree" without understanding what they have consented to.

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[2] 2.4.8 Location

[3] 3.3.7 Redundant Entry

[4] 3.3.9 Accessible Authentication (Enhanced)

Proposed design response	Avoid overwhelming interfaces, reduce pop-ups, provide ability to save progress, offer offline alternatives.	Larger user interface components and text, voice input options, reduced reliance on fine motor control.	Alternatives to telephone-based verification / Interactive Voice Response (IVR)	Simplified navigation, contrast adjustments, ability to pause without losing progress.

Common experience components applied across all lifecycle stages

Across all lifecycle stages, a consistent set of experience components shapes how consumers experience and understand consent through the CCS. These components are reflected across the grant, renew, review, and revoke stages and inform the development of the CEGs.

Common experience components include:

- Clear context and purpose: consumers can understand why consent is being requested or changed and what it relates to.

- Transparency of consent status: consumers can see whether consent is active, expiring, renewed, or revoked.

- Explicit consumer action: consent is only created, continued or revoked through clear, deliberate choices.

- Confirmation and reassurance: consumers receive clear confirmation of the outcome of their actions.

- Error handling and recovery: where journeys cannot be completed as expected, consumers are supported with clear explanations and next steps.

These experience components help ensure that consent interactions are understandable, trustworthy, and consistent for consumers, while allowing flexibility in how journeys are delivered across the CCS ecosystem.