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Protecting citizens online

Response to Ofcom consultation: Recommendations on how online platforms, broadcasters and streaming services should promote media literacy.

This is a submission from the REPHRAIN research centre. Specifically, the following contributed to the formulation of this response: Dr Partha Das Chowdhury, Dr Marvin Ramokapane and Dr Dana Lungu.

December 2025

UK Research and Innovation · University of Bristol · UCL · The University of Edinburgh · King's College London · University of Bath

Consultation response form

Please complete this form in full and return to MSOM_SoR_Consultation@ofcom.org.uk.

Consultation title	How to promote Media Literacy: Consultation on recommendations for online platforms, broadcasters and services
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Your response

Question	Your response
Question 1: Is it clear which types of organisations the 10 proposed recommendations are aimed at? Please provide reasons and evidence to support your answer.	Confidential? – N **<u>Tiers of responsibility</u>** The recommendations are broadly framed but they need to distinguish more clearly between platform operators, developers, and end-service providers and their respective responsibilities and duties. There are significant differences in terms of expectations and compliance in the case of these actors. For example, our studies of voice assistant (i.e., smart speakers) ecosystems show that smaller third-party developers operate under opaque certification systems where literacy and compliance expectations differ sharply from those of major vendors.[1] Hence, Ofcom recommendations should clarify tiers of responsibility: platform-level obligations for transparency; developer-level guidance for accessible design; and community-level support for digital literacy to ensure that media literacy is supported and promoted in a comprehensive and actionable manner to all actors involved. The recommendations need to identify who bears the responsibility for communicating rights, in this literacy intervention when we are dealing with educational platforms used by children in a school setting. A study on migrant-parents and the way they navigate child data management (Huan 2025) has shown that there needs to be a clear sense of whether it is platforms or schools that communicate rights in these types of interventions. There should be clear guidance on whose responsibility it is to disseminate this information, whether schools or platforms, in this specific context.

[1] Abdi, Noura, Kopo M. Ramokapane, and Jose M. Such. "More than Smart Speakers: Security and Privacy Perceptions of Smart Home Personal Assistants." *Proceedings of the Fifteenth Symposium on Usable Privacy and Security* (2019), pp. 451-466; https://www.usenix.org/system/files/soups2019-abdi.pdf; Seymour, William, et al. "Voice app developer experiences with alexa and google assistant: juggling risks, liability, and security." *Proceedings of the 33rd USENIX Security Symposium* (2024), pp. 5035-5052, usenixsecurity24-seymour.pdf

Question 2: Do you have any comments on whether they should apply to all organisations, including those of different sizes and operating models? Please provide reasons and evidence to support your answer.	Confidential? – N **<u>Proportional implementation</u>** Applying recommendations uniformly across organisations risks widening inequality. Evidence from developers and users indicates that resource-constrained actors lack legal and design literacy capacity.[2] Developers lack the expertise and clarity to comply with privacy-by-design mandates due to unusable regulatory interfaces and poor documentation. Our research shows users already experience unequal comprehension of privacy features as a result of this.[3] Proportional implementation (e.g., templates) would improve uptake without penalizing small innovators. In other words, Ofcom could provide centralized compliance toolkits and shared literacy resources to level the playing field for SMEs. For example, REPHRAIN experts created a policy brief and SME Privacy Starter Pack to support and encourage SMEs to implement Privacy Enhancing Technologies (PETs). The implementation standards should be proportional to the size and resource of the service provider. Large platforms should shoulder greater duties for user education and inclusive notice design. Whilst SME should be supported to reach a standard level of compliance in order to encourage uptake.
Question 3: Do you have any comments on the proposed recommendations? Please provide comments in	Confidential? – N

[2] Seymour, 'Voice app developer experiences with alexa and google assistant', usenixsecurity24-seymour.pdf; Abdi, Noura, Kopo M. Ramokapane, and Jose M. Such. "More than Smart Speakers: Security and Privacy Perceptions of Smart Home Personal Assistants." *Proceedings of the Fifteenth Symposium on Usable Privacy and Security* (2019), pp. 451-466https://www.usenix.org/system/files/soups2019-abdi.pdf

[3] Ramokapane, Kopo Marvin, Awais Rashid, and Jose Miguel Such. ""I feel stupid I can't delete...": A Study of Users' Cloud Deletion Practices and Coping Strategies." *Thirteenth Symposium on Usable Privacy and Security* (2017), pp. 241-256; https://www.usenix.org/conference/soups2017/technical-sessions/presentation/ramokapane; Ramokapane, Kopo Marvin, Jose Such, and Awais Rashid. "What users want from cloud deletion and the information they need: A participatory action study." *ACM Transactions on Privacy and Security*, 26, 1 (2022), pp. 1-34, https://dl.acm.org/doi/full/10.1145/3546578; Cheng, Cheng, and Kopo M. Ramokapane. "``Erasing the Echo": The Usability of Data Deletion in Smart Personal Assistants." *Proceedings on Privacy Enhancing Technologies* (2025), pp. 76-93, https://petsymposium.org/popets/2025/popets-2025-0120.php

particular on their effectiveness, applicability or risks. Please provide evidence to support your answer.	**User testing** We welcome the recommendation to conduct user testing with underrepresented groups to ensure that information is clear, accessible and meaningful. However, these recommendations should be based on an explicit and comprehensive assessment of users' individual opportunities to make use of tools, and knowledge (infirmities, limited education, literacy, disabilities, gender and socio-economic circumstances are some of the factors to be considered, as they impact users' engagement with online content and represent barriers to inclusivity and accessibility).[4] For example, accessibility barriers which exist in smart speakers' interfaces and deletion tools. In the absence of such assessments, reliance on users' ability to apply tools and knowledge risks excluding individuals with diverse abilities, elderly citizens, and disadvantaged groups. We propose that from a methodological standpoint, media literacy provisioning exercises should adopt Amartya Sen's Capability Approach (CA) to capture diverse individual deprivations, their environmental realities. *Functionings* and *capabilities* are two fundamental constructs of CA; the former captures the life an individual chooses to live, while the latter captures the opportunities one has to achieve the said functioning. A critical component of this approach is a *list of basic capabilities.* This captures the minimal set of *capabilities* that every individual should have. Such a list is drawn up on an evaluation of personal and societal factors that negatively influences the freedom to perform certain basic things. For example, a study using the CA approach in the context of cybersecurity unpacked the basic minimum

[4] Lizzie Coles-Kemp and Rikke Bjerg Jensen, 'Accessing a New Land: De signing for a Social Conceptualisation of Access', In *Proceedings of the CHI Conference on Human Factors in Computing Systems*, Association for Computing Machinery (2019), pp. 1–12. https://doi.org/10.1145/3290605.3300411; Rikke Bjerg Jensen, Lizzie Coles-Kemp, and Reem Talhouk, 'When the Civic Turn Turns Digital: Designing Safe and Secure Refugee Resettlement' (2020), pp. 1–14; https://pure.royalholloway.ac.uk/ws/portalfiles/portal/35869360/chi20_civic_digital_turn.pdf; Nora McDonald and Andrea Forte, 'The politics of privacy theories: Moving from norms to vulnerabilities', In *Proceedings of the CHI Conference on Human Factors in Computing Systems* (2020), pp. 1–14. https: //doi.org/10.1145/3313831.3376167; Karen Renaud and Lizzie Coles-Kemp, 'Accessible and inclusive cyber security: a nuanced and complex challenge', *SN Computer Science* 3, 5 (2022), 1–14. https://doi.org/10.1007/s42979-022-01239-1; Karen Renaud, Graham Johnson, and Jacques Ophoff, 'Dyslexia and password usage: accessibility in authentication design' In *Human Aspects of Information Security and Assurance: 14th IFIP WG 11.12 International Symposium*, (2020), pp. 259–268. https: //doi.org/10.1007/978-3-030-57404-8_20.

	needs for senior citizens to carry out commonly advised cybersecurity tasks.[5] The list of basic minimum needs will help direct the media literacy tooling efforts. This assessment of users' capabilities together with the list of capabilities itself would be agile, living documents which evolve and adapt to users and technology. As such provisioning some of the identified needs might not be feasible as and when they are drawn up but can become a reality with time. This ensures a gradual and continuous expansion of the ambit of an inclusive digital space. It also puts accessibility, and inclusivity needs ahead of /at the forefront of technological developments and in this way, it supports and promotes media literacy by design (engineers will develop systems with these capabilities in mind). Consequently, more individuals are able to securely participate online and in a manner they value. **Focus on comprehension** Across studies the main usability gap is transparency that outpaces comprehension.[6] If the information made available to users is too lengthy or too complex and they cannot understand it; they build misconceptions around it. In most cases, such misconceptions erode informed choice, a core literacy outcome. A focus on understandable, actionable, concise information should be a key component alongside clarity and transparency. **Balance accessibility and users' media literacy skills** The recommendations focus on equipping, empowering, supporting and helping people attain the media literacy skills to be able make informed choices about the content they access and curate the type of information they engage with. There needs to be a balance between the users' media literacy skills and the accessibility of the systems and interfaces they interact with. There is a risk of victim blaming if interface design remains confusing and

[5] Das Chowdhury, P., & Renaud, K. 'Ought'should not assume 'Can'? Basic Capabilities in Cybersecurity to Ground Sen's Capability Approach'. In *Proceedings of the 2023 New Security Paradigms Workshop* (2023), pp. 76-91); https://dl.acm.org/doi/10.1145/3633500.3633506

[6] Ramokapane, ""I feel stupid I can't delete...", https://www.usenix.org/conference/soups2017/technical-sessions/presentation/ramokapane; Cheng, "Erasing the Echo'', https://petsymposium.org/popets/2025/popets-2025-0120.php; Abdi, "More than Smart Speakers", https://www.usenix.org/system/files/soups2019-abdi.pdf

	the focus is on users to develop better skills to cope with it. **User journey-key moments** Service providers indeed should provide users with simple easy to use tools to manage their experiences on platforms. Our studies focusing on smart speakers (common platforms that people use to access information) and deletion practices across systems and platforms showed that this is not the case.[7] Most users do not know how to delete data from platforms and systems. They do not know where to find tools or controls to help them do that. The recommendations mention a need for clear and accessible information in key moments of the user's journey such as sign up and profile creation. However, in order to support media literacy by design, the recommendations should identify other key moments in the user journey which pose significant issues, such as deletion. There should be standards for transparent data deletion and feedback mechanisms (e.g. confirmation or audit trails) on these platforms.
Question 4: Are there any other additional recommendations you think we should consider? If so, please provide evidence to support your comment.	Confidential? N **Suggested Recommendation 1**: Provisioning of media literacy tools should be explicitly based on an assessment of individual needs of the users, their situated realities and their opportunities to make use of such tools. The assessment should be done using Capability Approach framework to ensure that the recommendations cover a diverse range of users, their deprivations and the environmental/contextual factors which influence their ability to engage with the means and tools developed to support media literacy. **Suggested Recommendation 2:** The exercises to capture diverse individual needs, constructing the list of basic minimum capabilities, and eventually informing the provisioning exercise should be done at policy level. An example of intervention at policy level is Beeban Kidron's "Age-Appropriate Design: A Code of Practice for Online

[7] Cheng, "Erasing the Echo", https://petsymposium.org/popets/2025/popets-2025-0120.php; Abdi, "More than Smart Speakers", https://www.usenix.org/system/files/soups2019-abdi.pdf

	Services". Similar formulations should guide service providers in the domain of media literacy. Inclusive and accessible media, like other moral needs, would benefit from a policy push. **Suggested Recommendation 3**: Migrant parents need culturally sensitive support to navigate consent, data ownership, and child safety issues. Our study showed that migrants struggle in understanding consent ownership and child safety. Ofcom should explicitly include "culturally and linguistically inclusive media literacy," for instance, co-designing educational resources with underrepresented communities. **Suggested Recommendation 4**: Ofcom could introduce initiatives like Privacy clinics or community-based digital-literacy programs which are culturally sensitive and delivered in the different languages of ethnic minorities for parents and children of different cultural backgrounds. **Suggested Recommendation 5:** Our research suggests a literacy gap among developers themselves.[8] Developers need media-literacy-style education in interpreting privacy frameworks. A recommendation should be added for developer media literacy, ensuring the people building digital services can communicate privacy clearly to end users. **Suggested Recommendation 6**: Literacy outcomes must be measured by ability to act on information, not exposure. Policies should promote usable transparency rather than legalistic disclosure. Ofcom should highlight "usability of privacy" as a media literacy issue not just user knowledge, but system design that supports comprehension and control. **Suggested Recommendation 7**: Ofcom could consider providing centralized compliance toolkits and shared literacy resources to level the playing field for SMEs and support the implementation of these media literacy measures by these service providers.

[8] Seymour, 'Voice app developer experiences with alexa and google assistant', usenixsecurity24-seymour.pdf; Tahaei, 'Charting app developers' journey through privacy regulation features in ad networks', https://doi.org/10.56553/popets-2022-0061.

	Suggested Recommendation 8: Media literacy policy should explicitly address digital inclusion and accessibility, treating it as an equity issue. Equality impact assessments must consider non-native English speakers, migrants, and children under shared device use. The authors and the coordinator of the response are happy to be contacted for any points of clarification or further discussion regarding this response.
Question 5: Do you have any examples or suggestions of ways of encouraging services to adopt these recommendations?	Confidential? – N Our research on developers showed that they rely on peer networks, documentation, and trial/error rather than formal guidance for information.[9] Also, developers respond better to clear, accessible, testable guidance. Incentivize platforms to embed in-situ learning features as a way of encouraging services and developers to adopt these recommendations. Specific guides and toolboxes for developers to support their work in media literacy by design would encourage them to adopt these recommendations.
Question 6: Do you have any comments on our impact assessment, rights assessment, equality impact assessment and Welsh language assessment? Please provide evidence in support your answer.	Confidential? – N Our research on migrant families reveals systemic inequalities in digital competence and trust, compounded by language and cultural gaps. Women and migrant caregivers often act as data gatekeepers without institutional support. Ofcom's equality assessment should therefore integrate intersectional and household-level analysis. Media-literacy impact metrics must include accessibility, linguistic inclusivity, and the ability to exercise rights (e.g., deletion confirmation, consent withdrawal). Inclusion is not an add-on but the mechanism through which literacy becomes effective.

Please tell us how you came across about this consultation.

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[9] Seymour, 'Voice app developer experiences with alexa and google assistant', usenixsecurity24-seymour.pdf; Chowdhury, Partha Das, et al. "Community Security Champions: Studying the Most Influential Users on Security Stack Exchange." *2024 IEEE Secure Development Conference (SecDev)* (2024), pp. 93-104; https://doi.org/10.1109/SecDev61143.2024.00015

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- x Found it on Ofcom's website
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REPHRAIN National Research Centre on Privacy, Harm Reduction and Adversarial Influence Online, *Privacy Clinics*, https://www.rephrain.ac.uk/privacy-clinics/

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