

Study to Support Future
Development of the
National Repair Directory
RepairMyStuff.ie

CIRCULAR INSIGHTS SERIES



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Study to Support Future Development of the National Repair Directory RepairMyStuff.ie

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Glossary

Table 1: Glossary

Term	Definition	
	An economic model and the policies and practices which give effect to that model in which:	
	 a - production and distribution processes in respect of goods, products and materials are designed so as to minimise the consumption of raw materials associated with the production and use of those goods, products and materials, 	
Circular economy	b - the delivery of services is designed so as to reduce the consumption of raw materials,	
Circular economy	c - goods, products and materials are kept in use for as long as possible thereby further reducing the consumption of raw materials and impacts harmful to the environment,	
	d - the maximum economic value is extracted from goods, products, and materials by the persons using them, and	
	e - goods, products and materials are recovered and regenerated at the end of their useful life.1	
Consumer	Any natural person who [] is acting for purposes which are outside that person's trade, business, craft or profession. ²	
Digital product passport	A set of data specific to a product that includes the information specified in the applicable delegated act adopted pursuant to Article 4 [of Regulation (EU) 2024/1781] and that is accessible via electronic means through a data carrier in accordance with Chapter III [of Regulation (EU) 2024/1781]. ³	
Ecodesign	The integration of environmental sustainability considerations into the characteristics of a product and the processes taking place throughout the product's value chain. ³	
Any entity engaged in an economic activity, irrespective of its legal form. This includ in particular, self-employed persons and family businesses engaged in craft or other activities, and partnerships or associations regularly engaged in an economic activity		

¹ Government of Ireland (2022) Circular Economy and Miscellaneous Provisions Act. Dublin: Stationery Office. Available at: https://www.irishstatutebook.ie/eli/2022/act/26/enacted/en/html. Accessed February 2025

² Directive (EU) 2019/771 of the European Parliament and of the Council of 20 May 2019 on certain aspects concerning contracts for the sale of goods, amending Regulation (EU) 2017/2394 and Directive 2009/22/EC, and repealing Directive 1999/44/EC, Official Journal of the European Union, L136/28.

Regulation (EU) 2024/1781 of the European Parliament and of the Council of 13 June 2024 establishing a framework for the setting of ecodesign requirements for sustainable products, amending Directive (EU) 2020/1828 and Regulation (EU) 2023/1542 and repealing Directive 2009/125/EC (2024), Official Journal of the European Union, L series, 28.6.2024.

⁴ Commission Recommendation 2003/361/EC concerning the definition of micro, small and medium-sized enterprises. (2003) Official Journal of the European Union, L124/36.

Term	Definition
	 a - any tangible movable items; water, gas and electricity are to be considered as goods within the meaning of this Directive where they are put up for sale in a limited volume or a set quantity;
Goods	b - any tangible movable items that incorporate or are inter-connected with digital content or a digital service in such a way that the absence of that digital content or digital service would prevent the goods from performing their functions ('goods with digital elements'). ⁵
Life cycle	The consecutive and interlinked stages of a product's life, consisting of raw material acquisition or generation from natural resources, pre-processing, manufacturing, storage, distribution, installation, use, maintenance, repair, upgrading, refurbishment and reuse, and end-of-life. ³
Maintenance	One or more actions carried out to keep a product in a condition where it is able to fulfil its intended purpose. ³
Manufacturer	Any natural or legal person that manufactures a product or that has a product designed or manufactured and markets that product under their name or trademark.3
Preparing for reuse	Preparing for reuse is defined as 'checking, cleaning or repairing recovery operations, by which products or components of products that have become waste are prepared so that they can be reused without any other pre-processing.'6
Product	Any physical goods that are placed on the market or put into service. ³
Professional repairer	A natural or legal person that provides professional repair or maintenance services for a product, irrespective of whether that person acts within the manufacturer's distribution system or independently. ³
Recovery	Any operation the principal result of which is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function, in the plant or in the wider economy. Annex II of Directive 2008/98/EC sets out a non-exhaustive list of recovery operations. ⁶
Recycling	Any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. It includes the reprocessing of organic material but does not include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations. ⁶
Refurbishment	Actions carried out to prepare, clean, test, service and, where necessary, repair a product or a discarded product in order to restore its performance or functionality within the intended use and range of performance originally conceived at the design stage at the time of the placing of the product on the market. ³
Remanufacturing	Actions through which a new product is produced from objects that are waste, products or components and through which at least one change is made that substantially affects the safety, performance, purpose or type of the product. ³
Repair	One or more actions carried out to return a defective product or waste to a condition where it fulfils its intended purpose. ³

Directive (EU) 2024/1799 of the European Parliament and of the Council of 13 June 2024 on common rules promoting the repair of goods and amending Regulation (EU) 2017/2394 and Directives (EU) 2019/771 and (EU) 2020/1828.

⁶ Directive 2008/98/EC on waste and repealing certain Directives (2008), Official Journal of the European Union, L312/3.

Term	Definition
Repair café	Free community events that primarily rely on volunteers to carry out repair work alongside members of the public on a broad range of products brought to the café.
Repairer	Any natural or legal person who, related to that person's trade, business, craft or profession, provides a repair service, including manufacturers and sellers that provide repair services and repair service providers whether independent or affiliated with such manufacturers or seller.8
Repurpose	Repurposing is the use of a product or a material for a different function than it was originally intended. It means taking an object, but using it for a totally different purpose, even though it remains the same object. Repurposing an item can be done by modifying it to fit a new use or by using the item in a new way.
Seller	Any natural person or any legal person, irrespective of whether privately or publicly owned, that is acting, including through any other person acting in that natural or legal person's name or on that person's behalf, for purposes relating to that person's trade, business, craft or profession, in relation to contracts covered by Directive (EU) 2019/771.5
Supply chain	The cumulative network of people, entities, activities, information and resources involved in moving raw materials, components and finished products from original suppliers to end users. ⁹
Social enterprise	An enterprise whose objective is to achieve a social or environmental impact, rather than maximising profit for its owners or shareholders. ¹⁰
Technical cycling rate (also known as the 'Circularity Metric')	The share of secondary materials in an economy's total material consumption, accounting for all materials that were formerly waste but are cycled back into use, including recycled materials from both the technical cycle (such as recycled cement and metals) and some recycled biological inputs (such as paper and wood). ¹¹
Waste	Any substance or object which the holder discards or intends or is required to discard. ⁶
Waste management	The collection, transport, recovery, and disposal of waste, including the supervision of such operations and the aftercare of disposal sites, and including actions taken as a dealer or broker. ⁶
White goods	White goods are large electrical goods/ home appliances examples include such as refrigerators, ovens, washing machines, freezers, dishwashers, and tumble driers etc.12

⁷ Rediscovery Centre (2023) Removing Insurance Barriers to Repair – EPA Strategic Partnership 2023. [Presentation slides]. Available at: https://www.rediscoverycentre.ie/research/removing-insurance-barriers-to-repair/. Accessed February 2025

⁸ Directive (EU) 2024/1799 of the European Parliament and of the Council of 13 June 2024 on common rules promoting the repair of goods and amending Regulation (EU) 2017/2394 and Directives (EU) 2019/771 and (EU) 2020/1828.

⁹ Hayes, A. (2024) The Supply Chain: From Raw Materials to Order Fulfilment. Available at: https://www.investopedia.com/terms/s/supplychain.asp. Accessed February 2025

¹⁰ Government of Ireland (2024) Trading for Impact: National Social Enterprise Policy 2024 – 2027. Available at: https://assets.gov.ie/static/documents/trading-for-impact-national-social-enterprise-policy-2024-2027.pdf. Accessed October 2025

¹¹ Circle Economy (2024) The Circularity Gap Report – Ireland. [Report commissioned by DCEE]. Available at: https://www.circularity-gap.world/ireland. Accessed February 2025

¹² Market Business News (n.d.). White goods – definition and meaning. Available at: https://marketbusinessnews.com/financial-glossary/white-goods-definition-meaning/. Accessed February 2025

Acronyms

Table 2: Acronyms

Acronym	Definition
B2B	Business-to-business
B2C	Business-to-consumer
CGR	Circularity Gap Report
CRNI	Community Resources Network Ireland
CRO	Companies Registration Office
CSIRT	Computer security incident response teams
DDoS	Distributed denial of service
DCEE	Department of Climate, Energy and the Environment
DETE	Department of Enterprise, Tourism and Employment
DPP	Digital product passport
EC	European Commission
EEE	Electrical and electronic equipment
EPA	Environmental Protection Agency
EPR	Extended producer responsibility
ERIF	European repair information form
ESPR	Ecodesign for Sustainable Products Regulation
EU	European Union
FAQs	Frequently asked questions
FCDM	Full Circle Digital Marketing
FIBC	Flexible intermediate bulk containers
FIT	Fastrack into Information Technology
FTP	File transfer protocol
GDPR	General Data Protection Regulation
GPS	Global positioning system
INCIEN	(Slovak) Institute for Circular Economy (Inštitút cirkulárnej ekonomiky)

Acronym	Definition
INDR	(Luxembourg) National Institute for Sustainable Development and Corporate Social Responsibility (Institut national pour développement durable et la responsabilité sociale des entreprises)
МСС	Monaghan County Council
NRRN	National Reuse and Repair Network
OECD	Organisation for Economic Co-operation and Development
PaaS	Platform-as-a-service
PROs	Producer responsibility organisation
RCN	Registered Charity Number
RPO	Recovery point objective
RTO	Recovery time objective
SEO	Search engine optimisation
soc	Security operations centre
SSAE	Statement on Standards for Attestation Engagements
SSH	Secure shell
UI	User interface
UK	United Kingdom
UX	User experience
VAT	Value added tax
WEEE	Waste electrical and electronic equipment
WGA	White Goods Association (Ireland)

Foreword

The Environmental Protection Agency (EPA) leads the Circular Economy Programme, which is a statutory requirement under the Circular Economy and Miscellaneous Provisions Act 2022. The vision for the Programme is an Ireland in which the circular economy ensures that everyone uses less resources and prevents waste to achieve sustainable economic growth.

The Circular Economy Programme has regulatory activities (including authorisation of the waste sector, by-products and end-of-waste regulation), provides evidence (including reporting of national statistics and delivery of insights studies) and works with others (including providing funding supports for innovation and demonstration, and developing and implementing statutory programmes and plans, such as national food waste prevention programmes and the National Hazardous Waste Management Plan 2021-2027).

Ove Arup & Partners Ireland Limited (Arup) was commissioned by the EPA to undertake this study to support future development of the national repair directory, repairmystuff.ie. It is intended that this study will provide insights relevant to policymakers, business and other circular economy stakeholders and contribute to national discussions on the role of repair in the circular economy.

Executive Summary

Repair refers to "one or more actions carried out to return a defective product or waste to a condition where it fulfils its intended purpose". Repair has an essential role to play as a driver of the transition to a circular economy, by keeping existing products in use, avoiding the need for new products and contributing to waste prevention. National policies, plans and programmes promote the role of repair in the circular economy, including A Waste Action Plan for a Circular Economy – Ireland's National Waste Policy 2020 – 2025¹⁴, the Whole of Government Circular Economy Strategy, 15 the EPA's Circular Economy Programme, 16 and the National Waste Management Plan for a Circular Economy 2024 – 2030, 17 which includes a commitment to develop a national repair target to support the growth of the sector to 2030. At the EU level, the EC's Circular Economy Action Plan supports the availability of repair services and the establishment of a right to repair for consumers. 18

In May 2024, the European Council adopted Directive (EU) 2024/1799 on common rules promoting the repair of goods and amending Regulation (EU) 2017/2394 and Directives (EU) 2019/771 and (EU) 2020/1828 ('the Right to Repair Directive'), which introduces a range of measures to promote repair, discussed in further detail below.

<u>Repairmystuff.ie</u> is a free, public, digital directory of business-to-consumer (B2C) repair enterprises in Ireland. The website, which was launched in 2017, is managed by Monaghan County Council (MCC) using grant-aid funding from the Environmental Protection Agency (EPA). The website supports the circular economy by allowing the public to search for providers of repair services in Ireland for a range of product categories. The findings of EPA surveys in 2022 and 2024 indicate that awareness of repairmystuff.ie among the general public appears to be low, at 11%.¹⁹, ²⁰

This study was undertaken to provide an assessment of <u>repairmystuff.ie</u> to inform its future development. It has been informed by:

- A review of key items of legislation;
- Identification and review of other repair directories in EU Member States;
- Reviews of the content, digital architecture and user experience design of repairmystuff.ie; and
- Engagement with key stakeholders.

- 16 EPA (2021). The Circular Economy Programme 2021 2027.
- 17 Government of Ireland (2024). National Waste Management Plan for a Circular Economy 2024 2030. Available at: https://mxywaste.ie/sustainability/circular-living/national-waste-management-plan-for-a-circular-economy-2024-2030/. Accessed February 2025
- 18 EC (n.d.) Circular economy action plan. Available at: https://environment.ec.europa.eu/strategy/circular-economy-action-plan_en. Accessed February 2025.
- 19 EPA & B&A (2023) Repair: Attitudes & Behaviours National Survey 2022: Professional Repair Services; Part 4 of 5 Series. Available at: https://www.epa.ie/publications/circular-economy/resources/EPA-Repair-National-Survey-2022-Professional-Repair-Services. pdf. Accessed January 2025.
- 20 EPA & IPSOS B&A (2025) Repair: National Survey 2024. Available at: https://www.epa.ie/publications/circular-economy/resources/ EPA-Repair-National-Monitoring-2024-Public-Report_FINAL2.pdf. Accessed November 2025.

¹³ Regulation (EU) 2024/1781 of the European Parliament and of the Council of 13 June 2024 establishing a framework for the setting of ecodesign requirements for sustainable products, amending Directive (EU) 2020/1828 and Regulation (EU) 2023/1542 and repealing Directive 2009/125/EC (2024), Official Journal of the European Union, L series, 28.6.2024.

¹⁴ Government of Ireland (2020) A Waste Action Plan for a Circular Economy – Ireland's National Waste Policy 2020 – 2025. Available at: https://www.gov.ie/en/publication/4221c-waste-action-plan-for-a-circular-economy/. Accessed March 2025.

¹⁵ Government of Ireland (2022) Whole of Government Circular Economy Strategy 2022 – 2023 – Living More, Using Less. Available at: https://www.gov.ie/en/publication/b542d-whole-of-government-circular-economy-strategy-2022-2023-living-more-using-less/. Accessed February 2025

Reviews were undertaken of two relatively new items of EU legislation, the Right to Repair Directive²¹ and the Ecodesign for Sustainable Products Regulation (ESPR), ²² to determine their relevance to *repairmystuff.ie*.

The Right to Repair Directive sets out a requirement for the EC to establish a European online platform allowing consumers to find repairers. This platform must be operational by the end of July 2027. The European platform shall consist of 'national sections' within the platform (using a user interface developed by the EC), or hyperlinks to standalone 'national online platforms' (websites) developed by Member States. Both the 'national sections' and 'national online platforms' for the Member States will need to comply with a number of requirements set out in the Directive, as summarised in Section 3.1.1.

Whether Ireland will opt to have a 'national section' using the interface developed by the EC or a standalone 'national online platform' is yet to be determined. This decision will be made by the Government as part of the transposition process, which is being led by the Department of Enterprise, Tourism and Employment (DETE). <u>Repairmystuff.ie</u> is an option for consideration to meet the requirement of the Right to Repair Directive for a national online platform or national section on the European online platform, subject to the website meeting the requirements set out in the Directive, as summarised in Section 3.1.1.

The ESPR replaces the Ecodesign Directive, providing a framework for the setting of ecodesign requirements for a wide range of product categories. It aims to improve the circularity of products placed on the single market, among other aspects of ecodesign. The ecodesign requirements will be set by delegated acts pursuant to the ESPR. The Regulation, which is focussed on product design, does not include specific requirements related to repair directories. However, various articles of the ESPR seek to improve access to information on repair, including for professional repairers, and may be regarded as being of indirect relevance.

A review was undertaken to identify and describe national repair directories in other EU Member States. Eight such directories were identified; in Austria (two directories), France, Latvia, Luxembourg, the Netherlands, Slovakia and Slovenia. Each of these provides some form of directory of repairers of consumer goods in the countries concerned. Based on the review, a summary was developed describing what might be considered best practice for European repair directories (see below), which may be useful to inform the future development of repairmystuff.ie.

²¹ European Parliament and Council of the European Union (2024) Directive (EU) 2024/1799 of the European Parliament and of the Council of 13 June 2024 on common rules promoting the repair of goods and amending Regulation (EU) 2017/2394 and Directives (EU) 2019/771 and (EU) 2020/1828.

²² Regulation (EU) 2024/1781 of the European Parliament and of the Council of 13 June 2024 establishing a framework for the setting of ecodesign requirements for sustainable products, amending Directive (EU) 2020/1828 and Regulation (EU) 2023/1542 and repealing Directive 2009/125/EC, Official Journal of the European Union, L series, 28.6.2024. Available at https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L_202401781. Accessed January 2025.

Repair directories in EU Member States: What best practice looks like

- The directory provides an effective map-based search function allowing users to filter results by relevant criteria.
- Repairers can register to create a profile on the website and once approved by the administrator, can log into the website to update, delete or deactivate their profiles at will.
- The website provides a mechanism for users to provide feedback and report issues or inaccuracies.
 This information is sent to the administrator for further action, where appropriate, but not displayed publicly on the website.
- The website includes a mechanism to request that **repairers periodically check and update their information** (e.g., annually) and, where appropriate, to temporarily deactivate repairer profiles that have not been checked or updated.
- In addition to the directory, the website includes **other useful features**, such as a news page or blog and calendar of events, including repair cafés.
- Where the administrator considers it appropriate to limit the scope of the directory, this is limited to priority product categories (e.g., EEE, bicycles).
- Where the directory is linked to a relevant scheme (e.g., a standard, quality mark and/or repair voucher), repairers that are approved to participate are **automatically added to the directory**, and the website provides detailed information for repairers regarding the scheme.
- Where appropriate, the website is coordinated and linked with related websites (e.g., the Austrian Repair Guide and Austrian Repair Bonus websites, which are managed by different organisations).
- Where the directory includes categories of circular services or initiatives other than repair (e.g., secondhand, zero waste, product rental), these are displayed on the same map but can be clearly distinguished and filtered by users.
- The website is reviewed by key stakeholders (including the administrator, funding partners and digital service provider) on a regular basis (e.g., annually), with areas for updates and improvements identified and changes made, where deemed appropriate.

A review was undertaken by Arup of the digital architecture of <u>repairmystuff.ie</u> using information provided by MCC and its digital service provider, Full Circle Digital Marketing (FCDM). This review found that the digital architecture of the website features mature and well-established technologies and adheres to industry best practices. The website is a WordPress application with plugins to extend its core functionality. It is hosted by a secure and scalable service provider that is considered to provide acceptable availability and disaster recovery guarantees relative to the website's requirements. The review did not raise any concerns regarding the future availability, resilience, scalability, maintainability or information security of the *repairmystuff.ie* website.

A user experience (UX) design review was undertaken to assess the experience of users interacting with <u>repairmystuff.ie</u>. Ten usability tests were carried out, in which potential users of the platform (including members of the public and repairers) were asked to complete a series of tasks, such as searching for repairers or setting up a repairer profile. Additionally, the user interface (UI) of the website was compared with that of three other national repair directories to assess the functionality of the respective interfaces. Existing issues and areas for improvement were identified, particularly in relation to the search function and repairer registration and log-in process.

Finally, stakeholder engagement was undertaken to gather relevant insights from a range of actors, including organisations involved in the administration of <u>repairmystuff.ie</u>, other European repair directories and circular economy platforms; and other public and private sector organisations active in the repair sector and circular economy in Ireland. This was facilitated through a series of online workshops and an optional stakeholder survey. Stakeholder insights were summarised under the

headings of key themes addressed, including the purpose of the platform, funding and resources, consumer awareness and community repair, among others.

Based on the findings of the study, a set of core recommendations have been developed for the future development of <u>repairmystuff.ie</u>, which are summarised below. For a more detailed list of recommendations, refer to Section 4.

Recommendations for the future development of repairmystuff.ie - overview

- Develop a vision and management plan for the platform, addressing its aims and objectives, value to
 users, relevant policies and legislation, funding and administration.
- Carry out annual reviews of the overall performance of the platform to identify issues and opportunities for continuous improvement.
- Ensure the platform is **coordinated and linked with other relevant platforms**, including <u>mywaste.ie</u> and the new national circular economy platform, *circular.ie*.
- Improve the usability of the website's **search function** in accordance with the recommendations set out in this report.
- Improve the website's **repairer registration and log-in process** in accordance with the recommendations set out in this report.
- Review the existing database of registered repairers to identify and remove duplicates and enterprises no longer in business.
- Add a mechanism requiring repairers to periodically check and update their information.
- Add a calendar of upcoming events to the platform, including repair cafés.
- Ensure the 'FAQs' and 'Contact Us' buttons are more prominent in the interface.
- Use the platform as a data collection tool to monitor the repair sector.
- Undertake enhanced promotional activities to increase consumer awareness of the website.
- Undertake search engine optimisation to ensure that the public can find the platform.
- Enhance the existing **news page/blog** with engaging content to promote consumer awareness and raise the profile of the repair sector.
- Consider using the platform to provide a regular **newsletter for registered repairers**.

1. Introduction

1.1 The Circular Economy in Ireland

The circular economy offers an alternative to the prevailing linear, 'take-make-use-dispose' model of resource use. The concept of the 'circular economy', as defined in Irish legislation, refers to "An economic model and the policies and practices which give effect to that model in which:

- (a) production and distribution processes in respect of goods, products and materials are designed so as to minimise the consumption of raw materials associated with the production and use of those goods, products and materials,
- (b) the delivery of services is designed so as to reduce the consumption of raw materials,
- (c) goods, products and materials are kept in use for as long as possible thereby further reducing the consumption of raw materials and impacts harmful to the environment,
- (d) the maximum economic value is extracted from goods, products, and materials by the persons using them, and
- (e) goods, products and materials are recovered and regenerated at the end of their useful life."23

Ireland is at a turning point in its transition from a linear to a circular economy.²⁴ In recent years, several interventions, including government-led waste prevention and circular economy initiatives, government-supported funding schemes, and the introduction of national circular economy policies and strategies have accelerated Ireland's transition to circular economy.²⁴

In September 2024, the *Circularity Gap Report* (CGR) for Ireland was published, providing an evidence-based baseline of the circularity of the Irish economy.²⁵ The analysis undertaken to inform the CGR found that Ireland's rate of technical cycling is 2.7%, meaning that over 97% of materials flowing through the Irish economy are from virgin sources. This rate is low relative to the global economy (7.2%) and other EU Member States, including Austria (9.7%),²⁶ Denmark (4%)²⁷ and the Netherlands (24.5%).²⁸ This low rate can be attributed, in part, to Ireland's very high material footprint per capita (22 tonnes), substantially higher than the EU average of 17 tonnes per capita.²⁵

In its recommendations, the CGR emphasises the need to shift the focus in Ireland from recycling and recovery to more upstream waste prevention strategies, such as reuse and repair. Among the detailed recommendations to bridge Ireland's circularity gap is to "support local, non-market and community services", including repair businesses.

²³ Government of Ireland (2022) Circular Economy and Miscellaneous Provisions Act. Dublin: Stationery Office. Available at: https://www.irishstatutebook.ie/eli/2022/act/26/enacted/en/html. Accessed February 2025

²⁴ OECD (2022) The Circular Economy in Ireland. Paris: OECD Publishing. https://doi.org/10.1787/7d25e0bb-en. Accessed February 2025

²⁵ Circle Economy (2024) The Circularity Gap Report – Ireland. [Report commissioned by DCEE]. Available at: https://www.circularity-gap.world/ireland. Accessed February 2025.

²⁶ Circle Economy (2019) The Circularity Gap Report – Austria. Available at: https://www.circularity-gap.world/cgr-austria. Accessed February 2025

²⁷ Circle Economy (2023) *The Circularity Gap Report – Denmark.* Available at: https://www.circularity-gap.world/denmark. Accessed February 2025

²⁸ Circle Economy (2020) The Circularity Gap Report – The Netherlands. Available at: https://www.circularity-gap.world/netherlands. Accessed February 2025

1.2 The Role of Repair in the Circular Economy

Repair refers to "one or more actions carried out to return a defective product or waste to a condition where it fulfils its intended purpose".²⁹ Repair has an essential role to play as a driver of the transition to a circular economy. It is relatively high up in the hierarchy of strategies for a circular economy, as it retains the functional value of products and contributes to waste prevention.

Policies at national and EU levels seek to promote repair as an enabler of the circular economy. The Irish Whole of Government Circular Economy Strategy³⁰ notes the potential social co-benefits of repair in relation to employment and skills development, supporting the national just transition effort. Under the EPA Circular Economy Programme,³¹ 'establishing Ireland's reuse and repair sector' is identified as a new partnership area to promote a national reuse and repair culture. The National Reuse and Repair Network (NRRN) was established in 2024 to support and scale repair in Ireland. It currently has members from 18 stakeholder organisations and is led by the EPA; along with the Department of Climate, Energy and the Environment (DCEE); and the Local Authority sector.

In 2024, Ireland published its first *National Waste Management Plan for a Circular Economy 2024* – *2030*,³² which acknowledges the important role that repair will play in the national circular economy transition. The Plan highlights the positive impact that the growth of the repair sector could have on the secondary materials market and material recirculation and sets a commitment to develop a repair target to support the growth of the sector to 2030.

In the EU, the policy context in respect of repair is rapidly evolving. Various EU policies seek to support the role of repair in the transition to a circular economy, including the EU *Circular Economy Action Plan*, ³³ which supports the availability of repair services, repair manuals and the establishment of a 'right to repair' for consumers. In May 2024, the European Council adopted its new 'Right to Repair Directive', providing common rules promoting the repair of goods. ³⁴ The Directive introduces a range of measures to empower consumers to seek repair instead of replacement; make repair services more accessible, transparent and attractive; and promote design for repairability.

²⁹ Regulation (EU) 2024/1781 of the European Parliament and of the Council of 13 June 2024 establishing a framework for the setting of ecodesign requirements for sustainable products, amending Directive (EU) 2020/1828 and Regulation (EU) 2023/1542 and repealing Directive 2009/125/EC (2024), Official Journal of the European Union, L series, 28.6.2024.

³⁰ Government of Ireland (2022) Whole of Government Circular Economy Strategy 2022 – 2023 – Living More, Using Less. Available at: https://www.gov.ie/en/publication/b542d-whole-of-government-circular-economy-strategy-2022-2023-living-more-using-less/. Accessed February 2025

³¹ EPA (2021). The Circular Economy Programme 2021 – 2027. Available at: https://www.epa.ie/publications/circular-economy-programme-2021-2027.php. Accessed February 2025

³² Government of Ireland (2024). National Waste Management Plan for a Circular Economy 2024 – 2030. Available at: https://mxywaste.ie/sustainability/circular-living/national-waste-management-plan-for-a-circular-economy-2024-2030/. Accessed February 2025

³³ EC (n.d.) Circular economy action plan. Available at: https://environment.ec.europa.eu/strategy/circular-economy-action-plan_en.

Accessed February 2025

³⁴ European Parliament and Council of the European Union (2024) Directive (EU) 2024/1799 of the European Parliament and of the Council of 13 June 2024 on common rules promoting the repair of goods and amending Regulation (EU) 2017/2394 and Directives (EU) 2019/771 and (EU) 2020/1828.

1.3 Repairmystuff.ie – a National Directory of Repairers

In 2017, a new website, <u>repairmystuff.ie</u>, was launched by Monaghan County Council (MCC), providing a free to use directory of repair enterprises in Ireland. The website is managed by MCC. Grant-aid support for the website and some limited promotional activity is provided by the EPA Circular Economy Programme.

1.4 Aim

The aim of this study is to undertake an assessment of the national repair directory, <u>repairmystuff.ie</u>, to inform its future development. The study will include reviews of the following aspects of the website:

- Legislative context;
- Content;
- Digital architecture; and
- UX design.

It will also include a review of repair directories available in other EU Member States for purposes of comparison, as well as engagement with key stakeholders to gather relevant insights. Based on the outcomes of these activities, the study will make recommendations for the future development of repairmystuff.ie.

2. Methodology

2.1 Overview

This study involved the following key tasks, undertaken by Arup:

- Targeted legislation review;
- Review of other repair directories;
- Review of repairmystuff.ie; and
- Stakeholder engagement.

2.2 Targeted Legislation Review

A review was undertaken of two relatively new items of legislation to ascertain their potential relevance to *repairmystuff.ie*:

- The Right to Repair Directive: Directive (EU) 2024/1799 of the European Parliament and of the Council of 13 June 2024 on common rules promoting the repair of goods and amending Regulation (EU) 2017/2394 and Directives (EU) 2019/771 and (EU) 2020/1828; and
- The Ecodesign for Sustainable Products Regulation (ESPR): Regulation (EU) 2024/1781 of the European Parliament and of the Council of 13 June 2024 establishing a framework for the setting of ecodesign requirements for sustainable products, amending Directive (EU) 2020/1828 and Regulation (EU) 2023/1542 and repealing Directive 2009/125/EC.

2.3 Review of Other Repair Directories

A review was undertaken to identify and describe key features of other national repair directories in the EU. Information sources used to identify repair directories included the findings of two previous EPA Circular Insights studies on the repair sector in Ireland, 35, 36 information provided by the EPA, information obtained during an EC webinar regarding the Right to Repair Directive 37 and a web-based search. Based on this review, a shortlist of three websites identified as being representative of best practice were identified for consideration as part of the UI review (refer to Section 2.4.3.2).

2.4 Review of Repairmystuff.ie

A review was undertaken of the national repair directory, <u>repairmystuff.ie</u>, involving the following subtasks:

- Review of previous research;
- Digital architecture review; and
- UX design review.

2.4.1 Review of Previous Research

Previous research undertaken on <u>repairmystuff.ie</u> was reviewed and key findings summarised. Refer to Section 3.3.2.

³⁵ EPA (2025) Business-to-consumer Repair Enterprises in Ireland. Available at: https://www.epa.ie/publications/circular-economy/resources/EPA_CircularInsights_Repair_B2C-Enterprises_Jan25.pdf. Accessed February 2025

³⁶ EPA (2025) Repair Skills Training and Education in Ireland. Available at: https://www.epa.ie/publications/circular-economy/resources/repair-skills-training-and-education-in-ireland.php. Accessed February 2025

³⁷ EC (2024) Stakeholder workshop – Right to Repair. [Online workshop: Tuesday 12 November 2024]. Information available at https://commission.europa.eu/ec-events/right-repair-stakeholder-workshop-2024-11-12_en.

2.4.2 Digital Architecture Review

A review was undertaken of the digital architecture of the <u>repairmystuff.ie</u> website. This involved engaging with MCC and its web service provider, FCDM, to gather technical and operational details of the current set-up in relation to high-level architecture, maintenance and operations, availability and disaster recovery, and cyber security. The review sought to identify risks and opportunities for improvement, outlining critical action paths to be prioritised in order to ensure that the platform fulfils future growth requirements while adhering to industry best practices, mitigating cyber security risks, and minimising operational costs. For findings, refer to Section 3.3.3.

2.4.3 User Experience Design Review

2.4.3.1 User Experience (UX)

A UX review was conducted through usability testing of <u>repairmystuff.ie</u>, the aim of which was to understand how users interact with the website. This included an assessment of ease of navigation on the website, the clarity of the information provided and efficiency in completing specific tasks.

A total of ten (10 no.) usability tests were undertaken, comprising a diverse group of users, representative of the website's target audience:

- General public digital users: Four (4 no.) digital users (individuals experienced in using digital technology).
- General public non-digital users: Three (3 no.) non-digital users (individuals with less experience
 of using digital technology).
- Repairers: Three (3 no.) repair service providers (two of which were previously registered on the website, and one of which was not).

Participants were asked to complete a series of specific tasks on the platform. The general public (digital and non-digital users) were tested on the process of searching for the website on Google and undertaking a search for a repair enterprise to repair a washing machine near their place of residence on the website. For repair service providers, the test focussed on the process of registering on the platform and modifying their business details. During tests, participants' activities were observed and recorded to identify any difficulties or areas of confusion. Post-test interviews were conducted to gather detailed feedback on participants' experiences. For findings, refer to Section 3.3.4.

2.4.3.2 User Interface (UI)

In addition, a high-level heuristic evaluation of the UI was conducted of <u>repairmystuff.ie</u> and three other national repair directories from EU Member States to compare the functionalities of the selected websites. Heuristic evaluation is a method to identify design problems in UIs. When combined with usability testing, heuristic evaluation can contribute to a comprehensive understanding of a website's usability issues. Jakob Nielsen's ten usability heuristics (best practices) are commonly used to conduct heuristic evaluations of UIs and were applied in this case. By adhering to these heuristics, designers can create interfaces that are more efficient, user-friendly, and aligned with user expectations.³⁸ Further details of the methodology for the heuristic evaluation, including Nielsen's ten heuristics and the associated severity classification system used to rate the UI of websites, are provided in Appendix A. Results of the evaluation are set out in Section 3.3.4.

³⁸ Yale University (n.d.) *Heuristic Evaluation*. Available at: https://usability.yale.edu/testing/heuristic-evaluation. Accessed March 2025.

2.5 Stakeholder Engagement

Stakeholder engagement was conducted to gather relevant insights from key stakeholders. This engagement was facilitated through six online stakeholder workshops, ranging from 1-1.5 hours. An optional stakeholder survey was also circulated after each workshop to capture any additional insights not shared during the workshops and to facilitate input from any individuals that could not attend. Appendix B provides a list of stakeholder organisations engaged through a workshop and/or survey to inform this study. Appendix G provides a copy of the stakeholder survey and responses received (anonymised). Stakeholder insights obtained are summarised in Section 3.4.

3. Findings

3.1 Targeted Legislation Review

3.1.1 Right to Repair Directive

On 30 May 2024, the European Council adopted Directive 2024/1799 on common rules promoting the repair of goods and amending Regulation (EU) 2017/2394 and Directives (EU) 2019/771 and (EU) 2020/1828 (the 'Right to Repair Directive').³⁹

The Directive lays down common rules strengthening the provisions related to the repair of goods, with a view to contributing to the proper functioning of the internal market, while providing for a high level of consumer and environmental protection.

The Directive was published in the Official Journal of the European Union on 10 July 2024 and entered into force 20 days later on 30 July 2024. Member States have 24 months (until 31 July 2026) to transpose the Directive into national law. In Ireland, the transposition of the Directive is being led by the Department of Enterprise, Tourism and Employment (DETE).

Requirement for a European repair platform

Article 7 of the Directive is particularly relevant to national repair directories like <u>repairmystuff.ie</u>. It requires the EC to establish a European online platform for repair, allowing consumers to find repairers, to be operational by 31 July 2027. The EC is in the process of developing the European platform, ⁴⁰ which will consist of 'national sections' or 'national online platforms' for the Member States. The Directive gives Member States two options in this regard:

- National section: Member States shall establish a national section on the European platform using a common online interface developed by the EC.
- National online platform: Member States that have at least one national online platform that covers their entire territory and complies with the requirements set out in the Directive are not obliged to establish a national section on the European platform. In such cases, the European online platform shall include a hyperlink to the national online platform.

Whether Ireland will have a national section using the common online interface or a standalone national online platform complying with the requirements of the Directive is yet to be determined. This decision will be made by the Government as part of the process of transposition. <u>Repairmystuff.ie</u> is an option for consideration as the standalone national online platform, subject to the website meeting the requirements set out in the Directive.

Requirements for the national sections and platforms

Paragraphs 5 and 6 of Article 7 set out requirements that the common online interface (for establishment of national sections) and national online platforms must comply with. These are summarised in Table 3. In addition to these mandatory requirements, paragraph 4 of Article 7 gives Member States the option of extending the scope of their national sections or national online platforms to include not only repairers, but also sellers of refurbished goods, purchasers of defective goods for refurbishment or community-led repair initiatives, such as repair cafés (referred to as 'other categories' in Table 3).

³⁹ Directive (EU) 2024/1799 of the European Parliament and of the Council of 13 June 2024 on common rules promoting the repair of goods and amending Regulation (EU) 2017/2394 and Directives (EU) 2019/771 and (EU) 2020/1828, Official Journal of the European Union, L series, 10.7.2024. Available at https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L_202401799. Accessed January 2025.

⁴⁰ EC (2024) Stakeholder workshop – Right to Repair. [Online workshop: Tuesday 12 November 2024]. Information available at https://commission.europa.eu/ec-events/right-repair-stakeholder-workshop-2024-11-12_en.

The national sections or national online platforms will also allow repairers to indicate their adherence to applicable EU or national quality standards related to repair services.

The preamble of the Directive states that, where Member States consider it necessary, they should be able to set out conditions for accessing the national sections, such as showing adherence to applicable standards (recital 26), although this is not provided for in the articles.

Table 3: Summary of requirements of Right to Repair Directive for national sections and online platforms

Article	The national sections and national online platforms in the European online platform shall		
	Be free of charge for consumers.		
Article 7(5)	 Allow voluntary registration for repairers and, where applicable, other categories. 		
Article 7(6), point (a)	Include a search function with a map providing information on goods, location of repair services, cross-border provision of services, repair conditions, time needed to complete repairs, availability of temporary replacement goods, place where the consumer hands over goods for repair, availability and conditions of ancillary services (including removal, installation and transportation), and applicable European or national repair quality standards.		
Article 7(6), point (b)	Include, where applicable, a search function for other categories.		
Article 7(6), point (c)	Enable consumers to request the European Repair Information Form from repairers offering it.		
Article 7(6), point (d)	Allow repairers to make regular updates of contact information and services.		
Article 7(6), point (e)	Allow repairers to indicate their adherence to applicable Union or national quality standards.		
Article 7(6), point (f)	Enable accessibility through national websites connected to the Single Digital Gateway . ⁴¹		
Article 7(6), point (g)	Ensure accessibility for persons with disabilities.		
Article 7(6), point (h)	Enable users to report technical issues and inaccuracies in information provided.		

Categories of goods concerned

The recitals of the Directive state that "Consumers should be able to use search functions in order to filter by different features like categories of goods...". However, the Directive does not stipulate specific categories of goods to be covered by the European or national platforms for repair.

The scope of the Directive in terms of the categories of goods concerned is very broad. Article 1(2) states that the Directive "shall apply to the repair of goods purchased by consumers in the event of a defect of the goods that occurs or becomes apparent outside the liability of the seller pursuant to Article 10 of Directive (EU) 2019/771". Article 2 states that, for the purposes of the Directive, 'goods' refers to "'goods' as defined in Article 2, point (5), of Directive (EU) 2019/771 except water, gas and electricity". Directive (EU) 2019/771 defines 'goods' as "(a) any tangible movable items; water, gas and electricity

⁴¹ Established by Regulation (EU) 2018/1724 of the European Parliament and of the Council

Directive (EU) 2019/771 of the European Parliament and of the Council of 20 May 2019 on certain aspects concerning contracts for the sale of goods, amending Regulation (EU) 2017/2394 and Directive 2009/22/EC, and repealing Directive 1999/44/EC. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32019L0771. Accessed March 2025.

are to be considered as goods within the meaning of this Directive where they are put up for sale in a limited volume or a set quantity; (b) any tangible movable items that incorporate or are inter-connected with digital content or a digital service in such a way that the absence of that digital content or digital service would prevent the goods from performing their functions ('goods with digital elements')".

European Repair Information Form

As noted above, the national sections or national online platforms (as the case may be) will enable consumers to request a document called the 'European Repair Information Form' (ERIF) from repairers. This is a new, standardised document introduced by Article 4 of the Directive that will specify the details and conditions of a repair in a clear and comprehensible manner. Offering the ERIF is optional on the part of repairers. Provision of the ERIF is intended to facilitate consumers to identify and compare suitable repair services and improve transparency, contributing to consumers' free choice and greater trust in repair services. Annex I of the Directive provides a template setting out the contents of the ERIF, which include the identity and contact details of the repairer and information on the repair service, including identification of the good to be repaired, nature of the defect, price for repair, time needed to complete the repair and the period of validity of the ERIF (at least 30 days).

3.1.2 Ecodesign for Sustainable Products Regulation

On 18 July 2024, Regulation (EU) 2024/1781 establishing a framework for the setting of ecodesign requirements for sustainable products, amending Directive (EU) 2020/1828 and Regulation (EU) 2023/1542 and repealing Directive 2009/125/EC (the 'Ecodesign for Sustainable Products Regulation' or ESPR), entered into force.⁴³ The ESPR replaces the previous Ecodesign Directive (Directive 2009/125/EC),⁴⁴ providing a framework for the setting of ecodesign requirements for specific product groups.

The ESPR has a broader scope than the Ecodesign Directive. It aims to improve the circularity, energy performance and other environmental sustainability aspects of products placed on the single market. It will enable the establishment of ecodesign requirements for almost all categories of physical goods, including in relation to repairability. The specific ecodesign requirements will be established by delegated acts pursuant to Article 4 the ESPR.

The ESPR also introduces a requirement for a Digital Product Passport (DPP) containing information to be laid down in delegated acts pursuant to the ESPR, regarding a product's sustainability and circularity, including repairability.

The ESPR is focussed on product design and does not include any specific requirements related to repair directories. However, various articles of the ESPR seek to improve access to information on repair, including for professional repairers, and may be regarded as being of indirect relevance.

In April 2025, the EC adopted the first ESPR and Energy Labelling Working Plan, setting out a list of products for which the adoption of ecodesign requirements will be prioritised. These are textiles/ apparel, furniture, tyres, mattresses, iron and steel, and aluminium. Additionally, horizontal ecodesign requirements will be prepared in relation to repairability (including scoring), and recycled content and recyclability of electrical and electronic equipment (EEE).⁴⁵ Delegated act under the ESPR are yet to be adopted.

⁴³ Regulation (EU) 2024/1781 of the European Parliament and of the Council of 13 June 2024 establishing a framework for the setting of ecodesign requirements for sustainable products, amending Directive (EU) 2020/1828 and Regulation (EU) 2023/1542 and repealing Directive 2009/125/EC, Official Journal of the European Union, L series, 28.6.2024. Available at https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=OJ:L_202401781. Accessed January 2025.

⁴⁴ Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products (recast) (2012), Official Journal of the European Union, L 315.

⁴⁵ EC (2025) Communication from the Commission: Ecodesign for Sustainable Products and Energy Labelling Working Plan 2025-2030. Available at: https://environment.ec.europa.eu/document/download/5f7ff5e2-ebe9-4bd4-a139-db881bd6398f_en?filename=FAQ-UPDATE-4th-Iteration_clean.pdf. Accessed October 2025.

3.2 Review of Other Repair Directories

Eight repair directories in other EU Member States were identified, as listed in Table 4 and illustrated in Figure 1, below. All platforms identified that provide some form of national directory of repair enterprises in EU Member States were included in this review. The following sections provide a brief description of each of these directories. Detailed descriptions of the contents of the websites in question, including information on geographic scope, responsible organisations, funding, target users, product categories, registration process, eligibility criteria and frequency of update, are provided in **Appendix C**.



Figure 1: Repair directories identified in EU Member States

Table 4: Repair directories identified in other EU Member States

Member State	Title
Austria	Reparatur Bonus ("Repair Bonus")
	Reparatur Führer <u>("Repair Guide")</u>
France	Label QualiRépar
Latvia	Lieto Vēlreiz Pakalpojumu Karte ("Used Again Service Map")
Luxembourg	Repair & Share
Netherlands	Nationaal Reparateursregister ("National Repairers Register")
Slovakia	Cirkulárne Mapy <u>("Circular Maps")</u>
Slovenia	Karta Mojstrov ("Map of Craftsmen")

3.2.1 Austria

Austria has a national directory of repair services, *Reparatur Führer* ("Repair Guide"). It also has a second national-level repair directory with a more limited scope, *Reparatur Bonus* ("Repair Bonus"), which provides a directory of repairers of EEE and bicycles that are eligible 'partner companies' for the national repair bonus/voucher. While the Repair Bonus platform is limited to the duration of time in which funding is available for this incentive, the Repair Guide is intended to provide a national directory of repairers that is comprehensive and available for the long-term.

Reparatur Führer ("Repair Guide")

The Repair Guide provides a free, searchable directory of repair enterprises in Austria, with the aim of making it easier for citizens to find professional repair services, for the benefit of the environment and enterprise in the region. The website is managed by a not-for-profit organisation, *Noamol Re-Use Tirol*, with financial support from project partners from the public sector in participating federal states. Seven of the nine states in Austria are included in the directory. Two of the states, Vienna and Burgenland, have their own municipal repair directories and are not currently included in the national directory.

The Repair Guide website contains a map-based search function, allowing Austrian citizens to search for repairers for a wide range of product categories. The website is linked to the Austrian Repair Bonus website. Repairers listed in the directory that are also partner companies for the Repair Bonus are clearly identified in the Repair Guide by the presence of the Repair Bonus logo on their profiles.

Repairers can register voluntarily to appear in the register and can log into the website to update their profiles at any time. Acceptance of registration is subject to eligibility criteria: the company must be located in one of the Austrian federal states and hold a valid trade licence for the repair service concerned, issued by the relevant district administrative authority. Validation of new repairer profiles is carried out by the administrators in the various federal states. To ensure information provided on repairers on the website is valid and up to date, the platform sends an auto-generated email once a year requesting repairers log in and check their details. If a repairer fails to do so after repeated reminders, the profile is flagged as inactive and no longer appears to users but can be restored upon request. Each repairer profile contains a link allowing users to send feedback on the repairer to the administrator. Reviews of repairers are not displayed on the website.

In addition to the directory of repairers, other features of note on the Repair Guide website include a news page/blog with information on related policy developments, upcoming repair cafés and other events.

Once a year, platform administrators from each of the federal states in the directory meet to identify potential areas for improvement. Thus, the platform is reviewed and further developed on an ongoing basis. Promotion of the platform, where undertaken, is funded and carried out at the federal state level.



Figure 2: Home page - Reparatur Führer ("Repair Guide") – translated to English by Google

Reparatur Bonus ("Repair Bonus")

The Reparatur Bonus ("Repair Bonus") website is an initiative of the Austrian Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology. It provides Austrian residents with access to the national repair bonus, which provides an incentive to increase repairs, services and maintenance of EEE and bicycles in Austria. The repair bonus is jointly funded by the NextGenerationEU⁴⁶ fund and the Austrian federal government. It covers 50% of the cost of the repair, service or maintenance, up to a maximum of €200. It also covers 50% of the cost (up to €30) of obtaining an estimate for these services. The website allows users to create a digital or printed repair voucher with a QR code that can be redeemed at a partner company.

The Repair Bonus website contains a searchable, map-based directory of businesses providing repair, service and maintenance services for EEE and bicycles that have voluntarily registered as partner companies for the repair bonus and which meet specific eligibility criteria: having a branch in Austria and holding one of several specific trade licences for the repair of the product categories concerned, or being a retailer permitted to carry out simple repairs. The website is linked to the national Repair Guide website. New partner companies added to the website are automatically added to the national Repair Guide.

A private consultant, *Kommunal Kredit Public Consulting*, acts as the administrator of the website, processing repair vouchers and applications from repairers to register as partner companies.

⁴⁶ NextGenerationEU is an EU stimulus package that provides loans and grants to Member States for projects in key areas, including the green transition, digital transformation and smart, sustainable and inclusive growth.

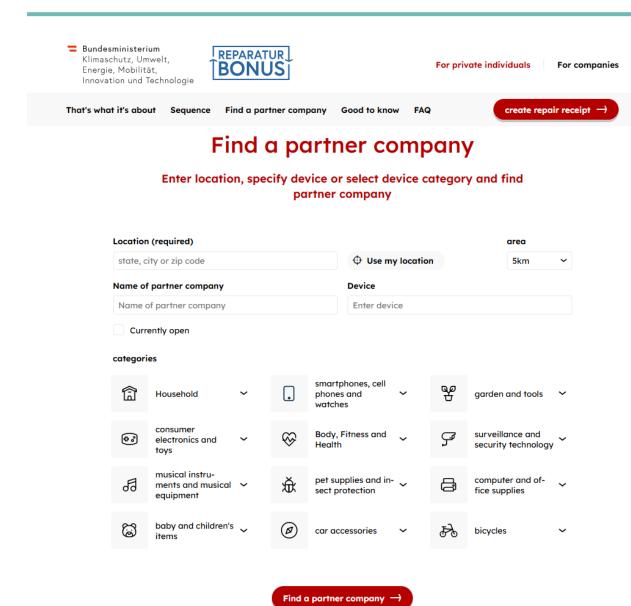


Figure 3: Search function - Reparatur Bonus ("Repair Bonus") - translated to English by Google

3.2.2 France

The *QualiRépar* label operates across France as a third-party certification/quality assurance programme for repairers of EEE. The label was established by two French producer responsibility organisations (PROs), Ecologic and Ecosystem. The *corresponding website* provides a directory of repairers of EEE certified with the *QualiRépar* label, which are eligible for the national repair voucher (*bonus réparation*), similarly to the Austrian Repair Bonus platform.

In order to be eligible to appear in the directory, repairers must be certified with the *QualiRépar* label for professional repair of household EEE. Certification is awarded based on an audit by an independent certification body (Bureau Veritas, SGS or Afnor) which certifies repairers for a period of 3 years. Cost of certification ranges from €670 - €2,415, depending on the type of repairer. This cost is mostly covered by the PRO (70%), with the remainder being paid by the repairer. Once certified, repairers are automatically added to the directory, typically within 48 hours of certification.

The website provides information for both professional repairers seeking certification and consumers in Metropolitan France and its overseas departments and regions looking for trustworthy EEE repair services and/or to avail of the repair voucher. Other features of note on the website include information on maintenance of household of EEE and a news page.

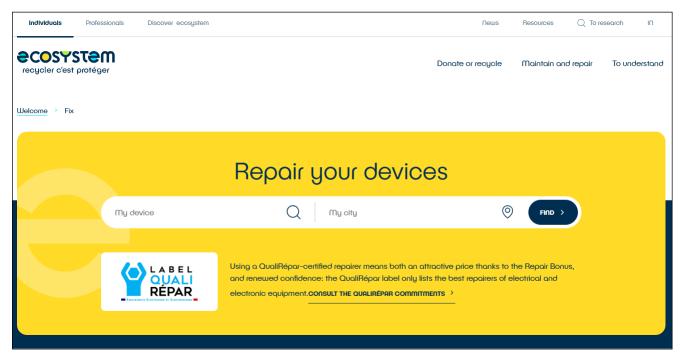


Figure 4: Search function – Label QualiRépar – translated to English by Google

3.2.3 Latvia

Lieto Vēlreiz Pakalpojumu Karte ("Used Again Service Map") provides a map-based directory of circular services available in Latvia, including repair, rental, sharing, trade-in and exchange services and refill stores. The directory is one element of a larger website that aims to encourage public participation in the circular economy in Latvia by providing information and practical resources to support reuse and the sharing economy. Other features of the website include a catalogue of used items (including electrical appliances, construction materials, furniture and sports equipment) offered for sale, rental or free of charge by registered partner organisations. The website was launched in November 2023 as one output of the EU LIFE project, 'Waste to Resources Latvia – boosting regional sustainability and circularity', led by the Latvian Ministry of Climate and Energy, with support from 21 partner organisations, including the association, Zero Waste Latvija, which developed the website. The project is funded by the EU LIFE

Programme, the Latvian State Digital Development Agency, and *Zero Waste Latvija*'s own co-financing until 2028.

Repairers that wish to appear on the directory cannot set up a profile or log into the website directly. Instead, they can submit an enquiry via a contact form on the website, and the administrator, Zero Waste Latvija, will create an entry for the repairer on the map. Most new entries to the directory are identified by Zero Waste Latvija through direct communications with organisations. Some repairers were identified by checking national and local government databases and registers of commercial repair enterprises. There are no specific eligibility criteria for the directory – all repairers that operate on a voluntary or commercial basis in Latvia are accepted. To promote regular update of the information in the directory, the administrator sends out a quarterly email to those included. Zero Waste *Latvija* is currently in the process of developing and adding new features and functions to the platform.

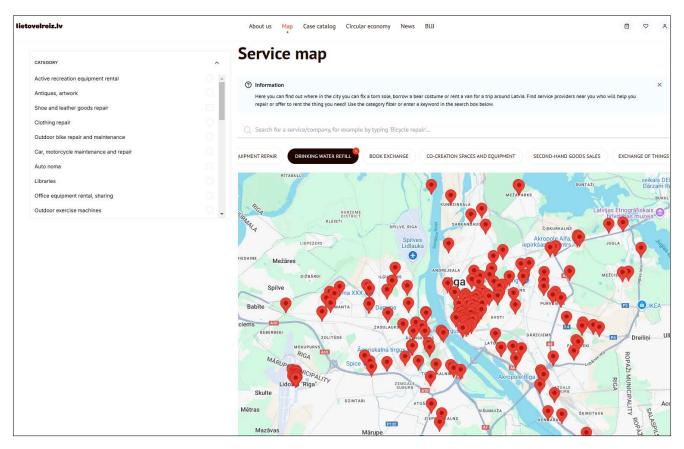


Figure 5: Search function – "Used Again Service Map" – translated to English by Google

3.2.4 Luxembourg

Repair & Share provides a dedicated, searchable, map-based directory of product repair and rental services for a wide range of product categories in Luxembourg. It is coordinated by SuperDrecksKëscht (a national waste management initiative of the Luxembourg Ministry of the Environment, Climate and Biodiversity; the Chamber of Trade, and the Chamber of Commerce) in partnership with:

- The national environmental administration;
- The Chamber of Crafts;
- The Chamber of Commerce;
- The National Institute for Sustainable Development and Corporate Social Responsibility (INDR);
- Ecotrel (a PRO for producers and importers of EEE); and

 Oekozenter Pafendall (a not-for-profit organisation in Luxembourg that advocates for sustainability and the circular economy).

Repairers can register to create a profile in the directory by completing a form on the website. There are no specific eligibility criteria for repairers who wish to register. Once accepted, the repairer's profile is added to the directory. As well as repairers, the directory also includes rental/sharing enterprises and initiatives. These are distinguished with separate tabs for 'Repair' and 'Share' in the search function.



Figure 6: Home page - 'Repair & Share'

3.2.5 Netherlands

The Nationaal Reparateursregister ("National Repairers Register") provides a directory of EEE repair enterprises in the Netherlands that have (a) been officially recognised by a manufacturer of consumer electronics for provision of repair services, or (b) met the requirements of the 'Recognition Scheme for Electronics Repair Companies' of the InstallQ foundation. The platform was developed as an initiative of Techniek Nederland and the Dutch Ministry of Infrastructure and Water Management (Rijkswaterstaat), in collaboration with the Central Register of Technology (Centraal Register Techniek).

The directory is limited to manufacturer approved and accredited repairers of EEE in the Netherlands. EEE repair enterprises that are registered in the Central Register of Technology and have received accreditation under the aforementioned recognition scheme are automatically added to the directory. Repairers can update their information by logging into the Central Register of Technology website. The recognition scheme is administered by InstallQ and is intended to ensure safe, efficient and reliable electronics repairs. It includes requirements in relation to the competence of the technician, equipment and tools that can be used and company management procedures. The cost of accreditation at the time of writing is €224. Fees are paid on an annual basis and quality audits are carried out once every two years.⁴⁷

The directory currently only includes manufacturer approved and accredited EEE repair professionals, but it is intended to extend its scope to include repairers of other product categories that meet the criteria of relevant quality assurance schemes in the Netherlands.

⁴⁷ InstallQ (2021) Recognition Scheme for Consumer Electronics Repair Companies – Requirements for Business Recognition in the field of Repairing consumer electronics. [Machine translated by Google]. Available at: https://installq.nl/files/erkennen/ erkenningsregeling_reparatiebedrijven_consumentenelektronica_bindend_01-01-2021.pdf. Accessed March 2025.

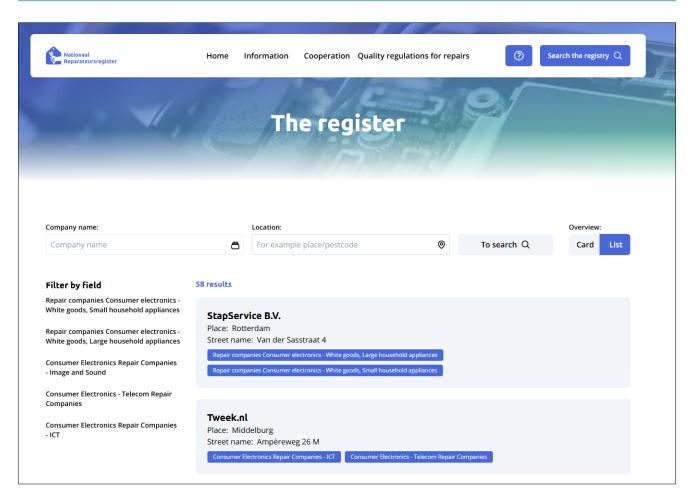


Figure 7: Search function – Dutch National Repairers Register – translated to English by Google

3.2.6 Slovakia

The Cirkulárne Mapy ("Circular Maps") refers to a series of maps of circular enterprises and amenities (including zero-waste and second-hand shops, community gardens, repair enterprises and rental services, among others) available in sixteen Slovak municipalities. The maps were created using Google My Maps by various individuals and organisations, and do not have a dedicated website. They allow residents and visitors to the towns and cities in question to access information on the range of circular services available locally. The initiative is led by the Slovak Institute for Circular Economy (INCIEN) with financial support from the Tesco Foundation. Links to each of the maps are provided on the INCIEN's website.

Entries to the maps are added by the owners. It is, therefore, not possible for repairers to register or add themselves to the maps. In some instances, the maps were developed as outputs of circular economy themed events. For some of the maps (e.g., Bratislava), an email address is provided that can be used to suggest additions. It is unclear whether there is a formal process in place to periodically review and update the information presented. There are no specific eligibility criteria for addition to the maps.

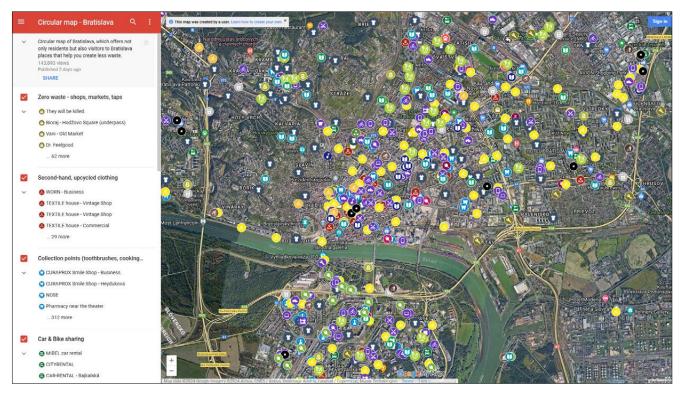


Figure 8: Circular Map – Bratislava – translated to English by Google

3.2.7 Slovenia

Karta Mojstrov ("Map of Craftsmen") is a searchable directory of repairers and refurbishers in Slovenia provided on the website, Manj je več ("Less is More"), an initiative of Ecologists Without Borders (Zero Waste Slovenia) that provides resources to support reuse. The website was launched in 2017. It was developed with the association's own funds and later updated with funding support from the Slovenian Ministry of Public Administration and Merkur Zavarovalnica (an insurance company).

The directory contains a map-based search function. Repairers can register voluntarily to appear in the directory by completing a Google Form. Registrations are subject to approval by the administrator. The directory is open to registrations from craftspeople and organisations who repair, restore, repurpose or buy-back used products. In addition to the 'map of craftsmen', the website also features separate maps of zero waste stores, second-hand and antique stores, product rental services, and drinking water fountain/refill points, as well as a calendar of events, including repair cafés. The administrators of the website have indicated that maintaining the directory up to date is a challenge, as information on repair enterprises changes frequently. A full update of the directory is planned for 2025.



Figure 9: Homepage - Karta Mojstrov ("Map of Craftsmen") - translated to English by Google

3.2.8 Summary

Each of the websites described above provides some form of directory of repairers of consumer goods in the country in question. These websites vary in terms of their scope, primary function and how they are managed. Some are very broad in their scope, aiming to provide a comprehensive directory of repairers in the country concerned, while others are limited in their scope.

A key difference in approach among the directories is the extent to which eligibility criteria are applied to restrict the types of repairers that may be included. Eligibility criteria applied in different directories include the following:

- Repairer holds a trade licence for the product category or categories concerned (Austria);
- Repairer is approved to participate in the national repair voucher/bonus scheme (Austria, France);
- Repairer is certified under a specific quality mark or standard (France, the Netherlands);
- Repairer is approved by a manufacturer to provide third-party repair services (the Netherlands).

The application of such eligibility criteria has the benefit of promoting high-quality, safe and professional repair services and thereby supporting consumer confidence in the sector. This is particularly important where higher risk product categories are concerned (e.g., EEE and bicycles). However, this approach has the disadvantage of excluding certain parts of the sector (e.g., repairers for which relevant standards do not exist, and repairers that do not have the resources to obtain certification), while potentially increasing costs and administrative burden for repairers.

Based on a review and comparison of the repair directories identified in other EU Member States, the box below provides a summary of what best practice might look like for European repair directories.

Repair directories in EU Member States: What best practice looks like

- The directory provides an effective map-based search function allowing users to filter results by relevant criteria.
- Repairers themselves can register to create a profile on the website and once approved by the administrator, can log into the website to update, delete or deactivate their profiles at will.
- The website provides a mechanism for users to provide feedback and report issues or inaccuracies. This
 information is sent to the administrator for further action, where appropriate, but not displayed publicly
 on the website.
- The website includes a mechanism to request that repairers periodically check and update their
 information (e.g., annually) and, where appropriate, to temporarily deactivate repairer profiles that have
 not been checked or updated.
- In addition to the directory, the website includes **other useful features**, such as a news page or blog and calendar of events, including repair cafés.
- Where the administrator considers it appropriate to limit the scope of the directory, this is limited to priority product categories (e.g., EEE, bicycles).
- Where the directory is linked to a relevant scheme (e.g., a standard, quality mark, manufacturer approval
 and/or repair voucher), repairers that are approved to participate are automatically added to the directory,
 and the website provides detailed information for repairers regarding the scheme.
- Where appropriate, the website is **coordinated and linked with related websites** (e.g., the Austrian Repair Guide and Austrian Repair Bonus websites, which are managed by different organisations).
- Where the directory includes categories of circular services or initiatives other than repair, these are
 displayed on the same map but can be clearly distinguished and filtered by users.
- The website is **reviewed by stakeholders on a regular basis** (e.g., annually), with areas for improvement identified and changes made, where deemed appropriate.

3.3 Review of RepairMyStuff.ie

3.3.1 Overview

In 2017, a new website, <u>repairmystuff.ie</u>, was launched by Monaghan County Council (MCC), providing a free to use directory of repair enterprises in Ireland. The website is managed by MCC. Grant-aid support for the website and some limited promotional activity is provided by the EPA Circular Economy Programme.

<u>Repairmystuff.ie</u> allows users to search for repair enterprises in Ireland by location and product category. Repair enterprises can register for free, and new registrations are validated manually by MCC through a web search to confirm that the name, telephone number and email address provided are correct. The commercial status or credentials of the repairer are not checked.

The directory was initially developed by collating information that various Local Authorities had collected on repair services available in their functional areas. In 2021, the EPA contracted services to identify and contact repairer enterprises in an effort to increase the number of repairers registered in the directory.

WEEE Ireland and ERP Ireland, the extended producer responsibility (EPR) compliance schemes for EEE in Ireland have also supported and contributed to the development of the directory, particularly in relation to EEE repair.

As a joint initiative of MCC, WEEE Ireland and the White Goods Association, in 2020 and 2021, 'authorised repairers' were identified on <u>repairmystuff.ie</u>. 'Authorised Repairer' status is now clearly displayed with a green 'badge' on individual listings of relevant EEE repairers on the directory. The status is validated by WEEE Ireland.

The scope of <u>repairmystuff.ie</u> is focussed on B2C repair services. It does not include community repair initiatives, such as repair cafés, or other categories of circular enterprises and initiatives, such as zero-waste stores, trade-in/refurbishment, product sharing or leasing schemes.

Appendix C includes a detailed review of the contents and operational aspects of repairmystuff.ie.



Figure 10: Home page – repairmystuff.ie

3.3.2 Previous Research

EPA National Attitudes and Behaviour Surveys

In 2022, as part of a national attitudes and behaviour survey on repair, the EPA investigated consumer awareness and usage of <u>repairmystuff.ie</u>. ⁴⁸ The survey found that, in November 2022, 11% of people were aware of <u>repairmystuff.ie</u>, with young adults (aged 16-34 years), Dubliners and self-repairers being most likely to have heard of the website. Among those who were aware of the website, almost half (44%) had used it to search for a repairer. The majority of those who had used the website to search for a repairer (75%) reported getting their item repaired as a result.

This survey was repeated in 2024, with very similar results. Consumer awareness of <u>repairmystuff</u>. <u>ie</u> remained the same at 11%. Of those who were aware of the website, just over half (51%) reported using it to search for a repairer – a slight increase relative to 2022. The proportion of respondents who reported subsequently getting their item repaired saw a very slight decrease to 74%. Overall, these results indicate that while awareness of <u>repairmystuff.ie</u> among the general public appears to be low, those who have used the website found it to be a useful tool to find someone to repair their defective item.

⁴⁸ EPA & B&A (2023) Repair: Attitudes & Behaviours National Survey 2022: Professional Repair Services; Part 4 of 5 Series. Available at: https://www.epa.ie/publications/circular-economy/resources/EPA-Repair-National-Survey-2022-Professional-Repair-Services. pdf. Accessed January 2025.

EPA Circular Insights Studies

In January 2025, the EPA published two studies investigating the repair sector in Ireland as part of its Circular Insights series. One of these studies provided an analysis of business-to-consumer (B2C) repair enterprises in Ireland, primarily drawing on data from <u>repairmystuff.ie</u>. The study noted the value of the website as a data collection tool to monitor the repair sector in Ireland.⁴⁹ At the time of undertaking this study (November 2023), there were approximately 1,260 registered repairers on <u>repairmystuff.ie</u>.

3.3.3 Digital Architecture

3.3.3.1 High Level Architecture

At a high level, <u>repairmystuff.ie</u> can be described as a WordPress application. WordPress is an open-source web content management system used extensively to develop websites across a range of industries. It has been a well-established technology since its debut in 2003, and to date, it remains extremely popular, being used by over a fifth of the top one million websites today, constituting a mature and robust solution for website development. At the time of writing this review, <u>repairmystuff.ie</u> was using WordPress version 6.7.1, which was the most recent stable release at the time.

From a technical standpoint, WordPress is written in PHP, a scripting language commonly used for creating web pages, and paired with MySQL-compatible databases⁵⁰ to handle data persistence. Its design philosophy focuses on providing developers with well-established tools to implement common patterns with minimal configuration or custom code development. To provide a sufficient degree of customiSability, it features a templating engine and an extensive library of customisable themes, which allow developers to configure the content and appearance of a website without the need to write custom PHP code.

Moreover, WordPress' architecture features a mature plugin ecosystem, which allows developers to extend the core WordPress functionality by simply installing and configuring the required plugins from either official or third-party repositories. The selection of these plugins has a significant impact on the capabilities of the resulting website, as well as on its associated risks. To minimise the risks associated with these dependencies, the installed plugins must be kept to the minimum required to cover the functionality of the website.

The WordPress plugins used by <u>repairmystuff.ie</u> are listed in Appendix D. In most cases, these plugins are well established and regularly maintained by the WordPress community, being actively used in millions of websites.

Given WordPress' longevity and worldwide popularity, several hosting providers offer tailored solutions to host WordPress applications in a fully managed environment that reduce operation and maintenance requirements, as well as many associated risks. In this case, the selected hosting solution is Nexcess Spark, a platform-as-a-service (PaaS) solution offering the following baseline resources for the currently selected plan.

⁴⁹ EPA (2025) Circular Insights Series: Business-to-consumer Repair Enterprises in Ireland. Available at: https://www.epa.ie/ publications/circular-economy/resources/EPA_CircularInsights_Repair_B2C-Enterprises_Jan25.pdf. Accessed February 2025.

⁵⁰ Several other database engines are compatible with MySQL, such as MariaDB, Vitess or Amazon Aurora, among others.

Table 5: Resources of the current Nexcess Spark plan compared with most comprehensive plan available

Resource/service	Current plan	Most comprehensive plan
Storage	15 Gb	800 Gb
Bandwidth	2 Tb	10 Tb
PHP workers ⁵¹	10	60
Autoscaled PHP workers ⁵²	20	70

According to the team currently maintaining <u>repairmystuff.ie</u>, the current Nexcess Spark plan has proved capable of coping with current traffic, which according to Google Analytics data reached over 230,000 page views over the course of 2023 (latest available data at the time of competing this study).⁵³ Therefore, there is no intention to update to a more comprehensive plan in the immediate future. However, in the event of a substantial, sustained increase in user traffic on <u>repairmystuff.ie</u>, Nexcess offers seamless migration between plans, which would significantly scale the capacity of the infrastructure, as outlined in Table 3.

Being a fully managed service designed specifically to host WordPress applications, Nexcess Spark offers several additional capabilities that help streamline the operation and maintenance of the website, as well as enhancing its scalability and information security. Some of the most relevant features are listed below:

- Autoscaling based on resource usage, automatically increasing the number of available PHP workers per website to accommodate traffic fluctuations for up to 24 hours;
- Seamless upscaling of infrastructure by switching to more extensive plans;
- Automated updates to both WordPress core and installed plugins;
- Content delivery network to speed up serving static assets;
- Automated backup and restore process;
- Reverse proxying based on Nginx;
- Automated image compression capabilities (powered by TinyPNG);
- Redis-based object caching;
- Fully managed server monitoring and logging; and
- Integration with Nexcess' certified Security Operations Center (SOC).

In terms of data residency, all data is physically hosted on Nexcess' data centres in Amsterdam, which aligns with European data residency requirements.

⁵¹ PHP workers are the processes that execute the WordPress server application which serves the repairmystuff.ie website.

Increasing the number of available PHP workers would result in a near-proportional increase in the number of requests per second that the server can process (assuming no bottlenecks in other parts of the infrastructure, such as the database).

⁵² Autoscaled PHP workers are processes that are spawned automatically depending on usage metrics, such as requests per seconds, CPU or memory utilization. These workers provide a transitory increase in capacity to accommodate fluctuations in user demands

⁵³ It is noted that the equivalent number of page views for mywaste.ie (another publicly funded, circular economy website in Ireland) in 2023 was 494,036, approximately double the traffic of repairmystuff.ie.

3.3.3.2 Maintenance and Operations

Since <u>repairmystuff.ie</u> was launched in 2017, its features have remained mostly unchanged, with only maintenance and operations work being required to keep the website working as expected. The following tasks are regularly carried out and reviewed by the website maintainers:

- Check for updates to WordPress core;
- Check for updates to WordPress plugins;
- Optimize database performance (vacuum, stale data cleanup, etc.);
- Review logs in search for any potential cyber security threats;
- Review contact forms;
- Verify that sitemap is up to date;
- Review site layout;
- Review Google Analytics data;
- Fix or remove invalid hyperlinks; and
- Review Google Search console indexing.

All these routine maintenance operations are carried out from Nexcess' web UI, and do not require direct access to the underlying systems. However, secure protocols to interact with these systems, such as Secure Shell (SSH) or Secure File Transfer Protocol (SFTP) would be available, if required.

3.3.3.3 Availability and Disaster Recovery

Nexcess Spark claims to achieve an availability of over 99.99% uptime, and their data centres implement full system redundancy and error tolerance, being regarded as Tier 4 data centres (providing the highest level of reliability and availability). However, in the extremely unlikely event of a full data centre failure or a wider scale regional disaster, cross-regional high-availability mechanisms would not be readily available. This risk is nonetheless considered to be acceptable given the requirements of the website.

In terms of disaster recovery, Nexcess offers automated daily backups of all data stored, which are retained for at least 30 days. These backups are encrypted both at transit and at rest, verified for integrity and copied in two or more data centres, ensuring that data can be recovered even in the event of a data centre-wide disaster. In addition to these backup policies, the operation and maintenance team also extracts copies of backups as part of their monthly operations and keeps these in their own infrastructure as a complementary measure.

Based on the reported backup schedule, the system is estimated to operate with a recovery point objective (RPO) of 24 hours, meaning that in the worst case, 24 hours' worth of data might be lost, a risk which is deemed acceptable given the data requirements of the website.

The process to restore the website from these backups is fully automated and may be managed from Nexcess' web UI, although no recovery time objective (RTO) has been explicitly reported.

3.3.3.4 Cyber Security

Given that the Website is hosted on a fully managed PaaS, a shared responsibility model may be applied in terms of handling cyber security risks. In this sense, a significant portion of cyber security risks are exclusively handled by Nexcess (for example, any risks related to physical security, networking, hardware, operating systems, data storage, etc.), whereas the website maintainers are responsible for the configuration of Nexcess' services as well as any application-level aspects, such as WordPress configuration, plugins, custom PHP code, or the handling of user data.

From the point of view of the infrastructure provider, Nexcess is SSAE 18 compliant and carries Out annual SOC-1 type II and SOC-2 type II assessments. SSAE 18 is currently one of the most exigent standards for cyber security in the industry.

From the point of view of the application itself, most cyber security risks are mitigated by the selection of well-established technologies that require minimal configuration or ad-hoc code development, and which are kept up to date via automated patching procedures. Given the widespread adoption of WordPress, security vulnerabilities are uncovered and patched with high frequency, highlighting the need to keep the core WordPress system up to date. A detailed list of WordPress known vulnerabilities is available at *cvedetails.com*.

To further mitigate potential malicious attacks, the website implements WordFence security, a WordPress plugin that carries out malware scans periodically, monitors malicious requests and offers integrated firewall functionality. At the time of reviewing the application, WordFence's free tier is being used, and more advanced functionality would be available under the WordFence premium subscription (such as IP blocklists or enhanced malware detection).

The website does not currently implement specific protection against distributed denial of service attacks (DDoS), which could reduce the availability of the website. This risk could be mitigated by means of complementary services from Nexcess, such as their 'Performance Shield' feature.

Both Nexcess and the current maintenance team have computer security incident response teams (CSIRTs) and implement incident response procedures, to appropriately respond in the event of an exploit or data breach. All website data is handled according to the EU General Data Protection Regulation (GDPR)⁵⁴ and is kept encrypted both at rest and in transit.

3.3.3.5 Conclusions

The digital architecture of <u>repairmystuff.ie</u> features mature and well-established technologies (WordPress) and adheres to industry best practices. The website is hosted on a highly secure and scalable PaaS provider that provides acceptable availability and disaster recovery guarantees relative to the website requirements. This review has not raised any concerns regarding <u>repairmystuff.ie</u> in terms of future availability, resilience, scalability, maintainability, or information security.

Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC (General Data Protection Regulation), OJ L 119, 4.5.2016, p. 1.

3.3.4 User Experience Design

3.3.4.1 User Experience (UX)

As described in Section 2, an assessment was undertaken of the UX to understand how users typically interact with <u>repairmystuff.ie</u> and identify any areas for improvement in this regard. The usability tests revealed several areas requiring attention to improve the functionality and accessibility of information on the platform. Addressing these issues will be important to ensure that <u>repairmystuff.ie</u> meets user expectations and serves its function.

Detailed findings of the individual usability tests are provided in Appendix E. This section sets out the identified areas for improvement and associated recommendations in terms of the positioning of the website in Google search results, public awareness of the website, the usability of the search function and repairer registration and log-in process.

Table 6: Usability testing key findings: Positioning in Google search results and public awareness of the platform

Observations and identified areas for improvement	Recommendations for improvement
The majority of participants (8 out of 10) were not previously aware of <u>repairmystuff.ie</u> . The only participants who had previous awareness of the website were repair enterprises, and one of the repairers was not previously aware of the platform.	Launch a marketing campaign (online and in other media) to increase visibility, especially among people interested in the circular economy.
The website is well positioned in Google search results when searching generically for "Repair services in Ireland". When searching for the repair of a specific product, many other options appear first.	Undertake search engine optimisation (SEO) to ensure that members of the public are directed to <u>repairmystuff.ie</u> when searching for repair services online.

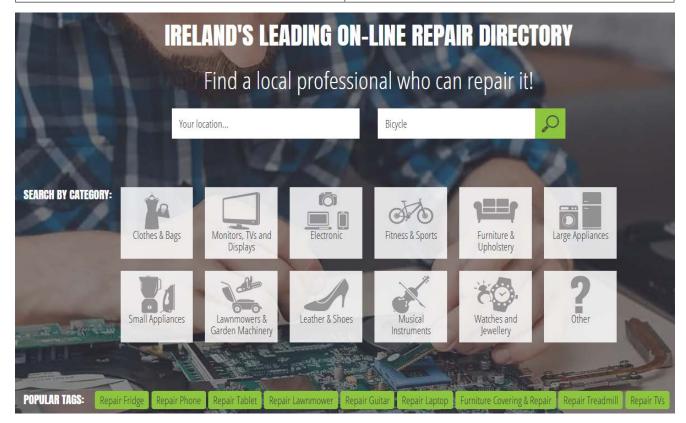


Figure 11: Repairmystuff.ie – search function

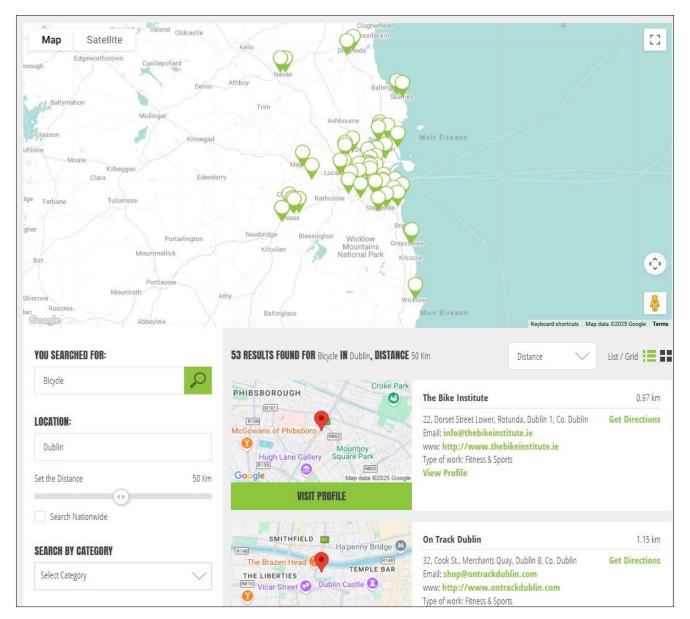


Figure 12: Repairmystuff.ie – search results

 Table 7: Usability testing key findings: Search function

Observations and identified areas for improvement	Recommendations for improvement
Many users try to enter their address in the 'Your location' bar, but it only allows users to search by city or town.	In the location search bar, use a more appropriate prompt/description than 'Your location', such as 'City or town'.
Most of the participants didn't use the 'Search by Category' or 'Popular Tags' search features.	The list of 'Popular tags' seems redundant and should be removed. The option to 'Search by Category' may be useful for some users and should be retained.
The categories of products presented in the 'Search by Category' feature are not always intuitive. For example, it is unclear why 'Electronic' is distinguished from 'Monitors, TVs and Displays' or why bicycles – a key product category for repair – are included in the category, 'Fitness & Sports'.	These category icons could potentially be revised to be more intuitive and better align with users' typical searches. For instance, these could be presented as high-level categories expanding into more specific sub-categories when selected.

Observations and identified areas for improvement	Recommendations for improvement
 The default geographic scope of the search (50 km) is too great, yielding too many results. The 'Set the Distance' slider sets the default search distance to 50 km, which is considered too great a distance. It is not a very intuitive feature. Most users prefer to narrow the search results using the zoom function on the map. 	The search results should, in the first instance, offer the results for the selected town or city and, only if no repairers are found in that area, automatically expand the search radius until results appear.
In the search results, the zoom function on the map doesn't respond to the mouse wheel, making navigation difficult.	Ensure that the map responds to the mouse wheel for zooming in and out.
 When users use the keyword search for product type ('What do you want to repair?'), some of the results shown don't match the product type. 	 Ensure that the keyword search for product category/type ('What do you want to repair?') yields correct results.
 To find repair services for particular product types, the 'Search by Category' function seems to yield much better results than using the custom keyword search. 	 Consider adding a small database with a list of products grouped by category to make search results more accurate and relevant to users.
Some users found the list of categories and sub- categories in the search results filters to be too long, making the selection complicated.	In the search results filter pane, make the 'Search by Category' filter more effective and intuitive (e.g., by having separate drop-down menus for 'Category' and associated 'Sub-category').
In the search results, for some enterprises a logo or image is shown, while for others a small map preview is shown. This is not consistent, and some users found this confusing.	Enable the logo, map preview and other images, where provided, to be displayed on all search results. Consider using a picture carousel to change from the logo to other uploaded images.
 Some of the enterprises listed in the search results appear to be retailers that sell new products but don't offer a repair service. 	
 Some enterprises are duplicated. One of the enterprises that participated in the usability testing did not know why they had two different entries in the directory. 	Review the entire database to ensure that enterprises' information is correct, consistent, up to date, that all businesses do offer repair services, and that there are no duplications.
 It appears that information provided on repairers is inconsistent and not maintained up to date. 	

Observations and identified areas for improvement

- Not all enterprises provide the same information, making it difficult for users to compare.
- Users are unsure which enterprise to choose as there is little information to differentiate them.
- There are no user reviews or other filtering options (such as opening hours) to help users compare enterprises and choose the most suitable option for them.

Recommendations for improvement

- Make more of the repairer registration fields mandatory (e.g., except for Eircode, website, social media links, company logo and profile image) to ensure that the basic information for all enterprises is provided and consistent.
- Add more search filters (e.g. opening hours, third-party certifications), giving users more information and options to narrow down results.
- Opening hours should be a mandatory field, defined using selectors rather than free text, so that this information is published consistently for all enterprises and can be compared using search filters.
- Allow repairers to upload multiple images of their repair enterprise, if desired, providing a gallery of images on their profiles.
- Consider including Google user ratings for the enterprises listed. This will help users make informed decisions based on the experiences of others and increase trust in the services offered.

It is challenging to find the 'Contact Us' button, which is hidden in extensive information in the footer.

Simplify and consolidate the footer by removing duplicate content and highlighting the contact button.

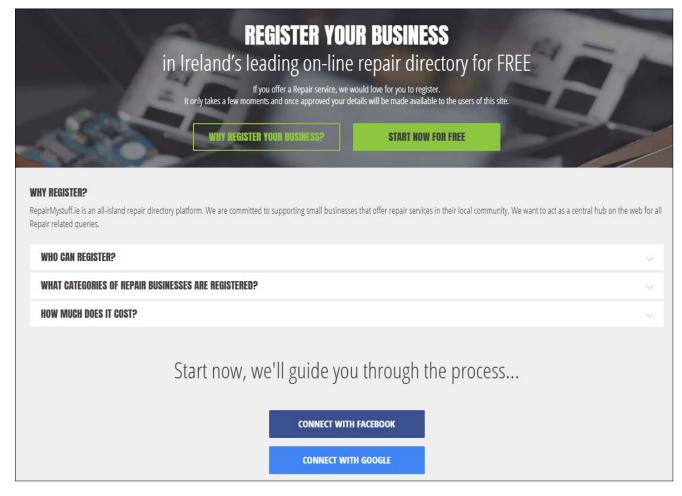


Figure 13: Repairmystuff.ie – repairer registration page

 Table 8: Usability testing key findings: Repairer registration and log-in

Observations and identified areas for improvement	Recommendations for improvement
The log-in option for previously registered repairers is not very prominent, but users do find it without too much difficulty.	On the landing page, highlight to a greater degree the log-in option for previously registered repairers.
There may be a problem with the password recovery process for registered repairers. One participant had forgotten their password and tried to recover it but didn't receive an email from the website.	Implement an automatic password recovery mechanism that sends a code to the repairer's email address.
On the repairer registration page ('Register Your Business'), the top banner is very large and includes two buttons that don't work ('Why Register Your Business?' and 'Start Now For Free'). There are also FAQs and social media links below the banner. These features take up all visible space on the page and users may not realise that the registration form is available below if they don't scroll down.	On the repairer registration page, reduce the height of the banner, remove the two redundant buttons, and move the FAQs and social media links to the end of the page, so that on a standard screen, registrants can see the beginning of the form without having to scroll down.
It is not clear whether the requested phone number should be that of the person who completes the registration or that of the repair enterprise. There is no option to add a business-specific phone number.	Enable registrants to add a business phone number (as an alternative to their personal number).
There is no option to add multiple locations for a single enterprise.	Enable registrants to add multiple locations for a single enterprise as part of the registration form.
Repairers may find it difficult to identify their product categories. One participant couldn't find the tag 'bicycles' because it was under the heading 'Fitness & Sports', which seemed inappropriate to them.	As noted above in relation to the search function, the product categories could potentially be revised to be more intuitive and better aligned with the expectations of users.
When registering, repairers cannot tell if their location will be shown accurately on the map.	Add a map preview in the registration form so that enterprises can check that their location is displayed correctly and allowing repairers to move the pin on the map, if needed.
Some enterprises would like to communicate that they have third party certifications/authorisations (e.g., manufacturer accreditation) related to their repair services. They would like this information to be more prominent, but they have concerns about how this information would be validated to ensure that other repairers cannot make false claims.	Consider the possibility of allowing repairers to indicate third-party certifications (e.g., manufacturer accreditations, quality marks, standards), taking into account the challenges of verification and the limitations of MCC's authority and resources to validate this information.

Observations and identified areas for improvement	Recommendations for improvement
 When the registration process is completed, users don't receive a confirmation email, which causes confusion. It is not clear whether this function is broken or not in place. It is also not made clear to repairers that their registration will need to be validated by the administrator, what is involved in this process, or when their profile will appear in the directory. 	 Ensure that new registrants receive a registration confirmation email, clearly explaining that the information has been received, and the profile is pending validation. Ensure that registrants receive a second email when their profile has been validated and is visible on the website with a link to their profile.
The social media options provided for repairers (Facebook and X) are limited.	Provide additional social media options (e.g., Instagram, LinkedIn).

3.3.4.2 User Interface (UI)

Based on a heuristic evaluation, the UI of repairmystuff.ie was compared with that of three of the identified repair directories from other Member States – Austria, Luxembourg and Slovenia, which were identified as being particularly good/relevant examples. Detailed results of the heuristic evaluation of each website are provided in **Appendix F.** Table 9, below, provides a summary comparing key features.

Table 9: Heuristic evaluation of UIs – comparison of key features

Feature	Ireland	Austria	Luxembourg	Slovenia
Repairer profiles are linked to Google Maps, making it easier for users to find the location and reviews	×			8
Visible direct access for repairer log-in	•	•	×	×
Repairer data is standardised (i.e., every profile contains the same required information, such as phone number and email)	×	•	•	×
FAQs and/or Contact buttons are prominent so that users can find help easily when a problem arises	×	•	•	×
On the search results page, the user sees which categories they had previously selected	Ø	×	Ø	②
Repairer profiles show what spoken languages and opening hours they offer, so users know this before visiting/making contact	×	•	•	×
Website shows the total number of repairers currently registered in the directory	×	•	②	Ø
Product categories and locations are selected from a list, which prevents typing errors	8	•	•	Ø
Users can search for repairers by radius distance in the initial search page	×	×	Ø	×
Repairer registration form is an integrated part of the website, not an external link	•	•	×	×
Accessibility settings are complete and clearly visible throughout the entire platform	②	×	×	×

3.4 Stakeholder Insights

This section provides a summary of insights shared by stakeholders during the series of workshops and as part of a stakeholder survey to inform the study. Stakeholder insights are grouped under the headings of key themes addressed during the workshops. The statements in this section represent the consolidated viewpoints of stakeholders engaged and should not be interpreted as conclusive statements or recommendations. In a number of places, information boxes or case studies are provided to give context to particular stakeholder insights. Refer to Appendix B for a list of stakeholders engaged. The stakeholder survey questions and responses are provided in Appendix G.

3.4.1 Purpose of the Platform

Stakeholders raised a number of points regarding the purpose of <u>repairmystuff.ie</u>, which may be summarised as follows:

- It is important to clearly establish the core purpose of <u>repairmystuff.ie</u> to ensure that it is developed and maintained with that purpose in mind and remains fit for its intended use into the future.
- One suggested purpose for the platform was to contribute to developing a community of practice around repair.
- One stakeholder noted that <u>repairmystuff.ie</u> was ahead of its time when launched, as one of the first national repair directories in Europe and in supporting the circular economy.
- There is a need to consider the utility and value of the platform to its users. There are other websites that perform a very similar function (i.e., providing information on available repair services), including Google and Facebook. To have value to its users (repairers and consumers), repairmystuff.ie needs to offer a unique selling point to these users.
- In order to justify public funding of the platform, there is a need to establish the rationale for the platform in the context of European and national policy and legislation, and to ensure that the platform is designed to support the objectives of these policies.

3.4.2 Funding and Resources

Funding and resources to support the ongoing operation and future development of <u>repairmystuff.ie</u> was a key discussion topic during the workshops. Stakeholder insights on this topic may be summarised as follows:

- The funding and resources currently available appear to be a key constraint on the future development of repairmystuff.ie.
- The funding currently available to MCC is not considered sufficient to allow it to develop the platform further or undertake additional validation exercises.
- Certain aspects of managing the platform are labour intensive, including the validation of new repairer profiles.
- Additional resources would be needed to facilitate the development of new features and functions, which could potentially be labour intensive if done manually (e.g., annual checks of repairer information).
- The platform needs a sufficient minimum level of ongoing investment to ensure that it can
 continue to perform its intended use (e.g., to ensure that the directory remains comprehensive
 and up to date).

- Concerns were expressed regarding the possibility of funding for the platform being discontinued in the future, and the associated loss of value and investment to date. Previous examples were cited of publicly funded circular economy platforms that were discontinued, including SMILE Resource Exchange.⁵⁵
- Potential options for ongoing funding were noted and discussed, including the potential use of membership fees from extended producer responsibility (EPR) schemes to support the national repair directory. It was noted that EPR schemes in their current form are focussed on waste management and generally do not support reuse or repair, but that this may change in future.

Extended producer responsibility (EPR) and repair

Extended producer responsibility (EPR) refers to a principle in environmental policy whereby the responsibility of producers is extended to the post-consumer stage of the product life cycle.⁵⁶ In the EU, EPR schemes require producers "to bear financial responsibility or financial and organisational responsibility for the management of the waste stage of a product's life cycle".⁵⁷ In Ireland, there are six EPR schemes (Producer Responsibility Initiatives (PRIs)) through which producers finance the collection and management of seven waste streams: packaging, batteries, WEEE, vehicles, tyres, farm plastics and specific single use plastic items.⁵⁸

In a 2024 discussion paper, the Right to Repair Europe Coalition (representing 140 organisations including the European Environmental Bureau (EEB), CRNI and the Rediscovery Centre) highlighted that EPR schemes as generally implemented in Europe are focussed on waste management and not sufficiently supportive of reuse. A notable exception is France, which has a repair fund financed by EPR fees paid by producers, used to fund the national repair voucher ('bonus reparation'). The Coalition has called for a harmonised EU EPR policy across Member States providing a source of funding for repair, including a fee structure that is aligned with the waste hierarchy and quantitative targets for waste reduction and reuse.⁵⁹

3.4.3 Product Categories

Stakeholders shared a number of insights regarding the product categories used on <u>repairmystuff.ie</u>, which may be summarised as follows:

- The possibility of reducing/consolidating the product categories on the platform was discussed, e.g., by narrowing down the categories to those most used in searches, or by aligning the categories with existing reporting requirements on product reuse and repair.
- The question was raised as to whether it would be preferable to focus efforts on covering a small number of priority product categories very well (which might allow for more robust validation of information provided, for instance) or alternatively having a comprehensive suite of categories covering all types of consumer goods.
- The product categories currently used on <u>repairmystuff.ie</u> are focussed on small consumer goods. Including categories such as automotive and gas boiler repair, which may be perceived as more mainstream professions, could raise the profile of the platform and B2C repair more generally.

⁵⁵ EC (2014) SMILE: saving money, reducing waste and creating business opportunities. Available at: https://ec.europa.eu/regional_policy/en/projects/europe/smile-saving-money-reducing-waste-and-creating-business-opportunities. Accessed February 2025.

⁵⁶ OECD (2001) Extended Producer Responsibility: A Guidance Manual for Governments. Paris, France: OECD Publications Service.

⁵⁷ Directive 2008/98/EC on waste and repealing certain Directives (2008), Official Journal of the European Union, L312/3.

⁵⁸ DCEE (2024) Extended Producer Responsibility (EPR).

⁵⁹ Right to Repair Europe (2024) Discussion Paper: Reforming Extended Producer Responsibility to Promote Repair. Available at: https://repair.eu/wp-content/uploads/2024/08/EPR-and-Repair-Funds-1.pdf. Accessed February 2025.

3.4.4 Validating and Maintaining Information on the Platform

Stakeholders emphasised the need to ensure that information on repairers on the platform is validated and maintained up to date. Insights on this topic may be summarised as follows:

- In order to ensure that the platform remains relevant and useful to its users, information provided on repairer profiles needs to be accurate and up to date.
- Alternative platforms, particularly Google, are more likely to have up to date information.
- Some repairer profiles on the platform are out of date, e.g., providing incorrect opening hours or contact details, or advertising an enterprise that is no longer in business.
- Stakeholders were supportive of repairers on the platforms being prompted to periodically verify/ update their information on the platform.
- Some repairers may be providing inaccurate information, e.g., indicating that they provide services for product categories that they do not in fact repair.
- Larger enterprises are more likely to have the resources to devote to keeping their information up to date on the platform.

3.4.5 Quality Assurance and Third-party Certifications

A key discussion topic during workshops was the need for quality assurance of repair services and the potential use of third-party certifications. Insights shared by stakeholders on this topic may be summarised as follows:

- The quality of repair services offered by repairers registered on <u>repairmystuff.ie</u> could vary greatly. There is a risk that, if consumers procure repair services that fail to meet expectations or are unsafe, this could negatively affect perceptions of the sector and the reputation of the platform.
- To support consumers to find safe, high-quality repair services, <u>repairmystuff.ie</u> should enable repairers to indicate on their profiles that they hold third-party certifications, adhere to standards and/or have membership of industry organisations or bodies, where relevant.
- In addition to third-party certifications, <u>repairmystuff.ie</u> could require repairers to validate their commercial status (e.g., by providing a Company Registration Number or indicating that they are a sole trader).
- The use of third-party certifications is a particularly important consideration where high-risk
 product categories are concerned (e.g., EEE, lawnmowers, bicycles, e-bikes and e-scooters). A
 requirement for repairers registered on <u>repairmystuff.ie</u> to hold third-party certifications (or not)
 could potentially be based on the level of risk associated with the product category concerned.
- The use of third-party certifications on the platform could contribute to raising the profile of the sector and improving the perceived legitimacy of repair professions.
- To complement this approach, <u>repairmystuff.ie</u> could include a section with information on the common third-party certifications of relevance to the sector.
- Without a validation process in place, there is a risk that some repairers could make false claims on the platform about certifications that they do not hold.
- Given the scope of <u>repairmystuff.ie</u> and the wide range of certifications used by different
 categories of repairers, it is not likely to be feasible for the administrator of the platform to check
 and validate all such claims. By reducing the number of product categories on the platform, it may
 be feasible for the administrator to validate a limited number of specific third-party certifications.

- <u>Repairmystuff.ie</u> could offer flexibility in this respect, allowing repairers to indicate that they hold relevant certifications, but not making this a mandatory requirement for registration.
- Some stakeholders were of the view that <u>repairmystuff.ie</u> should allow all types of repairers to register, not only those that hold relevant certifications or are manufacturer approved. It was noted that consumers would want a range of options to choose from, depending on their preferences and the nature of the product/repair, from social enterprises to sole traders to manufacturer-accredited enterprises.
- There would be value in developing a national quality standard for repair services. Such a standard does not currently exist and sufficient funding and resources would be needed for its development and implementation. If such a national standard were developed, repairers shouldn't be expected to pay and should instead be supported to achieve certification. CRNI's ReMark quality mark is a good example in this area. Joining the trial of the scheme was free for participants. Resourcing has been the main barrier to further development of the quality mark.
- One stakeholder suggested that repairmystuff.ie could include a built-in statement of competence
 as part of the registration process, with a standard set of questions (regarding, for example, thirdparty certifications, years of experience, training and insurance cover) that repairers would be
 required to respond to.

Third-party certifications used by repairers

There are several examples of third-party certifications, accreditations and quality marks used by repairers in Ireland, including Cytech accreditation for bicycle technicians; CRNI's ReMark quality mark for social enterprises engaged in reuse and repair; and Apple Authorised Service Provider certification for third-party repairers of Apple products. There are no known Irish or European standards related to repair services.

Cytech is an internationally recognised training and accreditation scheme for bicycle technicians, founded by the Association of Cycle Traders in the UK over 30 years ago. Training is available in Ireland, the UK, South Africa, Canada and Australia. In April 2024, the Rediscovery Centre in Ballymun launched Ireland's first Cytech accredited training centre. Previous research by the EPA identified over 80 Cytech accredited technicians providing bicycle repair services in Ireland. With the introduction of the Rediscovery Centre's training programme, that number is expected to increase.

ReMark is a quality mark developed by CRNI for social enterprises engaged in reuse and repair activities in Ireland. The quality mark was launched as a pilot project in 2017, when seven social enterprises were certified, including IRD Duhallow Revamp in Co. Cork and Deaf Enterprises in Cork (both furniture repair), and An Mheitheal Rothar in Galway (bicycle repair). The certification is focused largely on quality assurance and combatting negative consumer perceptions of used goods. Participation in the scheme resulted in improved operational and governance standards among participants, resulting in improvements in data collection, merchandising approach, store appearance and customer service, for example. The initiative received funding from the EPA Green Enterprise fund and the DCEE Circular Economy Innovation Grant Scheme (CEIGS). Based on learning from similar schemes, CRNI has recommended that the future roll-out of the initiative would require a delivery model that has sufficient capacity and resourcing, sectoral knowledge and insight.⁶³

Some manufacturers of consumer goods offer certification schemes whereby third-party repairers are approved to repair on their behalf. One such scheme used by repairers in Ireland is the **Apple Authorised Service Provider** certification. This scheme provides third-party technicians with the skills training and equipment needed to repair Apple products within and out of warranty.⁶⁴

In response to the stakeholder survey, IPC 7711/21 – Rework, Modification and Repair of Electronic Assemblies, was identified as a standard of relevance to EEE repair. The standard is provided by IPC, a global trade association for the electronics industry.⁶⁵



Figure 14: ReMark quality mark (source: CRNI)

⁶⁰ Cytech (2025) Home. Available at: https://www.cytech.training/. Accessed March 2025.

⁶¹ Rediscovery Centre (2024) Press Release: Minister Joe O'Brien TD Visits Ballymun to Celebrate the Launch of Cytech Training Facilities. Available at: https://www.rediscoverycentre.ie/2024/05/27/press-release-minister-joe-obrien-td-visits-ballymun-to-celebrate-the-launch-of-cytech-training-facilities/. Accessed March 2025.

⁶² EPA (2025) Circular Insights Series: Business-to-consumer Repair Enterprises in Ireland. Available at: https://www.epa.ie/ publications/circular-economy/resources/EPA_CircularInsights_Repair_B2C-Enterprises_Jan25.pdf. Accessed March 2025.

⁶³ CRNI (2025) ReMark Quality Mark. Available at: https://crni.ie/re-mark/. Accessed March 2025.

⁶⁴ Apple (2025) Find authorized repair and service locations. Available at: https://getsupport.apple.com/repair-locations?locale=en_let. Accessed March 2025.

⁶⁵ IPC (2025) IPC Store. Available at: https://shop.ipc.org/. Accessed March 2025.

3.4.6 Public Awareness of the Platform

Awareness of the platform among the general public was another discussion topic during the workshops. Stakeholder insights on this topic may be summarised as follows:

- <u>Repairmystuff.ie</u> may be perceived as somewhat static, in that it hasn't been developed substantially since its launch in 2017, and some of the information provided on the platform is out of date.
- There is a need for ongoing promotion of the platform and SEO to promote consumer awareness and engagement.
- Blog or social media posts on other platforms could also be considered to boost awareness of the platform.
- Promotional campaigns for the platform should be aligned with relevant events to make the link between *repairmystuff.ie* and the circular economy more broadly.
- Gaps in geographic coverage of repairers on the platform could be problematic in the event
 of a national-level awareness campaign. If a new user failed to find a repairer in their area on
 repairmystuff.ie, they may not be inclined to use the platform again. However, promotional
 activities could also increase awareness of the platform among repairers, increasing sign-up and
 thereby improving coverage.

3.4.7 Community Repair

Stakeholders generally supported expanding the scope of <u>repairmystuff.ie</u> to include community repair initiatives, such as repair cafés. Stakeholder insights on this topic may be summarised as follows:

- There is currently no centralised platform listing upcoming repair cafés in Ireland. A lot of repair café groups are listed on the Change X website. However, many of these are no longer active, which limits the value of this webpage.⁶⁶
- Stakeholders noted that the occurrence of repair cafés in Ireland has been hindered by barriers, including a lack of funding and product liability insurance associated with high-risk product categories. However, there is substantial interest in these events, which are expected to increase in prominence as barriers are addressed.
- A calendar of upcoming events would be an ideal format for listing repair cafés on <u>repaimystuff.ie</u>.
 Repair cafés tend to be temporary, pop-up events with no fixed location, so a calendar or page of 'upcoming events' would be more valuable than a location-based directory.
- Organisers of repair cafés could write blog posts about the events to be posted on the platform afterwards.
- Organisers of repair cafés should not be expected to pay to list their events on the platform, as budgets for these types of events are severely constrained.
- Several stakeholders noted the importance of differentiating community repair from commercial repair services listed on the platform. Repair cafés are social, community-based events that do not operate for profit. The way in which the platform features community repair should set appropriate expectations about these types of events.

Repair cafés in Ireland

Repair cafés are free, community repair events that rely on volunteers to demonstrate and carry out repair work on products brought to the event by members of the public. By attending these events and engaging with repairers, members of the public can get their items repaired free of charge and learn valuable repair skills in a community setting. In Ireland, repair cafés have been organised by a range of actors, including local community groups; 'hackerspaces' and 'makerspaces' such as TOG Hackerspace and Fingal Makerspace; the Rediscovery Centre; and Local Authorities, including Fingal and South Dublin County Councils. Funding to organise repair cafés has come from a variety of sources, including Horizon 2020 and Local Authorities. Previous research has identified challenges for repair cafés in Ireland today, including high insurance premiums where higher risk product categories are concerned, particularly EEE and, to a lesser degree, bicycles and furniture. ⁶⁷

3.4.8 Other Categories of Circular Services and Initiatives

Stakeholders were broadly supportive of sellers of refurbished goods and purchasers of goods for refurbishment being listed on <u>repairmystuff.ie</u>. However, stakeholders expressed concerns that this could undermine the objective of the platform to promote repair, by facilitating consumers to replace their items with refurbished goods rather than attempting repair. Stakeholder also noted the potential value of including direct reuse, product sharing and leasing services and initiatives on the platform.

3.4.9 The Platform as a Data Collection Tool

The value of <u>repairmystuff.ie</u> as a data collection tool was a key discussion topic during the stakeholder workshops. Key insights shared on this topic are summarised as follows:

- The data on the platform provides a snapshot of the B2C repair sector in Ireland the number of repairers, their locations, the categories of consumer goods they repair, etc. This data represents a valuable resource for monitoring the repair sector in Ireland. This data was recently used by the EPA to undertake a Circular Insights study describing the baseline scenario for B2C repair enterprises in Ireland.⁶⁸
- The data collected by the platform (i.e., by repairers registering and updating their profiles) can be tailored to meet the needs of associated reporting. In this way, the platform could be set up to contribute to monitoring requirements (e.g., for the national repair target as committed to in the National Waste Management Plan for a Circular Economy, national reporting obligations on reuse to the EC⁶⁹).
- The platform also collects data on the volume of user traffic. It was noted that it would be useful to have demographic data on the profile of visitors to the website, if this is possible.
- The data on the platform contains the contact details of a significant proportion of all repairers operating in Ireland today. This contact information could potentially be used to inform repairers of new policies, legislation, events or other important developments that may affect them. This could potentially be achieved by giving registrants the option of signing up to receive a regular newsletter.

⁶⁷ Rediscovery Centre (2023) Removing Insurance Barriers to Repair – EPA Strategic Partnership 2023. [Presentation slides]. Available at: https://www.rediscoverycentre.ie/research/removing-insurance-barriers-to-repair/. Accessed February 2025

⁶⁸ EPA (2025) Business-to-consumer repair enterprises in Ireland. Available at: https://www.epa.ie/publications/circular-economy/resources/business-to-consumer-b2c-repair-enterprises-ireland.php. Accessed February 2025.

⁶⁹ EPA (2023) Reuse statistics for Ireland. Available at: https://www.epa.ie/our-services/monitoring--assessment/waste/national-waste-statistics/reuse/. Accessed February 2025.

- The platform does not currently include a mechanism for collection of data on repairs undertaken.
 As noted in Section 3.4.12, the integration of a feature like a repair voucher would facilitate the collection of this type of data.
- If data on product repairs were collected, this could be aligned with the Open Repair Data Standard, which records information on product category, brand, year of manufacture, fault, solution, work carried out, repair status and barrier to repair, if any.⁷⁰

3.4.10 Repair Blog

Several stakeholders highlighted the potential value of having a blog built into <u>repairmystuff.ie</u> that could be used to highlight stories of repaired items, the work and social/environmental value of repairers registered on the platform, and news from community repair events. Blog posts could be re-posted across other platforms to promote consumer awareness.

3.4.11 Reviews of Repairers

Several stakeholders noted that it would be valuable for <u>repairmystuff.ie</u> to include a mechanism for consumers or other repairers to submit reviews of repairers listed in the directory. This could serve as a quality control mechanism requiring limited input from the administrator. However, it was noted that such a mechanism would be susceptible to manipulation (e.g., submitting false reviews to artificially increase or decrease ratings).

3.4.12 Repair Vouchers

Several stakeholders suggested that <u>repairmystuff.ie</u> could be used as a platform to provide access to a national repair voucher, should such an incentive be introduced in Ireland. It was also noted that linking <u>repairmystuff.ie</u> to a repair voucher would facilitate data collection on repairs undertaken using the voucher.

3.4.13 Spare Parts

Several stakeholders suggested that <u>repairmystuff.ie</u> could be used by repairers to advertise or request spare parts for completing repairs. It was noted that this could provide a local alternative to ordering spare parts from overseas, supporting decarbonisation.

3.4.14 Repair Manuals and Instructions

Stakeholders noted that the platform could be used to provide or signpost information on undertaking repairs for the public and/or professional repairers, e.g., product repair manuals, tutorials, etc. However, it was noted that there could be a risk associated with providing such information, which should be sourced from reputable sources only, e.g., iFixit. Content on DIY repair skills could be co-developed with repair professionals in Ireland, having the dual benefits of educating the public and raising the profile of the sector.

3.4.15 Social Economy

Stakeholders discussed the role of <u>repairmystuff.ie</u> in supporting social enterprises engaged in the repair sector. As highlighted by previous research undertaken by the EPA, social enterprises constitute a small proportion of repair enterprises, but play an important role in the sector, particularly in the provision of training.⁷¹ It was suggested that a valuable addition to the platform would be a mechanism allowing social enterprises and purpose-led commercial enterprises to provide a description of their social and

⁷⁰ Open Repair Alliance (n.d) Open Repair Data Standard. Available at: https://openrepair.org/open-data/open-standard/. Accessed February 2025.

⁷¹ EPA (2025) Repair Skills Training and Education in Ireland. Available at: https://www.epa.ie/publications/circular-economy/resources/repair-skills-training-and-education-in-ireland.php. Accessed February 2025.

environmental mission and value. As noted in Section 3.4.10, a blog would also provide an opportunity to share content spotlighting the social and environmental contributions of social enterprises operating in this area.

3.4.16 Repair Training

It was noted that <u>repairmystuff.ie</u> could be used to provide information on available repair skills training and education in Ireland, and to highlight repair enterprises that offer training as part of their activities. A field could be added to the registration/profile form allowing repairers to indicate if they offer repair training. It was also noted that the data contained in the platform could be used to identify areas that are poorly served by particular repair services and where there might be an associated need for training.

3.4.17 Policies, Rights and Obligations

A number of stakeholders noted that <u>repairmystuff.ie</u> could be used to provide information to repairers and the public on the key policies related to repair (e.g., the Whole of Government Circular Economy Strategy, the EPA Circular Economy Programme, the National Waste Management Plan for a Circular Economy, the Right to Repair Directive, and the Ecodesign for Sustainable Products Regulation). It was noted that this could be particularly valuable to smaller repair enterprises, who may not be aware of their rights and obligations under relevant legislation. Conversely, it was noted that stakeholders may not need to know the policy context associated with the platform and that this could overcomplicate the platform.

3.4.18 B2B Repair Services

In addition to its current function of providing a directory of B2C repairers, stakeholders noted that the scope of <u>repairmystuff.ie</u> could potentially be expanded to include enterprises offering business-to-business (B2B) repair services. One example cited was repairers of tertiary packaging used in supply chains, such as wooden pallets and flexible intermediate bulk containers (FIBCs), whose services would support packaging reuse in accordance with the Packaging and Packaging Waste Regulation.⁷²

It was suggested the platform could potentially provide a matchmaking tool for circular/green procurement, connecting public bodies and private businesses seeking enterprises with the capacity to provide repair services/refurbished goods at scale. However, it was noted that the public procurement process is highly formalised, and it is unclear how <u>repairmystuff.ie</u> could fit into the existing framework.

⁷² Regulation (EU) 2025/40 of the European Parliament and of the Council of 19 December 2024 on packaging and packaging waste, amending Regulation (EU) 2019/1020 and Directive (EU) 2019/904, and repealing Directive 94/62/EC, Official Journal of the European Union, L series, 22.1.2025. Available at: https://op.europa.eu/en/web/eu-law-in-force/bibliographic-details/-/elif-publication/d34251c8-d865-11ef-be2a-01aa75ed71a1. Accessed February 2025.

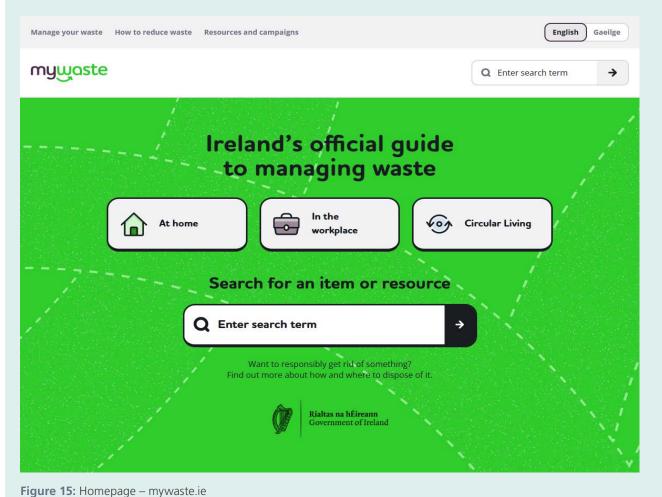
3.4.19 Links to Other Platforms

A key discussion topic during the stakeholder workshops was the need to coordinate repairmystuff.ie with other Irish circular economy platforms. Stakeholder insights on this topic may be summarised as follows:

- <u>Repairmystuff.ie</u> could be linked to and coordinated with other circular economy platforms in Ireland, such as <u>mywaste.ie</u> (refer to case study, below) and the new national circular economy platform, <u>circular.ie</u>.
- Coordination and alignment across different circular economy platforms may be harnessed to
 guide the 'user journey', ensuring that consumers are signposted to the most circular solution for
 their problem. For instance, a consumer with a defective item should be directed to <u>repairmystuff</u>.
 <u>ie</u> in the first instance, and <u>mywaste.ie</u> as a last resort.
- It may be appropriate to centralise the management of publicly funded circular economy platforms in Ireland, to promote coordination across platforms, avoid duplication and secure efficiencies.

Case study: mywaste.ie

Mywaste.ie is "Ireland's official guide to managing waste". The website provides information for citizens and businesses on the responsible management of waste, with specific guidance for different waste streams. It is administered by the Regional Waste Management Planning Offices on behalf of DCEE. It was established in 2018 to address an identified need for a centralised and official source of accurate information on waste management in Ireland. The website was extensively updated in 2024. It is structured with the Waste Framework Directive and waste hierarchy in mind. To discourage items being prematurely discarded as waste, the website includes hyperlinks to repairmystuff.ie (e.g., on the page for bicycles). Keeping information on the website up to date has been identified as a key challenge for the administrators. In 2023, the volume of user traffic to mywaste.ie was 494,036, over double that of repairmystuff.ie (at 234,660).⁷³



⁷³ Page views as measured by Google Analytics

3.4.20 Other Barriers to Repair

<u>Repairmystuff.ie</u> is a platform that provides consumers with information on available repair services in their area and nationally for particular product categories. In addition to ensuring that <u>repairmystuff.ie</u> is fit for its intended use, stakeholders highlighted the need to address other challenges for the repair sector in Ireland, including the following:

- High operating costs and administrative burdens;
- The cost of repair relative to replacement, which often does not incentivise consumers to repair;
- Lack of access to spare parts;
- Lack of design for repairability;
- Lack of access to repair information;
- Lack of representation for the sector and sub-sectors; and
- High insurance premiums related to product liability and repair of high-risk products.

3.4.21 Summary

Key insights shared by stakeholders as part of the workshops and surveys may be summarised as follows:

- In order to inform the future development of <u>repairmystuff.ie</u>, it is necessary to clearly define the overarching purpose/aim of the website, its unique selling point to its users compared with other websites, and the policy rationale for the website.
- Consistent and sufficient funding and resources are needed to ensure that <u>repairmystuff.ie</u> can
 continue to fulfil its intended use and be developed, as needed, in the future. At this stage,
 additional funding and resources would be required to develop the website further.
- In order to ensure that <u>repairmystuff.ie</u> remains relevant and useful to its users, information on repairers provided in the directory needs to be maintained in an accurate and up-to-date status. Duplication of profiles, profiles for enterprises no longer in business and incorrect or outdated information have been observed and may negatively affect the value of the directory for its users. Stakeholders agree that there should be a mechanism in place prompting repairers registered on the website to periodically check and update their information.
- Stakeholders expressed differing views on the use of third-party certifications on repairmystuff. ie. Stakeholders generally agreed that allowing repairers to indicate where they hold a relevant certification would be a positive development, supporting consumers to find safe, high-quality repair services. Some stakeholders suggested that third-party certifications (e.g., manufacturer accreditation) could be used as mandatory eligibility criteria where high-risk product categories are concerned (e.g., EEE). Other stakeholders expressed concerns that this would exclude a large proportion of repairers from appearing in the directory and noted that additional barriers to entry and administrative hurdles should be avoided given the significant challenges already faced by the sector.
- Stakeholders were generally in agreement that community repair initiatives (i.e., repair cafés) should be added to <u>repairmystuff.ie</u>. Repair cafés, which perform different functions to commercial repair enterprises, should be differentiated on the platform. A calendar of upcoming events would be well suited to this purpose.

- <u>Repairmystuff.ie</u> is effectively a database of information on B2C repair enterprises operating in Ireland. There is an opportunity to use the platform to gather data for the purposes of monitoring and reporting on reuse and repair in the context of the circular economy in Ireland. In developing the website, consideration should be given to how best to tailor the data collected to align with relevant reporting requirements and targets in national and EU policy.
- A number of additional features were identified that could potentially be integrated into <u>repairmystuff.ie</u>, where appropriate, as listed below. It is noted that a number of these features would be subject to policy support for implementation (e.g., the introduction of a national repair bonus/voucher scheme):
 - Community repair (i.e., upcoming repair cafés);
 - Sellers of refurbished goods and purchasers of defective goods for refurbishment;
 - Direct reuse, product sharing and leasing services and initiatives;
 - ▶ B2B repair enterprises and services;
 - A repair blog highlighting stories from the repair sector in Ireland (e.g., accounts of repaired items, updates from repair cafés, profiles on repairers, etc.);
 - A national repair bonus/voucher scheme;
 - Advertisements and requests for spare parts;
 - Repair manuals and instructions;
 - Consumer or peer reviews of repair enterprises;
 - Information on available repair skills training and education; and
 - ▶ Information for consumers and/or repairers on relevant law and policies.
- Stakeholder insights highlighted a number of ways in which <u>repairmystuff.ie</u> could be used to support the repair sector – beyond its core function of helping the public to find repair enterprises.
 For example, the website could be used to:
 - Support the development of a community of practice around repair in Ireland;
 - ▶ Provide a single source of information on third-party certifications, training and/or policy developments of relevance to existing and prospective professionals in the sector;
 - ▶ Keep repairers informed of key developments, publications and events (e.g., through a regular newsletter sent to repairers, and/or blog posts);
 - Provide access to repair information (e.g., manuals) and spare parts;
 - Improve consumer awareness of the repair sector and its role in the circular economy (e.g., through blog posts on repair professionals, repair cafés, repaired items, etc.); and
 - Increase consumer confidence in available repair services (e.g., by highlighting certified repairers, profiling repairers who are masters of their craft).
- <u>Repairmystuff.ie</u> should be aligned with (and, where relevant, linked to) other publicly funded websites related to the circular economy, including <u>mywaste.ie</u> and <u>circular.ie</u>. It may be appropriate to centralise the management of these platforms.

4. Conclusions

This study has provided an assessment of <u>repairmystuff.ie</u> to inform its future development. It has been informed by reviews of relevant legislation; other repair directories in EU Member States; and the content, digital architecture and user experience design of repairmystuff.ie; as well as stakeholder engagement.

Eight repair directories were identified from other Member States, including Austria, France, Latvia, Luxembourg, the Netherlands, Slovakia and Slovenia. These were reviewed to identify best practice approaches to inform the future development of the Irish platform.

A review of the digital architecture of <u>repairmystuff.ie</u> was undertaken. It was determined that the website is hosted by a highly secure and scalable service provider that provides acceptable availability and disaster recovery guarantees relative to the website's requirements. The findings of this review did not raise any concerns regarding the future availability, resilience, scalability, maintainability or information security of the website.

The UX design review, which has been informed by usability testing and a heuristic evaluation of the UI, identified a number of recommendations to improve the usability of the website – particularly its search function and the repairer registration and log-in process.

During the stakeholder engagement phase, insights to inform the development of the platform were gathered from a range of stakeholders, including organisations involved in the administration of <u>repairmystuff.ie</u>, other European repair directories and circular economy platforms; and other public and private sector organisations active in the repair sector and circular economy in Ireland.

Based on the findings of the study, recommendations have been developed to guide the future development of repairmystuff.ie. These have been divided into core recommendations to support the ongoing operation of a national repair directory that delivers the platform's aims in the short- to medium- term, and additional options for consideration, depending on the Government's future vision for the platform.

5. Recommendations

Based on the assessment undertaken, the following recommendations are made for the future development of the national repair directory, *repairmystuff.ie*.

It is important to note that the implementation of these recommendations would require the allocation of additional funding/resources for the administration of the platform. It is recommended that an assessment be undertaken of the resources required in consultation with the relevant stakeholders, including the administrator, digital service provider and funding partner(s). It is recommended that these improvements be delivered in a phased manner, allowing sufficient time for development and testing of the enhanced functionality.

Table 10: Recommendations for the future development of repairmystuff.ie

Theme	Recommendations
Management and administration	• Develop a vision and management plan for the platform: Clearly define the medium- to long-term vision for repairmystuff.ie. This exercise should seek to define the overarching aims and objectives of the platform, the value of the platform to its users (the general public and repairers); and to identify relevant policies and legislation and determine how the platform can support them. It should also consider potential options for the funding and administration of the platform into the future (e.g., use of EPR compliance fees to fund the website, as in the case of the French QualiRépar platform). Once a model is agreed for the future administration of the platform, lead organisations responsible for delivery of each agreed action from the recommendations below may be identified.
	 Carry out annual reviews of the platform: Ensure the performance of the website is reviewed on an annual basis by key stakeholders – at a minimum, the administrator, funding partner(s) and digital service provider – to identify any issues and opportunities for improvement to be actioned on an ongoing basis.
	 Coordination with other circular economy platforms: Ensure the website is coordinated and linked with other publicly funded circular economy platforms, including <u>mywaste.ie</u> and the new national circular economy platform, <u>circular.ie</u>. The website should be developed to incorporate additional functions only where this is not duplicated on another publicly funded website.

Theme **Recommendations** Improve the search function: This study has identified a number of issues and areas for improvement with the search function on repairmystuff.ie. As this is the core function of the website, it is recommended to address these issues as a matter of priority, to ensure that the platform remains fit for its intended use. Recommendations for improvement of the search function are summarised below. Improve repairer registration and log-in process: Several existing issues and recommended interventions have been identified to improve the registration and log-in process for repairers, and to enhance the quality and scope of information displayed on repairer profiles – thereby improving search results for the public. Recommendations for improvement of the repairer registration and log-in process are summarised below. Tidy up the existing database of repairers in the directory: Undertake a review of existing registered repairers to identify and remove duplicates and repairer enterprises that are no longer in business. Require repairers to regularly update their information: Add a mechanism whereby repairers are automatically requested to check and update their profiles on an annual basis (e.g., an autogenerated email or series of emails once a year). Consider Content of the linking this to a mechanism whereby repairer profiles that have not been checked platform for some time (e.g., 15 months) are temporarily deactivated pending the repairer carrying out their check. Add a calendar of upcoming events: Add a calendar of upcoming events on a dedicated webpage, to be populated by the administrator, including repair cafés. The website should include a mechanism allowing organisers of repair cafés to submit requests for their events to be listed in the calendar free of charge (e.g., via a form requesting standard information on the event). A description of repair cafés should also be provided to clearly differentiate repair cafés from commercial repair services. This feature should be added to <u>repairmystuff.ie</u> only where it is not already planned to provide this on another publicly funded website - consideration may need to be given to the most appropriate location for this information. Ensure the 'FAQs' and 'Contact' buttons on the website are made more prominent and easy to find for users. Use the platform as a data collection tool to monitor the repair sector: Ensure that the data inputted to repairmystuff.ie is aligned, where possible and appropriate, with relevant policies and monitoring requirements related to reuse and repair (e.g., the forthcoming national repair target as referenced in the National Waste Management Plan for a Circular Economy⁷⁴).

⁷⁴ EPA (2023) Reuse statistics for Ireland. Available at: https://www.epa.ie/our-services/monitoring--assessment/waste/national-waste-statistics/reuse/. Accessed February 2025.

Theme	Recommendations
	• Promotional campaigns: Enhanced promotional activities are recommended to increase consumer awareness of <u>repairmystuff.ie</u> . These activities could be coordinated with events managed by central and local government and relevant state agencies that support repair and circular economy objectives. It will be important to ensure that any agreed changes to the content of the platform are completed before undertaking broad-scale promotional activities – particularly the removal of duplicates and enterprises no longer in operation.
	 Search engine optimisation (SEO): Undertake SEO to ensure that members of the public are directed to <u>repairmystuff.ie</u> when searching for repair services online.
User engagement	 News page/blog: Enhance the existing news page/blog with the addition of engaging content provided by a more diverse range of actors (e.g., updates and photos from repair cafés, repair 'stories', interviews with repairers, updates on relevant policy developments, etc.) to promote consumer awareness and raise the profile of the repair sector.
	 Newsletter for repairers: Consider using the platform to engage the repair sector by allowing registered repairers to opt-in to receiving a regular (e.g., quarterly) newsletter developed by the administrator and/or EPA with information of relevance to the sector (e.g., new policies and legislation, upcoming events, articles and interviews, etc.).

Search function: summary of recommended improvements

- Remove popular tags feature.
- Replace location search bar prompt ('Your location...') with more appropriate prompt (e.g., 'City/town').
- Remove locations in UK from location search bar drop-down.
- Reduce default search distance to 5km or 10km unless no results are found in that area, in which case increase distance until results are shown on map.
- Ensure map zoom function responds to mouse wheel.
- Consider removing distance slider feature, instead ensuring map zoom function and default search distance work well.
- In filters in search results, separate product categories and sub-categories into separate fields.
- Ensure search results shown correspond to product category/product keyword used in search.
- Ensure format of how repairer profiles are listed in search results is consistent (current format is an
 inconsistent mix of logos and map previews) it is suggested to use logo or photo provided by repairers
 only.
- Expand filters in search results to include additional criteria (e.g. opening hours, third-party certifications), where relevant.
- Link repairer profiles to Google Maps, making it easier for users to access location, directions and reviews without having to complete a separate search.

Search function: summary of recommended improvements

- Make log-in button more visible/prominent on homepage.
- On registration page, reduce height of banner, remove redundant buttons ('Why Register Your Business?', 'Start Now For Free'), and move FAQs and other content to bottom of page (i.e., below registration form).
- In registration form, provide clearer description of information sought, where needed.
- In registration form, make basic fields mandatory it is suggested that all fields, except website, social media links and profile picture/logo, are required.
- Amend registration form such that opening hours are inputted using pre-defined selectors, not free text, facilitating comparison of opening hours in search results.
- Allow repairers to add hyperlinks to profiles on other commonly used social media platforms, including Instagram and LinkedIn.
- Add mechanism allowing repairers to enter multiple locations for a single enterprise, with different opening hours, addresses, contact details, etc.
- Consider allowing repairers to see their location on a map when registering/updating profiles and to move the pin to indicate their precise location, where needed.
- Add a field allowing repairers to add third-party certifications/authorisations as a list.⁷⁵ It is suggested
 to add a disclaimer to repairer profiles that these are not validated by <u>repairmystuff.ie</u> unless otherwise
 indicated.
- Add a field allowing social enterprises and purpose-led commercial repair enterprises to describe their social and environmental mission and impact.
- Consider allowing repairers to indicate what spoken languages they can work in.
- Ensure automatic password recovery process is in place and fully functional.
- Ensure confirmation of registration emails generated automatically, with information on validation process and timeline.
- Ensure confirmation of validation emails generated automatically, with link to repairer profile.

The incorporation of third-party certifications would give repairmystuff.ie added value relative to other platforms that are not specific to repair, such as Google, providing consumers with valuable sector-specific information to inform their decision making. It could also highlight to repair professionals and those interested in entering the sector the relevant certifications and accreditations available for different product categories, signposting appropriate training and encouraging a professionalisation of the sector.

6. Additional Options for Consideration

In addition to the core recommendations of this study identified above, a number of potential options for the future development of the platform were identified. These largely relate to limiting or extending the scope of platform (e.g., reducing the scope to focus on a smaller number of product categories, or extending the scope to include circular services other than repair). The applicability of these options should be determined based on the identified vision and plan for the website (e.g., identified aims, objectives, target audience) (refer to first recommendation in Section 4, above).

Table 11: Additional options for consideration for the future development of repairmystuff.ie

Theme	Options for consideration
	If, in the future, it is intended to link <u>repairmystuff.ie</u> to a specific scheme or initiative (e.g., a repair voucher, third-party certification or standard), limiting the scope of the directory to priority product categories would reduce the administrative burden associated with validating repairer eligibility. This approach has been adopted by several European repair directories, including:
	 The Austrian 'Repair Bonus' platform, which provides a directory of repairers of EEE and bicycles that are eligible to participate in the national repair bonus scheme;
Limiting the scope of the directory to priority product categories	 The French QualiRépar platform, which provides a directory of repairers of household EEE that are certified with the QualiRépar ecolabel and eligible for the national repair voucher scheme; and
	 The Dutch 'National Repairers Register', which provides a directory of repairers accredited to operate in accordance with the national standard for electronics repair.
	However, if the intention of <u>repairmystuff.ie</u> remains to provide a comprehensive directory of repairers of consumer goods, it is not recommended to limit the scope to priority product categories. In Austria, there are two separate directories in use, one of which is similar to <u>repairmystuff.ie</u> and provides a comprehensive directory covering a broad range of product categories (the 'Repair Guide') and another which provides a more limited directory dedicated solely to the national repair voucher scheme ('Repair Bonus'). These platforms are closely coordinated and linked with each other. This approach ensures that there is a comprehensive directory of repairers available to consumers, while repairs subsidised by the public repair voucher are undertaken only by repairers with a specified commercial status.

Theme Options for consideration Numerous potential additional features and services that could be incorporated into repairmystuff.ie were identified by this study. Depending on the agreed objectives and target audience of the platform, consideration could be given to integrating one or more of these optional extras into the platform: Other circular economy services that could be added to the directory: Business-to-business (B2B) repair services; Direct reuse enterprises and initiatives (e.g., charity shops, second-hand shops, vintage and antique shops); Sellers of refurbished goods, and purchasers of used goods for refurbishment (e.g., electronics trade-in shops); Product leasing services and initiatives (e.g., car rental, bike rental, 'libraries of things'); Zero waste/refill shops and hubs; and Extending the Community reuse, repair and sharing facilities (e.g., 'fixotekets', 'makers' spaces', scope of the 'Mens' Sheds', community workshops). directory to include other Other digital features that could be integrated into the website: features and A digital noticeboard/marketplace allowing retailers and repairers to advertise and services seek spare parts to complete repairs; A hub of technical information to facilitate professional and/or self- repair (e.g., repair manuals, instructions, tutorial videos); A searchable database of repair skills training and education programmes available in Ireland for professional and/or self- repair; A summary of EU and national policies and legislation related to repair and its role in the circular economy; and Information and resources to support repair enterprises and/or community repair organisers (e.g., overview of legal rights and obligations, available funding opportunities, support with overcoming insurance barriers, etc.). If other categories of circular economy services and initiatives other than repair are to be added to the website in future, it is recommended that these be displayed in the same search function and map as existing repairers but clearly distinguished for users visually and with the use of filters. Revise product categories used: Consider revising/consolidating the product categories used on the platform so that they are aligned with items commonly searched for by users and, where relevant, with policies and reporting requirements. Require repairers to validate their commercial status to register on the platform (e.g., Other by providing a Company Registration Number (CRO) or Registered Charity Number options for (RCN) (which would not be publicly displayed on their profile) or indicating that they consideration are a sole trader). Develop a national quality standard for repair enterprises. This could build on the learnings of CRNI's ReMark initiative, a quality mark for social enterprises engaged in reuse and repair. Accredited enterprises could have their status validated on repairmystuff.ie.

APPENDIX A UX Heuristic Evaluation Methodology Details

A.1 Nielsen's Heuristic Principles

Jakob Nielsen's heuristic principles are a set of guidelines used to evaluate the usability of user interfaces. These principles are crucial for reviewing the UX of websites because they help identify and resolve usability issues early in the design process, ensuring a more intuitive and satisfying user experience. By adhering to these heuristics, designers can create interfaces that are more efficient, user-friendly, and aligned with user expectations. Nielsen's 10 heuristic principles are as follows, along with a brief explanation of each:

- System status visibility: Keep users informed about what is happening through timely feedback.
- Match between system and the real world: Use familiar language and concepts to make the system intuitive.
- User control and freedom: Provide ways for users to undo and redo actions easily.
- Consistency and standards: Follow platform conventions and maintain uniformity in design.
- Error prevention: Design interfaces that prevent errors from occurring in the first place.
- Recognition rather than recall: Minimise the user's memory load by making options and information visible.
- Flexibility and efficiency of use: Cater to both novice and expert users by providing shortcuts and flexible interfaces.
- Aesthetic and minimalist design: Avoid unnecessary information and keep the design clean and focused.
- Help users recognise, diagnose, and recover from errors: Provide clear error messages and solutions
- **Help and documentation**: Offer easily accessible help and documentation to assist users when needed.

A.2 Severity Classifications

Based on the evaluation using Nielsen's principles, the UI is assigned a severity classification, as set out below. This way, the importance of what has been detected can be prioritised:

- **BP**: Best practice.
- Severity 0: Recommendation.
- Severity 1: Aesthetic problem only: fix it if time available.
- Severity 2: Minor usability problem: fixing this should have low priority.
- Severity 3: Major usability problem: important to fix, given high priority.
- Severity 4: Usability catastrophe: fix this for the proper functioning of the product.

APPENDIX B Stakeholders

Table 12: Stakeholders engaged to inform this study

Stakeholder	
Absolut Internat	
Community Resources Network Ireland (CRNI)	
Department of Climate, Energy and the Environment (DCEE)	
Donegal County Council	
ERP Ireland	
Fastrack into Information Technology (FIT)	
Full Circle Digital Marketing (FCDM)	
GreenIT	
IQUTECH	
CIRCULÉIRE (Irish Manufacturing Research)	
Monaghan County Council	
Noamol Re-use Tirol	
Rediscovery Centre	
Repak	
Reparaturbonus	
South Dublin County Council	
Southern Region Waste Management Office	
Tog Hackerspace	
WEEE Ireland	
White Goods Association (WGA)	
ZeroNet	
Zero Waste Latvija	

APPENDIX C Detailed Review of Repair Directories

C.1 Ireland

Table 13: Key features of the Irish repair directory, repairmystuff.ie

Feature	Description
Title	Repair My Stuff
Geographic scope	Ireland
Responsible organisation(s)	 Monaghan County Council is the lead authority/administrator. Full Circle Digital Marketing (FCDM) is the digital consultant maintaining the website. Funding is provided by the EPA. Other partners: The European Recycling Platform (ERP) White Goods Association WEEE Ireland
Funding mechanism	Funding is provided by the EPA Circular Economy Programme
Target users	Consumers and repairers in Ireland
Product categories used	 Clothes and Bags; Monitors, TVs and Displays; Electronic; Fitness and Sports; Furniture and Upholstery; Large Appliances; Small Appliances; Lawnmowers and Garden Machinery; Leather and Shoes; Musical Instruments; Watches and Jewellery; and Other. Note: There are sub-categories under each of the above headings.
Directory search filters	 Location (drop-down list); Option to 'search nationwide' (check-box); Product to be repaired (keyword search); Product category (select from options listed above); Popular tags (select from several suggested options); and Distance (slider ranging from 5-50km).

Feature	Description
Map view available?	Yes – using Google Maps.
Information provided on repairers	 Enterprise name; Logo/Image; Enterprise bio; Contact details; Link to website and social media profiles; Repair services categories; Coordinates and location on map; and Relevant tags pertaining to the type of repairs offered.
Linked to repair voucher?	No
Registration process	 Repairers can register voluntarily, for free, at any time by completing a form on the website. Requested information includes contact information, address, website and social media links, company bio and experience, opening hours, product categories repaired (selected from pre-set list) including specific sub-categories, company logo/ profile picture, service area (e.g., maximum distance willing to travel for repair). Repairers are asked to indicate whether they are a WEEE Authorised Repairer or not. Repairers are required to complete a declaration of consent (acceptance of terms and conditions) during registration.
Eligibility criteria	No specific criteria – anyone offering a repair service in Ireland is invited to register
Includes community repair initiatives?	There is a sub-category for 'community repairs/maintenance' but there are no repair cafés or associated groups registered under this category.
User feedback/ review mechanism	No – there is a 'contact us' form for general enquiries
Frequency of update	Ongoing – repairers may update their profiles at any time but there is no mechanism to prompt repairers to check/update their information on a regular basis and it is understood that some information and profiles are out of date/incomplete
Other features of note	News page

C.2 Austria

 Table 14: Key features of the Austrian repair platform, Reparatur Führer ("Repair Guide")

Feature	Description
Title	Reparatur Führer <u>("Repair Guide")</u>
Geographic scope	 Participating federal states in Austria Seven of the nine federal states are included (Carinthia, Lower Austria, Upper Austria, Salzburg, Styria, Tyrol, Vorarlberg) Vienna and Burgenland are not currently included but may be in the future The website includes a link to the <u>Vienna Repair Network</u>, which maintains a list of repair enterprises in Vienna
Responsible organisation(s)	 The website is managed by a not-for-profit organisation, Noamol Re-Use Tirol. It is supported by project partners in the federal states: Tyrol: State of Tyrol, Tyrol Chamber of Commerce, Tyrolean Education Forum; Carinthia: State of Carinthia, Carinthian Chamber of Commerce; Lower Austria: State of Lower Austria, Lower Austrian environmental associations, Lower Austrian Chamber of Commerce/Trade and Crafts Division; Upper Austria: Upper Austrian State Waste Association, State of Upper Austria, Climate Alliance Upper Austria; Salzburg: State of Salzburg; Styria: Association of Styrian Waste and Environmental Consultants, State of Styria, A 14- Department of Waste and Resource Management, Styrian Chamber of Commerce; and Vorarlberg: Vorarlberg Municipal Association, State of Vorarlberg - Office for Future Issues, Vorarlberg Chamber of Commerce.
Funding mechanism	Financial support provided by partners in respective federal states, as listed above
Target users	Citizens in participating Austrian federal states
Product categories used	Note: Additional sub-categories are provided under each of the following headings: Clothing and accessories; Leisure equipment, toys, pet supplies; Camera, accessories and optical devices; Medical aids; Musical instruments; Other initiatives for the sustainable use of everyday objects; Consumer electronics, technical office equipment; Around the house and garden; Household appliances and machines; Mobility: e-bike to stroller; and Home furnishings and home textiles.

Feature	Description
Directory search filters	 Product category; Product sub-category; Region; Keyword; and Repair Bonus partner companies.
Map view available?	Yes – using Google Maps
Information provided on repairers	 Enterprise name; Logo; Enterprise bio; Product categories repaired; Contact details; Address and location on map; Link to website and social media profiles; Link to profile on <i>Reparatur Bonus</i> ("Repair Bonus") platform, where applicable; and Opening hours.
Linked to repair voucher?	 Yes. Since December 2022, the Austrian Reparatur Führer ("Repair Guide") and Reparatur Bonus ("Repair Bonus") platforms are linked. Repair enterprises that are 'partner companies' eligible for the Repair Bonus are indicated on the Repair Guide by the presence of the Repair Bonus logo in the list of search results. When users click on the logo, they are automatically redirected to the partner company's profile on the Repair Bonus platform. As part of their registration as partner companies for the Repair Bonus, repairers give their consent for their data to be used on the Repair Guide platform also. All companies eligible for the Repair Bonus are, therefore, automatically listed on the Repair Guide. Data is provided from the Repair Bonus platform periodically.
Registration process	 Repairers can register voluntarily at any time by completing a form on the website. Requested information includes VAT registration number, contact information, address, website and social media links, company bio, opening hours, product categories repaired (selected from pre-set list), company logo/profile picture, gallery images. Repairers are required to complete a declaration of consent (acceptance of terms and conditions) and CAPTCHA during registration. Each registration is manually approved by the administrator from the respective federal states. Registered repairers can log into the website and edit or delete their profiles at any time. To ensure information provided by repairers is up to date, the platform automatically sends an email once a year requesting repairers to log-in and check the profile. This is followed by a reminder email. If the company fails to check their profile after repeated reminders, the profile is marked as inactive and no longer appears to users. The profile can be restored on request.

Feature	Description
Eligibility criteria	 Company is located in one of the participating federal states; Company holds a valid trade license for the repair of the product category/ies in question; and During operation, products from at least one of the categories listed on the website must be repaired.
Includes community repair initiatives?	No – although the FAQ section does note that repair cafés are established in Austria and can be an alternative to using a professional repair service. There is also a news article on repair cafés in one of the federal states (Vorarlberg), with links to websites.
User feedback/ review mechanism	Yes – each repairer profile includes a prompt to report positive or negative experiences via an admin email. Feedback/reviews are not shown on the website.
Frequency of update	Ongoing – individual profiles may be updated by repair enterprises in question at any time. Annual, autogenerated emails from the website encourage enterprises to update their details at least once per year.
Other features of note	News page

 Table 15: Key features of the Austrian repair voucher platform, Reparatur Bonus ("Repair Bonus")

Feature	Description
Title	Reparatur Bonus ('Repair Bonus')
Geographic scope	Austria
Responsible organisation(s)	 Austrian Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology A private consultant, Kommunal Kredit Public Consulting acts as the processing office for the repair voucher, and processes applications by repairers to register on the platform
Funding mechanism	 European Union 'NextGenerationEU' fund – as part of Austrian Recovery and Resilience Plan 2022-2026: €130 million Austrian federal government: €124 million (of which €50 million earmarked for bicycles) Note: funding covers the repair voucher (see below)
Target users	Legally competent private individuals residing in Austria

Feature	Description
Product categories used	 Household; Consumer electronics and toys; Musical instruments and musical equipment; Baby and children's items; Smartphones, cell phones and watches; Body, fitness and health; Pet supplies and insect protection; Car accessories; Garden and tools; Surveillance and security technology; Computer and office supplies; and Bicycles.
Directory search filters	 User location – can 'use my location' (GPS) and specify distance (e.g., 5km); Name of partner company (keyword search); Product type (keyword search); Whether business is currently open or not; and Product categories – sub-categories provided within EEE.
Map view available?	Yes – using Google Maps
Information provided on repairers	 Address; Website (link); Link to Reparatur Führer ('Repair Guide'), if registered (https://www.reparaturfuehrer.at/); Link to regional repair network platform, if registered (e.g., Viennese Repair Network: https://www.reparaturnetzwerk.at/); Sub-categories of products repaired; and Opening hours.
Linked to repair voucher?	Yes – 50% repair bonus – up to €200 per item, or €30 per cost estimate. Vouchers can be requested for as long as budget funds are available.

Feature	Description
Registration process	 Only companies that have registered to become a partner company are listed. Companies can register via the platform by filling an online application form. Information required to complete the application form include legal form, company name and registration number, address and contact details, information on business licences, categories of products repaired (selected from predefined options) and opening hours. Official approval of the application is required subject to meeting certain conditions of participation (applications are processes by a private consultant, <i>Kommunal Kredit</i> Public Consulting). Once the application is approved, the organisation becomes a 'partner company' as appears in the directory. Companies wishing to be removed from the directory must send a written request for termination to <i>Kommunal Kredit</i> Public Consulting.
Eligibility criteria	 Company has a branch in Austria; and Company holds one of a number of specified trade licenses, or is a socio-economic business that is exempted from the requirement to hold a trade licence, or holds a licence to repair its own EEE devices (i.e., is a manufacturer take-back and repair scheme), or is a retailer that is permitted to carry out simple repairs.
Includes community repair initiatives?	No
User feedback/ review mechanism	No
Frequency of update	Ongoing – updated by <i>Kommunal Kredit</i> Public Consulting
Other features of note	Allows users to create a receipt for a repair voucher, which can be redeemed at partner companies registered on the platform

C.3 France

 Table 16: Key features of the French repair platform, Label QualiRépar

Feature	Description
Title	Label QualiRépar
Geographic scope	Metropolitan France and overseas departments and regions (Guadeloupe, Martinique, French Guiana, Mayotte, Réunion, Saint Martin, and Saint Pierre and Miquelon)
Responsible organisation(s)	 Ecosystem, a not-for-profit PRO approved by the French authorities to extend the lifespan of household EEE by supporting repair and reuse and also to provide for the recycling of EEE, lamps and small fire extinguishers Ecologic, a not-for-profit PRO approved by the French authorities to provide for the collection and end-of-life management of household and professional EEE, sports and leisure items, DIY and gardening equipment
Funding mechanism	The PROs are financed through extended producer responsibility (EPR) fees ('ecocontributions') paid by their members and revenues from recycling
Target users	The platform provides information for both professional repairers seeking certification and consumers looking for trustworthy EEE repair services and/or to avail of the repair voucher
Product categories used	 The platform relates to repair of EEE only. A checklist of product sub-categories is not provided in the search function, although suggestions do appear once the user starts typing. The broad categories of EEE concerned are as follows: Home maintenance; Cooking; Musical instrument; Major appliances; Beauty/health; Garden maintenance; Tools/DIY; Drones; Home entertainment and cameras; E-mobility; Telephones; and Computing and gaming.
Directory search filters	Type of device; andLocation.
Map view available?	 Yes – using Google Maps Only becomes visible once user clicks into individual repairer profiles

Feature	Description
Information provided on repairers	 Name; Contact number; Link to website; Address; Distance from user location; Location on map; Whether in-store and/or home repairs offered; Opening hours; and Categories of goods for which repairer is certified with QualiRépar label.
Linked to repair voucher?	Yes. The search results provide a quick snapshot of the eligible repair voucher amount for the product category in question, with a link to the eligibility criteria. The amount ranges from €15 - €60 per item, depending on the product category.
Registration process	 All repairers who have obtained certification with the QualiRépar label are automatically added to the directory on the platform – repairers themselves do not take any action. The repairer's profile typically appears on the platform within 48 hours of confirmation of certification.
Eligibility criteria	 In order to be eligible to appear in the directory, repairers must be certified with the QualiRépar label. The label is for professional repairers of household EEE, including artisan repairers, industrial repairers, and after-sales services offered by manufacturers and distributors. Certification is awarded by independent certification bodies, Bureau Veritas, SGS and Afnor, based on an audit. Criteria vary depending on the product category concerned and consider a range of factors, including training and qualifications, organisational arrangements and waste management procedures of the repairer. Cost of certification ranges from €670 - €2,415, depending on the type of repairer. The cost is mostly covered by the PRO (70%), with the remainder being paid by the repairer.
Includes community repair initiatives?	No

Feature	Description
	Yes, there is an option of "Report an Error" on each repairer profile. This can be clicked into and five options are provided:
	 Bonus not deducted from the bill (my device and my breakdown were eligible);
User feedback/	 The phone number or address is incorrect;
review mechanism	 I am not satisfied with the repair carried out;
mechanism	 The repairer does not work in my city; and
	 The repairer does not repair this type of device.
	Along with these options, the user fills out their contact details and a message.
Frequency of update	Ongoing – new certified repairer profiles typically added within 48 hours
Additional features of note	 Resources and advice on maintenance of household EEE Detailed information on repair costs, including the application of the repair bonus, providing consumers with transparency on potential expenses News page

C.4 Latvia

Table 17: Key features of the Latvian repair platform, *Lieto Vēlreiz Pakalpojumu Karte* ('Used Again Service Map')

Feature	Description
Title	Lieto Vēlreiz Pakalpojumu Karte ("Used Again Service Map")
Geographic scope	Latvia
Responsible organisation(s)	 The platform is an output of the LIFE project, 'Waste to Resources Latvia – boosting regional sustainability and circularity', led by the Latvian Ministry of Climate and Energy, with support from 21 partners, including the association, Zero Waste Latvija. The digital platform was developed by Zero Waste Latvija, in cooperation with various organisations.
Funding mechanism	Project funded by the EU LIFE Programme, the Latvian State Digital Development Agency and the association's own co-financing
Target users	Citizens in Latvia
Product categories used	The map-based directory is not limited to product repair but also includes product rental, sharing, trade-in, exchange and refill services. It is not possible to filter repair categories only. All categories used in the directory are listed below. Active recreation equipment rental; Antiques, works of art; Repair of shoes and leather goods; Clothing repair;

Feature	Description
Product categories used contd.	Public bicycle repair and maintenance stations; Car, motorbike maintenance and repair; Bike remounts; and Smart device repair, mobile phone repair. Car rental; Library; Office equipment rental, sharing; Outdoor exercise equipment/outdoor gyms; Rental of construction goods; Rental of other household goods; Exchange of gardening equipment; Filling drinking water; Book exchange; Co-creation locations and equipment; Trade-in second-hand goods; Exchange of things; Repair of household utensils, home and garden equipment; Furniture repair and cleaning; Rental of musical instruments; Tuning and repair of musical instruments; Rental of event accessories; Project partner; Renovation; Repair of household goods; Repair of household appliances; Care and rental of textiles; Refill; Bike rental; Bike remounts; and Smart device repair, mobile phone repair.
Directory search filters	 Category (as listed above); Keyword-based search; and Location (by navigating on the map).
Map view available?	Yes – using Google Maps

Feature	Description			
Information provided on repairers	 Enterprise name; Logo; Service category/ies (e.g., 'Repair of computers and their equipment'); Link to website; Contact details; Address; Description/bio; and Opening hours. 			
Linked to repair voucher?	No			
Registration process	 Organisations that wish to appear on the map-based directory can submit an enquiry via a contact form on the platform, providing their name, email address and message. Organisations cannot set up a profile or log in to the platform directly. Information can only be entered by the administrator, Zero Waste Latvija. According to Zero Waste Latvija, only a small minority (2%) of all organisations/ amenities shown on the map are identified through organisations making enquiries via the platform. The majority are identified by Zero Waste Latvija through direct communication with organisations/repairers, by email, phone call or meeting in person. 			
Eligibility criteria	No specific eligibility criteria are provided on the platform. According to <i>Zero Waste Latvija</i> , repairers are accepted that operate on a voluntary or commercial basis in Latvia, and which have either a physical location or work on-site.			
Includes community repair initiatives?	The map-based directory doesn't yet provide a dedicated category for 'community repair' or 'repair cafés'. According to <i>Zero Waste Latvija</i> , there are no repair cafés in the country operating on a daily or weekly basis, although there is a monthly repair café in Riga. The platform does include organisations and amenities that may be regarded as community repair, including workshops providing free facilities for self-repair and 'libraries of things'. Additionally, the platform includes a 'News' page that provides information about upcoming events, including repair cafés.			
User feedback/ review mechanism	No			
Frequency of update	To promote regular update of the information provided on the platform, <i>Zero Waste Latvija</i> sends out a quarterly update email to organisations/amenities included in the directory, although the response rate is currently low (7%).			
Other features of note	 News page; Catalogue of used items for sale, rental, sharing and free to take away. 			

Feature	Description			
Proposed developments	 Zero Waste Latvija has begun the second phase of development of the platform. Proposed developments in 2025 include: 			
	 The ability to filter repair, sharing, rental and second-hand services separately on the map; 			
	 The ability to filter search results by region; 			
	 Enhanced location-based search, whereby location will either be entered manually by the user or detected by a location services cookie; 			
	 Provision of a more detailed contact form for organisations that wish to appear on the platform; and 			
	 To add repair cafés, sellers of refurbished goods and purchasers of defective goods for refurbishment in response to the Right to Repair Directive. 			

C.5 Luxembourg

 Table 18: Key features of the Luxembourg repair platform, Repair & Share

Feature	Description		
Title	Repair & Share		
Geographic scope	Luxembourg		
Responsible organisation(s)	The platform is coordinated by <i>SuperDrecksKëscht</i> – a national waste management initiative of the Luxembourg Ministry of the Environment, Climate and Biodiversity; the Chamber of Trade and the Chamber of Commerce – in partnership with the national environmental administration, the Chamber of Crafts, the Chamber of Commerce, the National Institute for Sustainable Development and Corporate Social Responsibility (INDR), Ecotrel (a PRO for producers and importers of EEE), and <i>Oekozenter Pafendall</i> (a notfor-profit organisation in Luxembourg that advocates for sustainability and the circular economy).		
Funding mechanism	Details of funding not provided on the platform		
Target users	Citizens of Luxembourg		
Product categories used	 Electronic equipment; Celebration and party; Sports, toys, travel and hobbies; Music and instruments; House and apartment; Furniture, dishes, textiles and interior decoration; Clothes, shoes and jewellery; Machines and household appliances; Cameras and optics; Medical aids, cosmetics, wellness; and Garden and plants. 		

Feature	Description			
Directory search filters	 Product category; Locality; and Range (a sliding scale of 0 – 50 km). 			
Map view available?	Yes – using Google Maps			
Information provided on repairers	 Enterprise name; Logo; Photo(s); Contact details; Address; Link to website; Links to social media profiles; Opening hours; Spoken languages; Enterprise bio; Product categories repaired; Product categories rented; and 'Special services'. 			
Linked to repair voucher?	Partly. Residents of the City of Luxembourg can avail of a repair voucher for repairs of certain household appliances. The search function of <i>Repair & Share</i> doesn't provide information on the repair voucher/eligible enterprises or provide a mechanism through which individuals can redeem the voucher. However, a page on the platform providing additional information does refer to the repair voucher and includes a link to a page with details on the City of Luxembourg website.			
Registration process	 Repairers can register voluntarily and free of charge; Repairers first create an account on the platform; They can then fill out a form with information on the repair enterprise; and Upon approval, the repair service will be added to the platform's directory. 			
Eligibility criteria	No specific eligibility criteria are provided			
Includes community repair initiatives?	The search function on the platform doesn't allow users to filter or search specifically for community repair initiatives. However, a page on the platform providing additional information does provide information on repair cafés and a link to a separate platform (https://www.repaircafe.lu/) with details of upcoming repair cafés in Luxembourg and a map of active repair cafés across the country.			
User feedback/ review mechanism	No			
Frequency of update	Ongoing – repair enterprises may register at any time			

Feature	Description		
Other features of note	 Separate tabs provided for 'Private Individuals' and 'Companies'; 		
	 Separate tab provided in search function ('Share') for rental services; and 		
	 Built-in function to translate the platform into English, German and French. 		

C.6 Netherlands

 Table 19: Key features of the Dutch repair platform, Nationaal Reparateursregister ("National Repairers Register")

Feature	Description		
Title	Nationaal Reparateursregister ("National Repairers Register")		
Geographic scope	Netherlands		
Responsible organisation(s)	An initiative of <i>Techniek Nederland</i> and the Dutch Ministry of Infrastructure and Water Management (<i>Rijkswaterstaat</i>), in collaboration with the Central Register of Technology (<i>Centraal Register Techniek</i>)		
Funding mechanism	Details of funding not provided on the platform		
Target users	Consumers in the Netherlands		
Product categories used	 Images and sound; Phones; ICT hardware; White goods – large household; and White goods – small household. 		
Directory search filters	 Product category (as listed above); Company name; Location; and Local/nationwide repairers. 		
Map view available?	Yes – using Google Maps;Users can toggle between showing results in map or list view.		
Information provided on repairers	 Enterprise name; Contact details; Address; Link to website; and Product categories repaired. 		
Linked to repair voucher?	No		

Feature	Description			
Registration process	At the time of reviewing the website (March 2025), there are two routes for repairers to register:			
	EEE repair enterprises that are officially recognised by a consumer electronics manufacturer can be registered by that manufacturer. The manufacturer shares the repairer's information with the website administrators.			
	2. EEE repair enterprises that are registered in the Central Register of Technology and that have received accreditation under the 'Recognition Scheme for the Repair of Consumer Electronics' are automatically included in the directory. Repairers can update their information by logging in to the Central Register of Technology platform.			
	 The platform currently only includes EEE repair enterprises that are (a) officially recognised by a manufacturer or (b) registered in the Central Register of Technology and that have received accreditation under the 'Recognition Scheme for the Repair of Consumer Electronics'. 			
	 The accreditation scheme is administered by InstallQ, an independent Dutch foundation dedicated to ensuring safe and high-quality installations across the Netherlands. 			
	 The scheme is intended to ensure the safety, efficiency and reliability of consumer electronics until the next maintenance. 			
	This scheme includes requirements in relation to:			
Eligibility criteria	Competence of the technician;			
	► The repair work itself;			
	► Equipment/tools used;			
	Company management procedures;			
	► Legal requirements and documentation;			
	Intake, handling and delivery of products.			
	 Cost of accreditation was €224 in 2024; 			
	 The accredited enterprise is periodically assessed by InstallQ. 			
	 Fees are paid on an annual basis and quality audits are carried out once every two years. 			
Includes community repair initiatives?	No			
User feedback/ review mechanism	No			
Frequency of update	Ongoing – the platform states that once a repair enterprise has updated their information on the Central Register of Technology, the profile on the National Repairers Register will be updated as soon as possible.			

C.7 Slovakia

 Table 20:
 Key features of the Slovak Cirkulárne Mapy ("Circular Maps")

Feature	Description			
Title	Cirkulárne Mapy ("Circular Maps")			
Geographic scope	Sixteen towns and cities in Slovakia: Pezinok; Žiar and Hronom; Malacky; Liptovský Mikuláš; Prievidza; Dubnica and Váhom; Bardejov; Bratislava; Trnava; Trenčín; Solved; Žilina; Banská Bystrica, Zvolen; Prešov; Košice; and			
Responsible organisation(s)	 Institute for Circular Economy (INCIEN) manages the initiative; Participating municipalities of the cities mentioned above. 			
Funding mechanism	Created with financial support from the Tesco Foundation			
Target users	Residents and visitors			
Product	Repair enterprises are not subdivided by product category. Categories of circular services shown on the maps vary across the maps/municipalities and generally include the following categories:			
categories used	 Waste collection points; Car and bike rental; Repair shops; Community composting facilities; Community gardens; and Libraries. 			

Feature	Description		
Directory search filters	e above-listed categories (or variations thereof) can be toggled on/off on the maps		
Map view available?	es – using Google Maps		
Information provided on repairers	 Enterprise name; Description; and Additional details from Google Maps, if available. 		
Linked to repair voucher?	lo		
Registration process	It is not possible for repairers to formally register to appear on a map. In some instances, the maps were created as outputs of circular economy themed events – it is assumed that information was gathered at the events about circular services and amenities available in the municipality. For some maps (e.g., Bratislava), an email address is provided to suggest additions to the map.		
Eligibility criteria	N/A		
Includes community repair initiatives?	No		
User feedback/ review mechanism	No		
Frequency of update	Unknown		

C.8 Slovenia

 Table 21: Key features of the Slovenian Karta Mojstrov ("Map of Craftsmen")

Feature	Description		
Title	Karta Mojstrov ("Map of Craftsmen")		
Geographic scope	Slovenia		
Responsible organisation(s)	Ecologists Without Borders (Zero Waste Slovenia)		
Funding mechanism	The website that contains the map was developed with the association's own funds and later updated with funding support from the Slovenian Ministry of Public Administration and <i>Merkur Zavarovalnica</i> (an insurance company). In 2025, a new update to the website is planned, funded by a Slovenian environmental public fund, the Eco Fund.		
Target users	Citizens in Slovenia		
Product categories used	 Umbrella holders; Musical instruments; Clothing; Furniture; Miscellaneous; Technical equipment; Shoemakers; Sports equipment. 		
Directory search filters	 Text search; Category (as listed above); Sort by: A-Z Category; Z-A Category; A-Z Title; Z-A Title; Z-A Address; Number of locations/results (25; 50; 100; 200; 500; All). 		
Map view available?	Yes – using Google Maps		
Information provided on repairers	 Enterprise name; Category; Link to website; Address; Product categories repaired. 		

Feature	Description			
Linked to repair voucher?	No			
Registration process	 Repairers can register voluntarily at any time by completing a Google Form. Registrations are subject to approval by the administrator. Information requested in the form includes (*mandatory): Name*; Email address*; Enterprise name*; Address*; Product category*; Products repaired*; Link to website; Additional description; Photos; Opt in/out of receiving newsletter from Ecologists Without Borders*. 			
Eligibility criteria	Craftspeople and organisations who repair, restore, repurpose or buy back used products are eligible to register.			
Includes community repair initiatives?	The search function/map doesn't allow users to filter or search specifically for community repair initiatives. However, a page on the platform provides a calendar with upcoming events, which may include repair cafés or other community repair events from time to time.			
User feedback/ review mechanism	While there is no mechanism to provide feedback or reviews on individual repairers via the search function, users are invited to report any issues (e.g., if a craftsperson doesn't meet the criteria) by emailing the platform administrators directly (email address provided).			
Frequency of update	Ongoing – repair enterprises may register at any time. The administrators have indicated that maintaining the directory up-to-date is a challenge, as information on the craftspeople changes frequently (e.g., businesses close, contact details change, etc.). A full update of the directory is planned for 2025. It is also proposed to sync data on drinking water fountains with OpenStreetMap.			
Other features of note	 Separate map of zero waste stores; Separate map of second-hand and antique stores; Separate map of product rental stores; Separate map of drinking water fountain/refill points; and Calendar of events, including community repair. 			

APPENDIX D WordPress Plugins Used by Repairmystuff.ie

Table 22: WordPress plugins used by repairmystuff.ie

WordPress Plugin	Version	Source
Advanced Custom Fields PRO	6.3.11	Available at wordpress.org, over 2 million active installations.
Contact Form 7	6.0.0	Available at wordpress.org, over 10 million active installations.
Disable Comments	2.4.6	Available at wordpress.org, over 90 thousand active installations.
Header and Footer Scripts	1.5	Available at wordpress.com, over 200 thousand active installations.
Import Business	1.0.0	Not available at the reviewed public repositories.
LiteSpeed Cache	6.5.2	Available at wordpress.org with over 6 million active installations.
One Click Accessibility	2.1.0	Available at wordpress.org with over 200 thousand active installations.
Polylang	3.6.5	Available at wordpress.org with over 700 thousand active installations.
SVG Support	2.5.8	Available at wordpress.org with over 1 million active installations.
UpdraftPlus – Backup/Restore	1.24.11	Available at wordpress.org with over 3 million active installations.
User Role Editor	4.64.3	Available at wordpress.org with over 700 thousand active installations.
WordFence Security	8.0.1	Available at wordpress.org with over 5 million active installations.
Social Login	3.0.4	Available at wordpress.org with over 7 thousand active installations.
WP All Export	1.4.8	Available at wordpress.com with over 100 thousand active installations.
WP Thumb Filters	1.0.0	Not available at the reviewed public repositories.
Yoast SEO	24.0.0	Available at wordpress.org with over 10 million active installations.

APPENDIX E Usability Test Results

E.1 Digital Users

E.1.1 Digital User No. 1

This user has some basic skills in repairing. Normally, they look for repair tutorials on internet, and if they are unable to fix something themself, they look for a repair service. They weren't aware of repairmystuff.ie before participating in the test.

Table 23: Results of usability test – digital user no. 1

Stage/webpage	Comments					
Google search positioning	Typing "Repair home items Ireland" found repairmystuff.ie, but using other combinations, the website didn't appear in the first results.					
Home page	 User started by searching for "washing machine" and their address. The system asked for permission to use the user's current location. They accepted, but it seems that this didn't work, as their location didn't appear on the map. 					
Search results	 Some of the services found were not for large appliances. "The map zoom doesn't respond to the computer mouse. This makes it difficult to navigate." User selected one business, but it didn't match their search (washing machine). Among the options found, they finally selected the one that was closest to their home. User gave the platform access to their current location to easily find a business in their vicinity, but it didn't seem to work. 					
Repair service profile	 "Right sidebar information looks quite central, so it's distracting." The result the user opened didn't fit their search requirement (washing machine). 					
Overall comments and suggestions	 "In terms of trust, adding a review system for repair services could be very helpful, so users can filter by ranking and don't need to look for reviews in other places like Google Maps." 					

E.1.2 Digital User No. 2

This user is very mindful about the circular economy and repair. They usually search for repair services when they need to have a personal item repaired. They were not aware of repairmystuff.ie before participating in the test.

Table 24: Results of usability test – digital user no. 2

Stage/webpage	Comments			
Google positioning	The user did not find the website by typing "Second hand bike parts Dublin". They finally succeed by typing "repair directory Ireland".			
Home page	They used the filter by city (Dublin) and chose the option "large appliances".			
Search results	 They didn't use the map initially. When they tried it, the zoom didn't work well. They selected the first search result but noted that the business information was incomplete. They think businesses services will be more accurate described by using "Type of repair" instead of "Type of work", as this sounds like they were only selling products not repairing. "If I was genuinely getting my washing machine fixed, I wouldn't go to the closest business. I would probably check out the top three." "I lost my searching parameters when I came back into the searching page from a business profile page". 			
Repair service profile	 They thought that in the sidebar the "Find a local professional" option is confusing, when they had already done the search. They perceived the repair services with more information as being more reliable. "The link to the website of several businesses doesn't work". "It's very useful that they have listed the services they offer". 			
Overall comments and suggestions	 They didn't find the map useful. They would like to make it smaller/more zoomed in, so they can see the results of the search. It seems that the information provided by businesses could be clearer. They rated the platform a 4 out of 5. Getting different results for similar searches is confusing. They would like to see the full directory of repair services in a clearer way, without having to filter or search for anything, so that they can find something specific that hasn't been tagged. 			

E.1.3 Digital User No. 3

This user does not often contact repair services. They use things until they are broken. They didn't know about the platform before participating in the test.

Table 25: Results of usability test – digital user no. 3

Stage/webpage	Comments				
Google positioning	They typed "repair services Dublin" and found the website first time.				
Home page	They searched using their address and "washing machine".				
	 They were confused by the zoom function of the map: "That's not very close". Searching by address did not give specific results by neighbourhood. 				
	They found it quite difficult to find the zoom in function.				
	 They noted that the repairer profiles include two maps of the repairer's location: "Two maps on the same site aren't necessary". 				
Search results	 They would like to see the search results without any map or image, only the principal information. 				
	In the filters, location is set in miles and on search results in kilometres.				
	"I'll go straight to the one with a phone number".				
	"I would like to see if the businesses are open or closed."				
	"The information doesn't tell much. The phone or email is what I need."				
Repair service profile	"I want to know the specific stuff they repair. I don't think tags are important."				
prome	"Sidebar info should only be in the landing page".				
	They think this website has potential to be improved.				
Overall	They rated it between 2 and 3 out of 5.				
comments and suggestions	 They noted that the map could be a great feature but is not currently well developed. 				
	"The way you filter, it's confusing."				

E.1.4 Digital User No. 4

This user is very familiar with the circular economy because of his job. They usually tries to fix broken stuff, so they are really interested in this service. They were not familiar with the website before participating in the test.

Table 26: Results of usability test – digital user no. 4

Stage/webpage	Comments			
Google positioning	They typed "Repair services Ireland" and got the website as the first result.			
Home page	They typed "Dublin" and "washing machine" and started the search.			
	 Once in the results page, they clicked into map full-screen mode. "The zoom doesn't work". They struggled with the map until learning how to use it. 			
	 In the full-screen mode, the points in the map don't allow users to click into or open them. This makes the experience confusing. 			
Search results	 Afterwards, they looked at the list of search results. They typed in their neighbourhood, because they wanted to find a place near their home, but the results they were getting seemed to be quite far away. 			
	 They thought that the two first results were quite good, but the following results didn't align with their search parameters: they were for clothing repair, not washing machines. 			
	"It looks like I need to select again the parameters after seeing one service profile".			
Repair service	"All this information looks valuable".			
profile	"The phone number is the most important information for me".			
Overall comments and suggestions	 "It would be good to have reviews for repair services". "This platform looks friendly, even for the least tech-savvy users". 			

E.2 Non-digital Users

E.2.1 Non-digital User No. 1

This user is familiar with the circular economy. They always try repairing first, usually going to the shop where he bought the product. They are 82 years old and live in Cork City. They describe their digital skills as being 'pretty basic'. They didn't know about repairmystuff.ie before participating in the test.

Table 27: Results of usability test – non-digital user no. 1

Stage/webpage	Comments				
Home page	They typed "cork city" and "washing machines", but didn't select "Cork" in the dropdown list of options for location.				
Search results	 "I get a pile of little green arrows, but they aren't near Cork. I'm getting Dublin instead of Cork." They said that they would choose the closest repairer to their home. They check if they know any of the businesses. They said that they would call some friends to ask for a reference. They were confused by the fact that some of the search results included a map preview and others didn't. They thought that only the search results with map preview would contain a map in the repairer profile. 				
Repair service profile	 "It's helpful to have the map inside of the profile." They wanted to know if the service would repair his specific washing machine braand this information didn't appear. "In terms of trust, it's very important to know if it's an official and certified services." 				
Overall comments and suggestions	 "This platform is very user-friendly because even people like me with basic digital skills could use it". They rated the website a 4 out of 5. "I think this platform is more useful for younger people who have less experience and knowledge". "It's a very good initiative for promoting circular economy". 				

E.2.2 Non-digital User No. 2

This user was not familiar with repairmystuff.ie before participating in the test.

Table 28: Results of usability test – non-digital user no. 2

Stage/webpage	Comments				
Google positioning	 They searched on Google for something specific to repair and found many results, but not the repairmystuff.ie website. 				
	 When they searched for "repair services in Ireland", it did appear as the first option. 				
Home page	 They thought that the 'search by category' icons/headings were too generic and preferred to search by the specific device. 				
	 They tried to search using the Eircode, but the location search only accepts towns or cities. 				
	 They thought that too many results appeared on the map. 				
	 They tried to zoom in but found that the zoom function on the map didn't work well. 				
Search results	 They said that many of the businesses shown were not related to their search. 				
Searchiresuits	 They tried to narrow the search using the category filter but found that there were too many options in the drop-down list. 				
	 They would like to see reviews or ratings from other users to help them decide. 				
	They couldn't find the opening hours of the businesses.				
	 They didn't understand why the map appeared duplicated in the profile of many businesses. 				
Repair service	 They thought that the information on many businesses was poor. Some didn't even have a description. 				
prome	 They found the information in the right sidebar confusing because it wasn't directly related to the business. 				
	They rated the website 2 out of 5.				
Overall comments and suggestions	 They didn't believe the website offers complete, reliable, and up-to-date information. 				
	 They said that they would continue searching for repair services on Google rather than this website. 				

E.2.3 Non-digital User No. 3

This user is familiar with the concept of the circular economy. They don't always try to repair things that break, sometimes buying a new item instead.

Table 29: Results of usability test – non-digital user no. 3

Stage/webpage	Comments				
Google positioning	 They searched for what they wanted to repair on Google and got many results, but none were the repairmystuff.ie website. 				
	 The user was asked to search for something more generic. They tried "repair services Dublin" and then found the website as the first option. 				
Home page	They entered "Dublin" in the location search and "Washing machine" in the item search.				
	 They thought that the number of results obtained was quite good. 				
	 They tried to zoom into their area on the map and realised that the zoom functionality didn't work well. 				
Search results	 Reviewing the list of businesses obtained, they noted that some businesses were not related to the item they searched for. 				
	 In general, they preferred to navigate through the map rather than the list. 				
	 They thought it would be good to see user reviews of the businesses. 				
	 They didn't understand why the search results for some businesses showed a map and others a logo. 				
	 They preferred to see the map than the logo. 				
Repair service	 They noticed that some businesses had very detailed information while others had very little information. 				
prome	 They trust businesses with more detailed information. 				
Overall	They would rate the website a 4 out of 5.				
comments and suggestions	In general, they think it's a very good initiative.				
	 However, they believe there is room for improvement, especially in the reliability and consistency of the business information. 				

E.3 Repairers

E.3.1 Repairer No. 1

This user represents a repair enterprise specialising in a wide range of electronic devices, including mobile phones, tablets, and more. Their repair services are certified by leading manufacturers, and they ensure top-quality repairs using genuine parts. They have an official store in Dublin and some of their partner locations.

Table 30: Results of usability test – repairer no. 1

Stage/webpage	Comments				
Registration process	 They were able to find the registration form without any issues. 				
	 They pointed out that "the form doesn't require legal information, which means that anyone can offer services, regardless of whether it's a real enterprise or not." 				
	"There is no way to verify that a service is certified by the manufacturers."				
Repair service profile	 Tags like "Electronic" seem too broad; they thought the filters should be more specific. 				
	 They then realised that the sub-tags are quite specific, although they think some are missing. 				
Search results	They noted that the location bar in the search function should only allow addresses in Ireland. Currently, it is allowing searches for towns and cities in the UK, which is confusing.				
	They find this website to be quite basic.				
	 They suggested that the business database should be updated and checked on an ongoing basis. 				
Overall comments and	 They think that there should be more control over adding businesses to the platform. 				
suggestions	 While searching for a service on the map, they noted that it could be useful to search through a specific area (region, city, district, etc.). 				
	 Currently, they don't track the users that are reaching their service through the website but would find it useful to do so. 				

E.3.2 Repairer No. 2

This user represents a social enterprise that specialises in furniture repair. They also offer furniture restoration services for people with different needs or disadvantages and training for people to learn how to repair and restore their furniture.

Table 31: Results of usability test – repairer no. 2

Stage/webpage	Comments				
Registration process	 They have a profile for their enterprise but forgot the password to log in. When they tried to recover their password, they did not receive an email from the website to do so. 				
	 They proceeded as if to set up a new profile. On the "Register your business" page they clicked on the "Start now for free" button and nothing happened. It took them a while to realise that by scrolling down, they could reach the form. 				
	 They noted that the location of their business is incorrect on the profile. They thought that the form should allow selecting a location on the map. 				
	 "The business logo should be mandatory, so the business profile looks completer and more trustful". 				
Repair service	 They found their enterprise's profile easily by searching the address. But then they realised that there are two profiles for the enterprise, one with more information than the other, and neither of which is up to date. 				
profile	"It would be useful to upload more pictures for showing our business".				
	 "This sidebar information got my sight at first glance, but it's not related to the business, which is confusing". 				
	"I need more information from the businesses".				
Search results	"Our business tags are not correct and there are some missing".				
	"We would like to add our social media: Facebook and Instagram".				
Overall comments and suggestions	 They rated the website a 4 out of 5. "It would be great to know how many customers this page brings us". 				

E.3.3 Repairer No. 3

This user represents a social enterprise dedicated to bicycle repair, recycling and circular economy more broadly.

Table 32: Results of usability test – repairer no. 3

Stage/webpage	Comments				
Google positioning	They searched for "repair services electronics" and repairmystuff.ie appeared as the fourth search result.				
	 They proceeded to set up a profile for their enterprise on the website. They clicked on "Register your business for free" but then struggled to find the form until they scrolled down. 				
	 They were unsure whether the phone number requested should be their personal number or that of the business. They understand it is requesting their personal number but believe it should be the business'. 				
	 "It would be great to have other social media links, as we no longer use Facebook or X". 				
Registration process	 They found the field "Maximum distance willing to travel?" confusing. At a first glance, they couldn't see the "only repair at store" option and were going to quit the form. 				
process	 They noted that the directory only allows them to enter a single location for their enterprise and that they would have to create an entirely new profile for other locations: "We currently have two locations, so we need to choose only one to display in the platform." 				
	 They think it's inappropriate that bikes should fall into the category of 'Fitness & Sports' as bikes are generally used for personal mobility/transport rather than sport. 				
	 During the test (30 minutes), they did not receive a confirmation email after registering on the platform. They did not understand that the business needs to be validated by the administrator (Monaghan County Council) before appearing in the directory. 				
Repair service profile	They could log into their profile without difficulty, but couldn't preview how their profile looks, which they found confusing.				
	 They noted that not all the results (roughly half of them) were related to the circular economy. 				
Search results	 They noted that there were businesses whose information had not been updated. For example, they noted that one business appeared that had been closed for years. 				
	 They also noted that results contained duplicated businesses. 				
	They rated the website a 3 out of 5.				
Overall	 They noted that it wasn't possible to search by business name, only location and product type. 				
comments and suggestions	 They would like to see more information on how each business supports the circular economy (e.g., whether they recycle components, etc.). 				
	 They would also like to see user recommendations and reviews, as they think there are important insights in reviews. 				

APPENDIX F Heuristic Evaluation Results

F.1 Ireland

 Table 33: Heuristic evaluation – Ireland (repairmystuff.ie)

Heuristic	Place in platform	Comments	Severity
System status visibility	Search feature > Results > Filters	The default search radius is set to 50 miles, which may be confusing. A smaller default radius could improve usability.	S.2
	Search feature > Results > Map	Displaying the user's location on the map would enhance the search experience.	5.2
Match between system and real world	Business page > Service review	It could be beneficial for users to add a section for reviews of the services offered and some kind of rating format so that users can evaluate the services.	S.0
User control and freedom	Register business form > Thank you page	The validation process and subsequent communications should be clearly explained. Users should receive a confirmation email to reduce uncertainty, along with an estimated duration for the validation process.	S.4
Consistency and standards	Business profile > Cover/ profile image	When the business doesn't upload a cover image, the platform is loading another map instead of it. To avoid confusion, a template image could be added or making the image mandatory to better recognize the business.	S.1
	Footer > Contact us	The "Contact us" option it's difficult to find, because of its style and the amount of information shown around. This option could be more visible for users by adding it into the header or changing the style.	S.3/4
Error prevention	Header > Click "Register your business for free" button > Click "Why register your business?" button	Once you click the button nothing happens. Only if you scroll down, you see the form. This button could force the scroll to the form when clicked, so fewer users would miss it.	S.4
	Business profile > right aside	Twitter icon looks like a button more than a placeholder. It appears when the business has not uploaded any social media links. It could either not appear or change its style.	S.1
	All platform	The accessibility options displayed are complete and clearly visible throughout the entire platform.	ВР
Recognition rather than recall	Header> "Links"	The name of this chapter could be more descriptive. For example, it could be called "About", which is a frequently used section in web pages for this kind of content.	S.2

Heuristic	Place in platform	Comments	Severity
Flexibility and efficiency of use	Top page banner > Business Login	Nice to have this direct access for businesses that need to access it quickly, for example, while working.	ВР
	Register business form	Social media fields could be more flexible, so users could add another one, for example Instagram.	S.0
	Business profile	It can be very valuable for businesses to see how many people have visited their business profile, and ideally, how many people have booked their services through the platform.	S.0
Aesthetic and minimalist design	Footer > "Our mission is to support"	Typically, the footer content is concise, containing only essential links. The detailed paragraph currently in the footer could be more appropriately placed on the 'About' page to better represent the platform.	S.1
	Business profile page > right-side information: About RepairMyStuff.ie, Why repair? etc.	This information is not needed here and could distract the user from the principal action which is finding a service.	S.2
Help users recognize, diagnose, and recover from errors	Register your business form	It could be useful to add some required fields, marked with an asterisk, so users can easily recognize which are more important and the ones that they can skip. Also, this will make business data more standardized and valuable, for example by marking a contact method or the opening hours as required information.	S.0
	"Contact us" button > form	When the user fills out the contact form, they do not receive any confirmation email. Additionally, after several days, no one contacts them, which suggests that there is no support.	S.4
Help and documentation	"About" Page	This is a good space to add, in addition to general information and useful links about the platform, a diagram of the sign-up and validation process for businesses, as a guide.	S.0
	"About" Page/ Footer	In this page and/or in the footer, it would be good to add a clear contact for any questions, issues, or support that users may need.	S.0

F.2 Austria

 Table 34: Heuristic evaluation – Austria (reparaturführer.at)

Heuristic	Place in platform	Comments	Severity
System status visibility	Header > Categories	The category search feature displays the number of businesses in each category and sub-category at a glance.	ВР
Match between system and real world	Business profile > Calculate route	Business profiles are linked to Google Maps, facilitating location and review searches. Users can also add their own location to easily visualize the nearest businesses.	ВР
User control and freedom	Search results > Business card	The card includes information and features an arrow button that allows users to expand more details and the small map, which is useful for saving space on the results view by displaying the extra info only when attention is focused on a specific business.	ВР
	Search results > places selected	The platform does not allow users to select multiple locations simultaneously.	S.2
Consistency and standards	Business profile/ log-in form	Data is standardized as every business profile has required contact information, such as phone number and email.	ВР
Error prevention	Search feature > Select an area	Users can select an area to narrow the displayed results.	ВР
Recognition rather than recall	Search feature > Search results	When the user arrives at the results view, they don't see which categories they had previously selected.	5.2
Flexibility and efficiency of use	Search > Step 2 > Are you looking for a repair professional?	This search feature allows users to choose where the search engine looks: Description, Categories, Company Name, or Repair Bonus.	ВР
Aesthetic and minimalist design	Business registration form	The form is divided in steps based on different types of information: Login and contact, Offer info, Pictures, Additional info and Declaration of consent.	ВР
Help and documentation	Header > FAQs and Contact	The FAQs content and Contact button are very visible so users can find it easily when a problem arises.	ВР

F.3 Luxembourg

 Table 35: Heuristic evaluation – Luxembourg (repairandshare.lu)

Heuristic	Place in platform	Comments	Severity
Match between system and real world	Business register form	Fields such as contact, opening hours and tax identification number are required as mandatory, which is quite useful. This ensures that they are real businesses.	ВР
Consistency and standards	Business register form	The registration is done via an external interface (WordPress), which could be confusing for digital users and difficult for non-digital users.	S.4
Recognition rather than recall	Header > More	This page could be named in a more descriptive way.	S.2
Error	Home > Search for Repair	Categories and localities are selectors, which prevents typographical errors. Also, the range selector helps to localize places better while searching.	ВР
prevention	Business profile > Spoken languages and Opening hours	Business profiles display spoken languages and opening hours, allowing users to know this information beforehand.	ВР
Flexibility and efficiency of use	Home > Top of the page	The homepage features two buttons for selecting either individual or business user, which dynamically changes the page content. This helps make the UX much more relevant and clearer, depending on the type of user accessing the website.	ВР
	Any page > bottom	An arrow button enables users to return to the top of the page at any time.	ВР
Help and documentation	Header > Contact and FAQ	These options for help and documentation are quite well visible placed.	ВР

F.4 Slovenia

 Table 36: Heuristic evaluation – Slovenia (manjjevec.si)

Heuristic	Place in platform	Comments	Severity
System status visibility	Home page > Numbers	The homepage displays the number of businesses and services currently registered on the website.	ВР
Consistency and standards	Business card image	If a business doesn't upload a picture, the platform assigns an icon based on the business category.	ВР
Error prevention	Home > Find a master	Categories and localities are selectors, which prevents typography errors. Also, the range selector helps to localize places better while searching.	ВР
	Business profile > address	Home> Business address could be linked to Google maps.	5.2
Help users recognize, diagnose, and recover from errors	Business cards / profile	They only business information displayed is the name, address, link to website and things that they repair. There isn't a business profile page with extra information.	S .2
Help and	Home > "Enrolment criteria" button > "Game rules" page	This is a useful page that explains what type of businesses or services you will find in each part of the website.	ВР
documentation	Header/footer	Contact information and FAQs are not prominently displayed.	5.2

APPENDIX G Stakeholder Survey

G.1 Survey

Stakeholder Survey: Future Development of <u>repairmystuff.ie</u>

This is a voluntary survey, developed by Arup, the purpose of which is to gather stakeholder insights to inform an ongoing study on behalf of the EPA regarding the future development of the online repair directory, <u>repairmystuff.ie</u>. Thank you for taking the time to complete this survey, which will provide valuable information to inform the study. Any data from this survey used in reporting will be anonymised.

When completing this survey, please note the following definitions:

'Repairer' (as defined under the EU Right to Repair Directive) refers to "any natural or legal person who, related to that person's trade, business, craft or profession, provides a repair service, including manufacturers and sellers that provide repair services and repair service providers whether independent or affiliated with such manufacturers or sellers".

1.	Name (optional)
2.	Organisation (optional)
3.	Email address (optional)
4.	Before participating in this study, were you aware of <u>repairmystuff.ie</u> ?
	Yes
	O No
	Other

5. Have you used <u>repairmystuff.ie</u> to find a repair service that you have subsequently used?						
\bigcirc	Yes					
\bigcirc	No					
\bigcirc	Other					
6. Are	you a repair	rer currently re	gistered on <u>rep</u>	pairmystuff.ie?		
\bigcirc	Yes					
\bigcirc	No					
		(where 1 is 'ver faction with <u>rep</u> 2	y dissatisfied' an airmystuff.ie?	d 5 is 'very satisf	fied'), how woul	d you rate
8. Pleas	e provide ar	ny reasons for th	ne score given in	response to Q4,	, if desired.	
			pairers to indicate uality marks rela		hieved third-pa	rty
	Yes					
\bigcirc	No					
\bigcirc	Other					

11. Repairmystuff.ie currently provides information on repair enterprises only. If there is capacity to extend its scope, which of the following categories, if any, do you think should be considered for the future development of repairmystuff.ie? Select all that apply. Using the 'Other' option, please indicate if there are any additional categories that you would like to see included on repairmystuff.ie. Sellers of refurbished goods Purchasers of defective goods for refurbishment Community-led repair initiatives None of the above Other 12. Should repairmystuff.ie allow repairers to indicate that they are a social enterprise, where this is the case? No No No No Other GERD AND STATE STAT	10.	re you aware of any third-party accreditations, certifications or quality marks related to epair? If so, please list them here.			
to extend its scope, which of the following categories, if any, do you think should be considered for the future development of repairmystuffie? Select all that apply. Using the 'Other' option, please indicate if there are any additional categories that you would like to see included on repairmystuffie. Sellers of refurbished goods Purchasers of defective goods for refurbishment Community-led repair initiatives None of the above Other 12. Should repairmystuffie allow repairers to indicate that they are a social enterprise, where this is the case? Yes No No 13. Some repair websites in other Member States require repairers to validate their commercial status (e.g., by providing a company number). Should repairers registered on repairmystuffie be required to validate their status (e.g., by providing a Companies Registration Office (CRO) number or Registered Charity Number (RCN)), which would not be publicly displayed on their profile, or indicate that they are a sole trader? Yes No					
to extend its scope, which of the following categories, if any, do you think should be considered for the future development of repairmystuffie? Select all that apply. Using the 'Other' option, please indicate if there are any additional categories that you would like to see included on repairmystuffie. Sellers of refurbished goods Purchasers of defective goods for refurbishment Community-led repair initiatives None of the above Other 12. Should repairmystuffie allow repairers to indicate that they are a social enterprise, where this is the case? Yes No No 13. Some repair websites in other Member States require repairers to validate their commercial status (e.g., by providing a company number). Should repairers registered on repairmystuffie be required to validate their status (e.g., by providing a Companies Registration Office (CRO) number or Registered Charity Number (RCN)), which would not be publicly displayed on their profile, or indicate that they are a sole trader? Yes No					
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 Other 12. Should repairmystuff.ie allow repairers to indicate that they are a social enterprise, where this is the case? Yes No No 13. Some repair websites in other Member States require repairers to validate their commercial status (e.g., by providing a company number). Should repairers registered on repairmystuff.ie be required to validate their status (e.g., by providing a Companies Registration Office (CRO) number or Registered Charity Number (RCN)), which would not be publicly displayed on their profile, or indicate that they are a sole trader? Yes No No 		Community-led repair initiatives			
 12. Should repairmystuff.ie allow repairers to indicate that they are a social enterprise, where this is the case? Yes No No No No No Yes One repair websites in other Member States require repairers to validate their commercial status (e.g., by providing a company number). Should repairers registered on repairmystuff.ie be required to validate their status (e.g., by providing a Companies Registration Office (CRO) number or Registered Charity Number (RCN)), which would not be publicly displayed on their profile, or indicate that they are a sole trader? Yes No No 		None of the above			
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 13. Some repair websites in other Member States require repairers to validate their commercial status (e.g., by providing a company number). Should repairers registered on repairmystuff.ie be required to validate their status (e.g., by providing a Companies Registration Office (CRO) number or Registered Charity Number (RCN)), which would not be publicly displayed on their profile, or indicate that they are a sole trader? Yes No 		○ Yes			
status (e.g., by providing a company number). Should repairers registered on repairmystuff.ie be required to validate their status (e.g., by providing a Companies Registration Office (CRO) number or Registered Charity Number (RCN)), which would not be publicly displayed on their profile, or indicate that they are a sole trader? Yes No		○ No			
status (e.g., by providing a company number). Should repairers registered on repairmystuff.ie be required to validate their status (e.g., by providing a Companies Registration Office (CRO) number or Registered Charity Number (RCN)), which would not be publicly displayed on their profile, or indicate that they are a sole trader? Yes No					
○ No	13	status (e.g., by providing a company number). Should repairers registered on <u>repairmystuff.ie</u> be required to validate their status (e.g., by providing a Companies Registration Office (CRO) number or Registered Charity Number (RCN)), which would not be publicly displayed on their			
		○ Yes			
Other		○ No			
		Other			

14.	Some repair websites in other Member States periodically contact registered repairers asking them to check and update, where relevant, their details on the website. Should repairers registered on <u>repairmystuff.ie</u> be prompted to periodically verify/update their information on the platform?
	○ Yes
	○ No
15.	Do you have any further thoughts that you would like to share regarding <u>repairmystuff.ie</u> ?

G.2 Responses

Table 37: Stakeholder survey responses (N=11)

Que	estion	Responses
1.	Name (optional)	Confidential
2.	Organisation (optional)	Confidential
3.	Email address (optional)	Confidential
4.	Before participating in this study, were you aware of repairmystuff.ie?	No 27% 3 8 8
5.	Have you used repairmystuff.ie to find a repair service that you have subsequently used?	Other 9% Yes 36% 4 6 1 'Other' response: "In the process of potentially doing so"
6.	Are you a repairer currently registered on repairmystuff.ie?	No: 11 (100% of responses to this question)
7.	On a scale of 1-5 (where 1 is 'very dissatisfied' and 5 is 'very satisfied'), how would you rate your overall satisfaction with repairmystuff.ie?	Level 5 1 Level 4 2 Level 3 6 Level 2 Level 1 1 3.20 Average Rating

Que	estion	Responses
8.	Please provide any reasons for the score given in response to Q4, if desired.	 "Easy to navigate and very comprehensive." "I recently used the website to find a treadmill repair provider. The map gave me responses all over Ireland and so, I started ringing the local providers. After the first 3 calls I gave up as none of these provided Treadmill repair." "I would just repair things ourselves, we don't have need for the service but we point other people towards it." "I use it in a work capacity. I have noted entries for businesses that no longer are operating - the biggest challenge for all directories is to remain up to date." "Platform isn't functional for me as I moved out of Ireland couple of years ago." "Needs to be updated" "Great site, would be beneficial to find a way to incentiviselincrease repairers presenting on the site so it covers all repair options. Integrated reviews would also be beneficial" "Sometimes the asks from repairers are specialised and not easily fixed." "Website needs an upgrade: more pertinent background information. Improved layout! structure. More information on the benefits of getting an item repaired. More information to encourage more repairers."
9.	Should repairmystuff.ie allow repairers to indicate if they have achieved third-party accreditations, certifications or quality marks related to repair?	Yes: 10 (100% of responses to this question)
10.	Are you aware of any third-party accreditations, certifications or quality marks related to repair? If so, please list them here.	 "Electronics - IPC 7711, 7721; ISO 9001:2015 (General Quality Management Certification). Should the owner of the website I initiative provide some certification based on activities. Should a customer experience score system bring its own level of quality mark?" "National Qualifications e.g. upholstery, textile, bike maintenance etc." "No, as they are not generally defined in legislation. But they should not be noted on repairmystuff.ie unless they are mandatory." "Q-mark (possible)."

Question Responses Repairmystuff.ie currently provides **10%** information on repair enterprises only. If there is capacity to extend its scope, which 30% 9 Sellers of refurbished goods of the following categories, if any, do you Purchasers of defective goods 7 for refurbishment think should be considered for the future Community-led repair initiatives 11 development of repairmystuff.ie? Select 37% all that apply. Using the 'Other' option, 0 None of the above 23% please indicate if there are any additional Other 3 categories that you would like to see included on repairmystuff.ie. 12. Should repairmystuff.ie allow repairers to indicate that they are a social enterprise, Yes: 10 (100% of responses to this question) where this is the case? **13.** Some repair websites in other Member States require repairers to validate their No **10%** commercial status (e.g., by providing a company number). Should repairers registered on repairmystuff.ie be required to validate their status (e.g., by providing a Companies Registration Office (CRO) number or Registered Charity Number (RCN)), which would not be publicly 90% displayed on their profile, or indicate that they are a sole trader? **14.** Some repair websites in other Member States periodically contact registered repairers asking them to check and update, where relevant, their details on Yes: 11 (100% of responses to this question) the website. Should repairers registered on repairmystuff.ie be prompted to periodically verify/update their information on the platform?

Question	Responses
	"On Q.14 - This information should be validated and based on the activities of the enterprise, if they have not provide this service in a defined period or if they no longer provide the service, it should be removed from the profile."
15. Do you have any further thoughts that you would like to share regarding repairmystuff.ie?	"I would like to see a national budget for the promotion of repair & repair services. When we host events/focus groups to discuss circular economy, one of the barriers always mentioned is that using repair services is impacted by perception about costs - showing that repair can be economically effective & economical will be very important to future success."
	 "Increasing the profile of this great resource through links with other environmental agencies (MyWaste.ie) and media campaigns might be worth considering."
	"Overall, great that this work is underway."

TO FIND OUT MORE:

Email us: cep@epa.ie

Check our website: https://epacirculareconomy.ie

Follow us on X and Instagram: @EPAIreland

Follow us on LinkedIn: Environmental Protection Agency (EPA) Ireland

