

IRELAND'S BESMART.IE ONLINE INTERACTIVE RISK ASSESSMENT TOOL: SUPPORTING OCCUPATIONAL SAFETY AND HEALTH COMPLIANCE (CASE IE2)

1 Introduction

Promoting effective occupational safety and health (OSH) practices is key to safer and healthier workplaces. Improving arrangements and practices for managing OSH across a whole range of industry sectors and firm sizes — large, medium and small — is stimulated, supported and sustained by a range of institutional actors and internal and external processes to firms. Scientific research¹ highlights, among other things, the critical role that state regulators for OSH, such as Labour Inspectorates and prevention services, can play. This case study is part of a research project conducted in Ireland to provide further insight into this topic.²

BeSMART.ie³ is a free, user-friendly online interactive risk assessment tool that is hosted by the Health and Safety Authority (HSA) on a cloud-based platform. It is aimed at small companies and the self-employed. It allows users to generate and download relevant risk assessments and safety statements for their workplaces, as required by national OSH legislation. Users can easily update their risk assessments and safety statements as well as use the platform as a source of OSH-related guidance.

An important feature of BeSMART.ie is that it is completely anonymised and users cannot be identified in any way by the HSA or have their risk assessments or safety statements accessed. In addition, BeSMART.ie users can have direct access to HSA inspectors through this online resource. BeSMART.ie now includes over 500 hazards and 5,000 control measures that detail the procedures required to work safely with these hazards and which can be selected as required, to produce and download individual risk assessments for users and their workplaces. There are also over 300 business types listed in BeSMART.ie, including agriculture, construction, retail and hospitality.

Since BeSMART.ie's inception in 2011, engagement with small companies and the self-employed has grown year on year. In 2023, BeSMART.ie had over 14,000 users from over 10,000 companies and since 2011 has generated over 90,000 risk assessments and has downloaded over a quarter of a million safety statements for the estimated 350,000 workers who are part of BeSMART.ie's target audience. By any metric, this level of engagement represents demonstrable evidence that this online resource is a very effective way of reaching and engaging with the hard-to-reach small companies and self-employed in Ireland.

2 How BeSMART.ie works

Once users have accessed this online resource, they can remain as guest users or register an account. Either way, users will have the opportunity to choose their workplace type, which the BeSMART.ie team have configured so that it will contain a list of expected hazards. Selecting hazards will then allow users to select appropriate control measures and a risk assessment can then be generated for download by

¹ EU-OSHA – European Agency for Safety and Health at Work, *Improving compliance with occupational safety and health regulations: an overarching review*, 2021. Available at: <https://osha.europa.eu/en/publications/improving-occupational-safety-and-health-changing-world-work-what-works-and-how>

² EU-OSHA, 2025. Ireland's approach to supporting occupational safety and health compliance: the role of labour inspectorate and prevention services. Available at: <https://osha.europa.eu/en/publications/irelands-approach-supporting-occupational-safety-and-health-compliance-role-labour-inspectorate-and-prevention-services>

³ See: www.besmart.ie

the user. These risk assessments do not have risk ratings by design, which improves useability and decreases complexity.

The BeSMART.ie risk assessment is based on the International Standard 31010 Risk Management – Risk Assessment Techniques: B4 Checklists (IS EN31010:2019)⁴ and is considered a simple form of risk identification. It is a technique that provides a listing of typical uncertainties that can be considered. Users can refer to a previously developed list, codes or standards and the technique does not provide a quantitative output.

The BeSMART.ie team have found that selecting workplace types, typical hazards and control measures promotes the platform's use, retains functionality and allows its ease of use, which are all primary aims.

In addition, an important feature of BeSMART.ie is that it can generate a safety statement for the workplace type. In Ireland, OSH legislation requires a safety statement for all companies that typically consists of: an OSH policy statement together with a written risk assessment based on an identification of hazards and details that describe how OSH safety will be managed at the workplace. BeSMART.ie generates this policy statement and the users can annotate the statement with their company name, chief executive officer and date. This safety statement will also present templates that detail further OSH arrangements at the company under the following headings: roles and responsibilities, persons responsible, competence and training, consultation and participation, safety representatives, contractor responsibilities, visitors, accident reporting and investigation, emergency procedures, welfare facilities, workplace requirements, personal protective equipment, pregnancy at work, young persons at work, work-related stress and dignity at work.

In addition, BeSMART.ie provides templates that can be used for OSH-related forms and documents, including emergency information details, accident and investigation forms, and safety data sheets and reports for hazardous substances. All these OSH documents remain on BeSMART.ie's cloud-based system and are therefore continuously available and securely stored for users in a data protection-compliant manner.

The BeSMART.ie team have also developed additional content, information and guidance for specific sectors and in particular for high-risk sectors, being construction, agriculture and healthcare. For example, users from the construction sector can generate risk assessments that are required as part of the planning process for new construction projects or for typical building maintenance. These documents can be used by the project supervisor construction stage (a legislatively created duty holder) and illustrates the wide range of OSH-related documents that BeSMART.ie can generate for users.

A key feature of BeSMART.ie is its continually evolving functionality, user friendliness and diversity of its content that is primarily aimed at small companies and the self-employed. For example, three improvements recently introduced by BeSMART.ie illustrate this innovation as follows: firstly, as an encouragement or nudge, BeSMART.ie users who complete a safety statement get an annual reminder by email if they have not accessed the platform within a calendar year. Secondly, users can now add their own text to BeSMART.ie's generated risk assessments and safety statements, thereby improving the applicability of content reflecting the actual conditions of users' workplaces. Thirdly, from 2025, the platform should be able to categorise users into relevant Eurostat NACE and NUT 3 categories, which will allow the BeSMART.ie team to analyse uptake by different sectors. This in turn would allow the HSA to plan sectoral-related campaigns and thereby increase user numbers and engagement.

Current internal core staffing for BeSMART.ie involves: one senior professional, two inspectors and two administration staff. This complement includes an HSA-administered contact centre for BeSMART.ie users. Further, inspector staff contribute their expertise as required. A third party hosts the BeSMART.ie platform itself and is responsible for software development and maintenance. Further information on BeSMART.ie can be found on its OSHwiki page.⁵ The European Agency for Safety and Health at Work (EU-OSHA) also hosts a listing of further online risk assessment tools (Online interactive Risk Assessment, or OiRA)⁶ that can be viewed for a comparison with BeSMART.ie.

⁴ <https://www.iso.org/standard/72140.html>

⁵ See: <https://oshwiki.osha.europa.eu/en/themes/besmartie-business-electronic-safety-management-and-risk-assessment-tool>

⁶ See: <https://osha.europa.eu/en/tools-and-resources/oira> and <https://oira.osha.europa.eu/en>

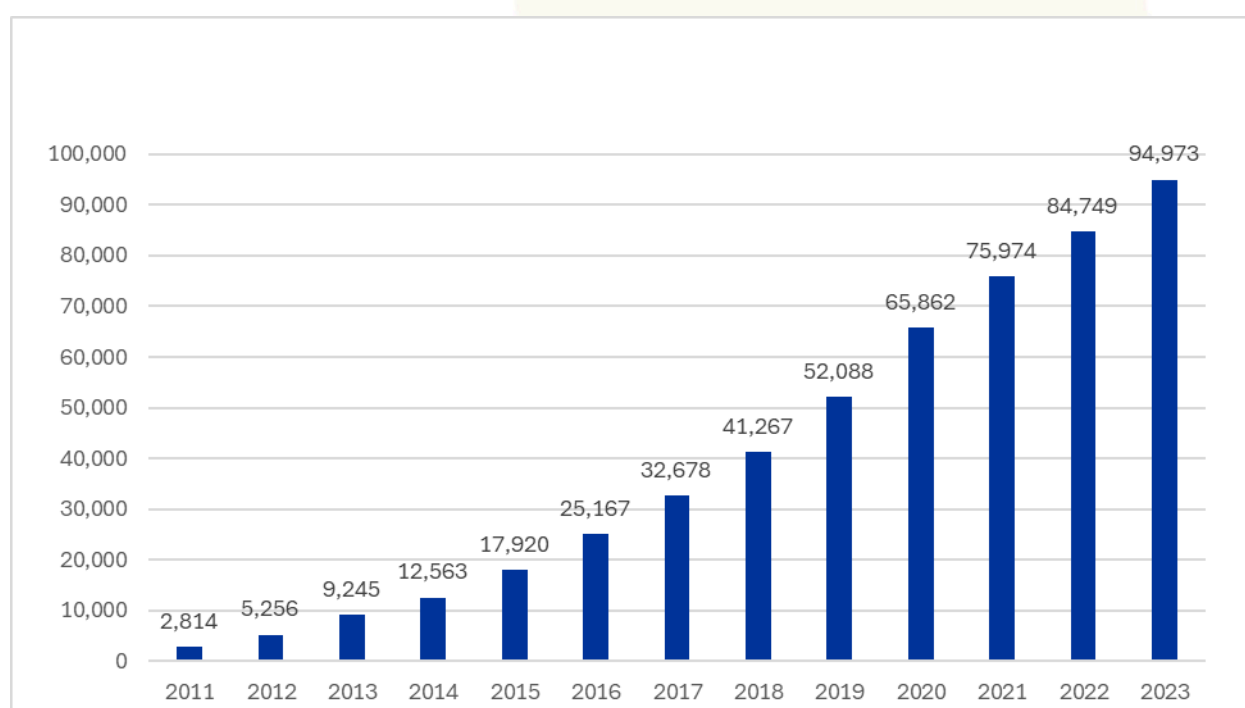
3 Methodology

A senior professional and an inspector from the BeSMART.ie team were interviewed for this case study. The authors of this research report have also accessed BeSMART.ie to review content. They also used BeSMART.ie to produce several safety statements and risk assessments in their own areas of expertise and competency.

4 Main findings

BeSMART.ie continues to demonstrate successful and growing engagement within the small companies and the self-employed. A particularly illustrative example of this reach can be seen in Figure 1 detailing the total yearly number of safety statements and risk assessments completed. The yearly number and increase in risk assessments downloaded from this online resource very well evidences BeSMART.ie's momentum since its inception in 2011. The figure shows the cumulative development.

Figure 1: Cumulative number of safety statements and risk assessments completed



Source: HSA, BeSmart

BeSMART.ie continues to retain its original ethos and strategy, which includes assisting with basic compliance and high levels of usability and functionality around the production of risk assessments, safety statements and related OSH documents. In addition, all text is written in plain English and in accordance with the National Adult Literacy Agency⁷ principles. The following quotes are from the two BeSMART.ie professionals interviewed and illustrate key concepts relevant to the platforms.

'BeSMART.ie allows people to meet compliance in a basic way as our users are not normally OSH experts.'

⁷ See: www.nala.ie/plain-english

'BeSMART.ie is aimed at the 350,000 or so working in companies that have 10 employees or less'.

'BeSMART.ie is a learning by doing exercise'.

'We go out to get users initially, and then give them a platform they can use'.

'There is a fine line between complexity and useability. If it's too difficult to use, the user will walk away'.

'All text has to be simple English and easy to understand'.

'Any content that does not work will soon cause us problems as users will contact us. So we test, test and test or we will get customer complaints'.

'We can't say what conditions are like in workplaces that use BeSMART.ie.'

We have to respect our confidentiality with users and we take data protection compliance very seriously'.

The BeSMART.ie team continually review OSH content that is regularly enlarged on a risk-based basis. A recent addition has been content related to safety in higher education and primary schools. It should also be noted that there are further online risk assessment tools, like EU-OSHA's OiRA, customised to cover different sectors in Member States.⁸

5 Assessing the effect of BeSMART.ie on workplace safety

Metrics for user numbers and downloads of risk assessments, safety statements and related OSH documents demonstrate BeSMART.ie's effectiveness in engaging with the small companies and self-employed sector.

In addition, data analysis by the BeSMART.ie teams suggests that there has been a recent surge in engagement by users. This is evidenced by the BeSMART.ie team looking at the total cumulative number of hazards between 2011 and 2023, which stands at 1,779,483. Notably for 2023, the total number of hazards assessed in the approx. 10,000 safety statements and risks assessments was 200,779, far above the expected number and evidencing a significant increase in engagement.

The BeSMART.ie team also reported numerous positive effects of this online resource as follows: the platform assists users to comply with the most important requirements detailed in national OSH legislation and provide a one-stop-shop for its target audience of small companies and the self-employed.

BeSMART.ie now has a well-established and professional credibility with its target audience regarding the platform's content availability, as well as direct advice and expertise from its inspectors if required. In addition and very importantly, users trust the confidential nature of BeSMART.ie. The platform is continually promoted by field inspectors at conferences and industry events, on social media and in campaigns organised by the HSA. In addition, all field inspectors have been trained and instructed in its use and it is constantly promoted during their site visits.

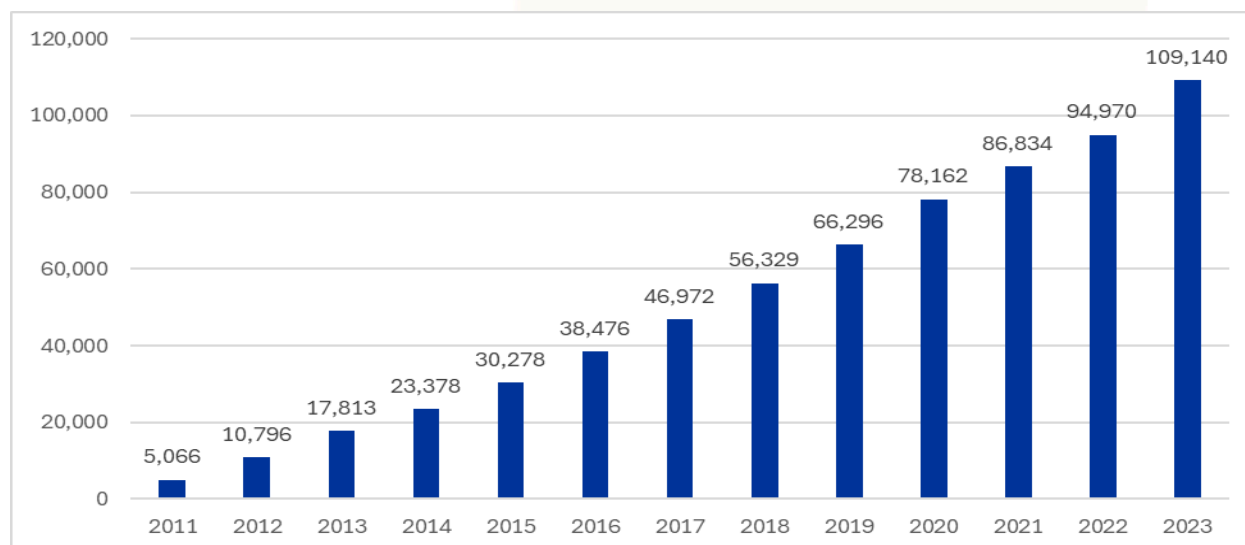
The BeSMART.ie team are also developing survey functionality that will allow optional feedback from registered users. However, assessing the actual effect on workplace safety conditions of BeSMART.ie users remains very difficult in practice. The need to empirically assess the impact of any promotionally based OSH compliance intervention or factors contributing to OSH compliance is not restricted to BeSMART.ie. This is a problem that is discussed in the main report, referring to the difficulty of empirically evaluating the amount of OSH compliance influence and contains further references to the issues involved.

⁸ <https://oira.osha.europa.eu/en>

6 Further examples of BeSMART.ie engagement metrics

Figure 2: illustrates the continual increase in users since the platform's inception in 2011.

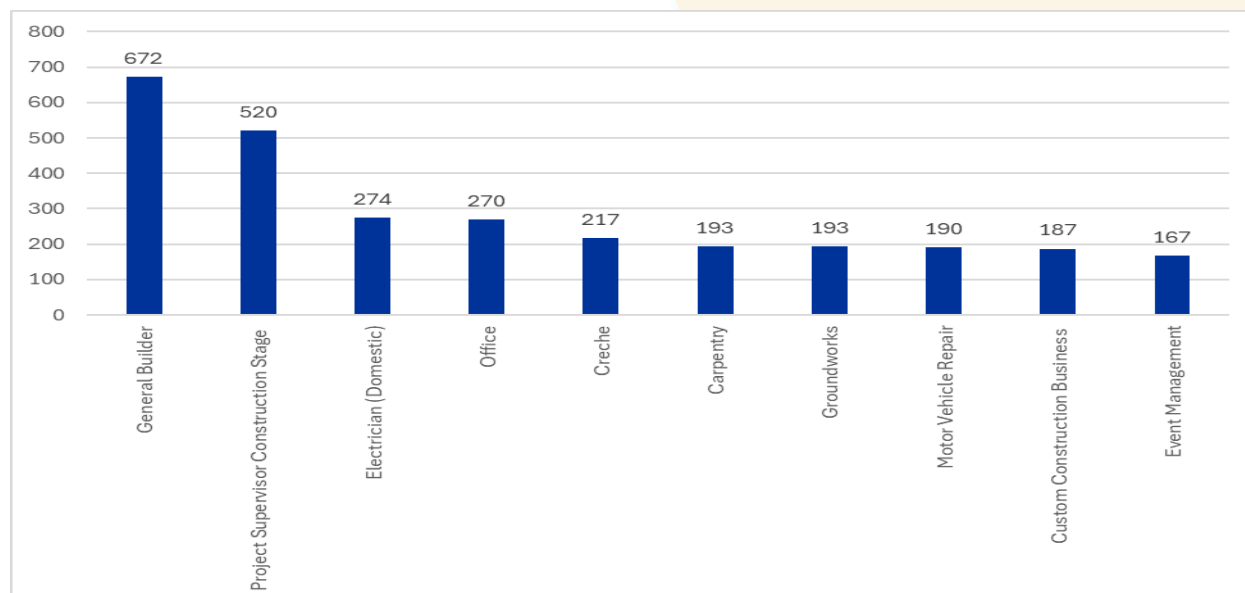
Figure 2: Number of BeSMART.ie cumulative users



Source: HSA, BeSmart 2024

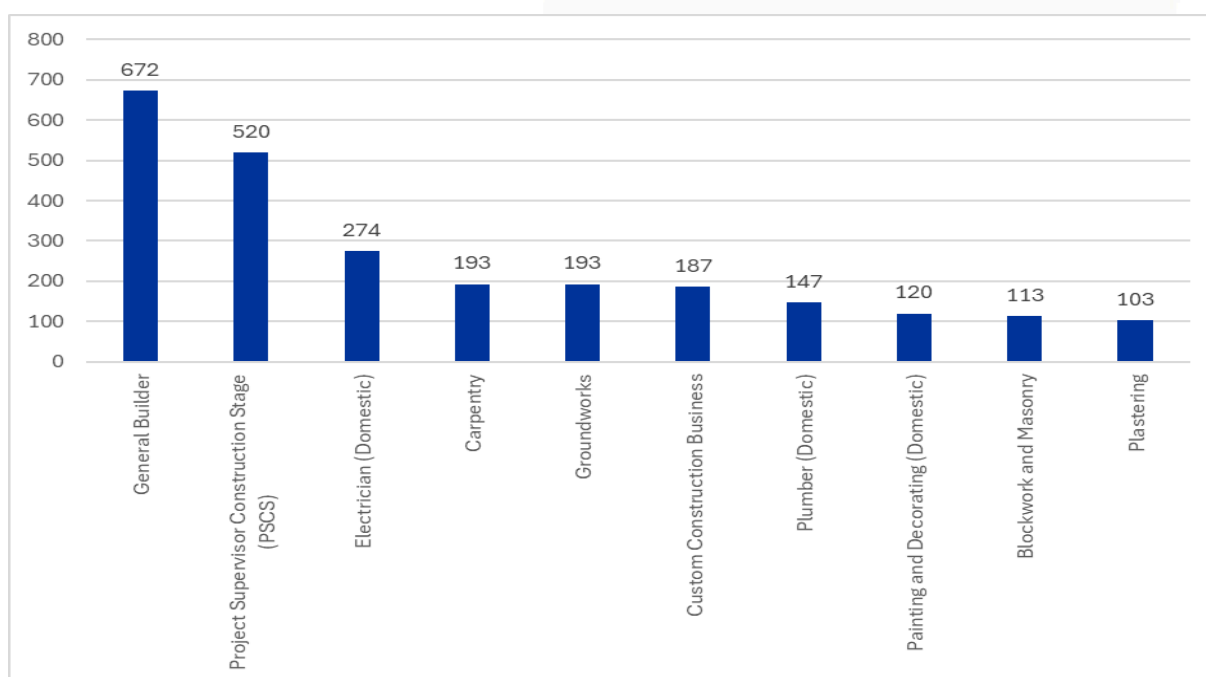
Figure 3: illustrates the top 10 businesses by type of workplaces the users of BeSMART.ie are from

Figure 3: BeSMART.ie users by workplace type



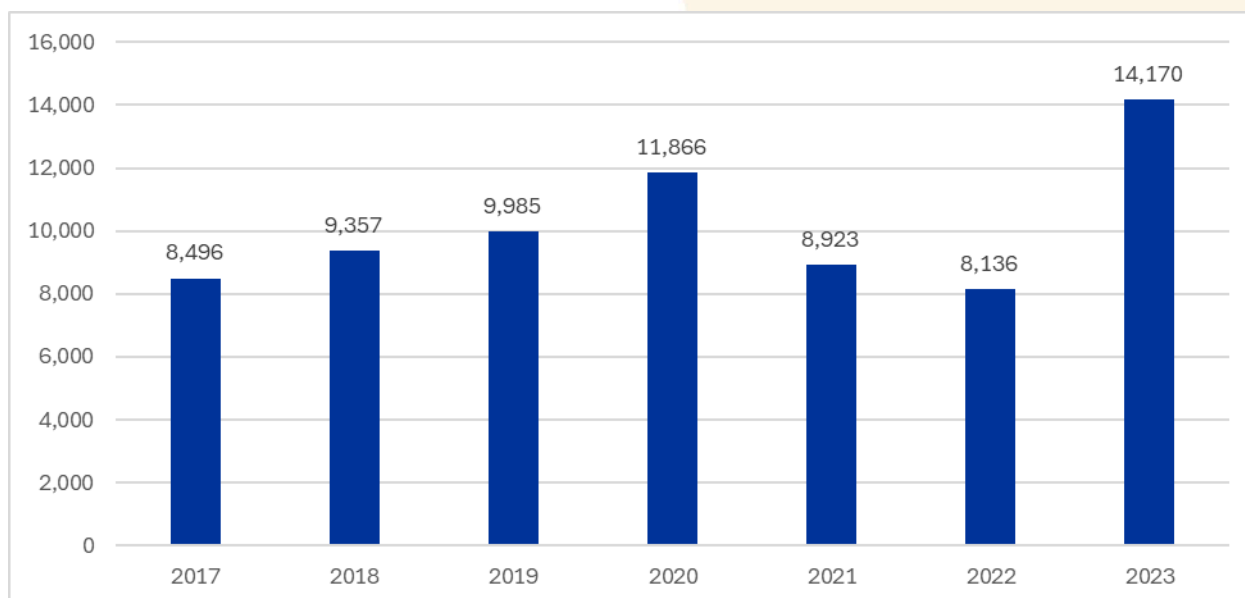
Source: HSA, BeSmart 2024

Detailing BeSMART.ie users by sector also illustrates the successful level of engagement with high-risk sectors, with the following example from the construction sector. Figure 4. details users from the small companies and the self-employed in this particular sector.

Figure 4: BeSMART.ie users by company type

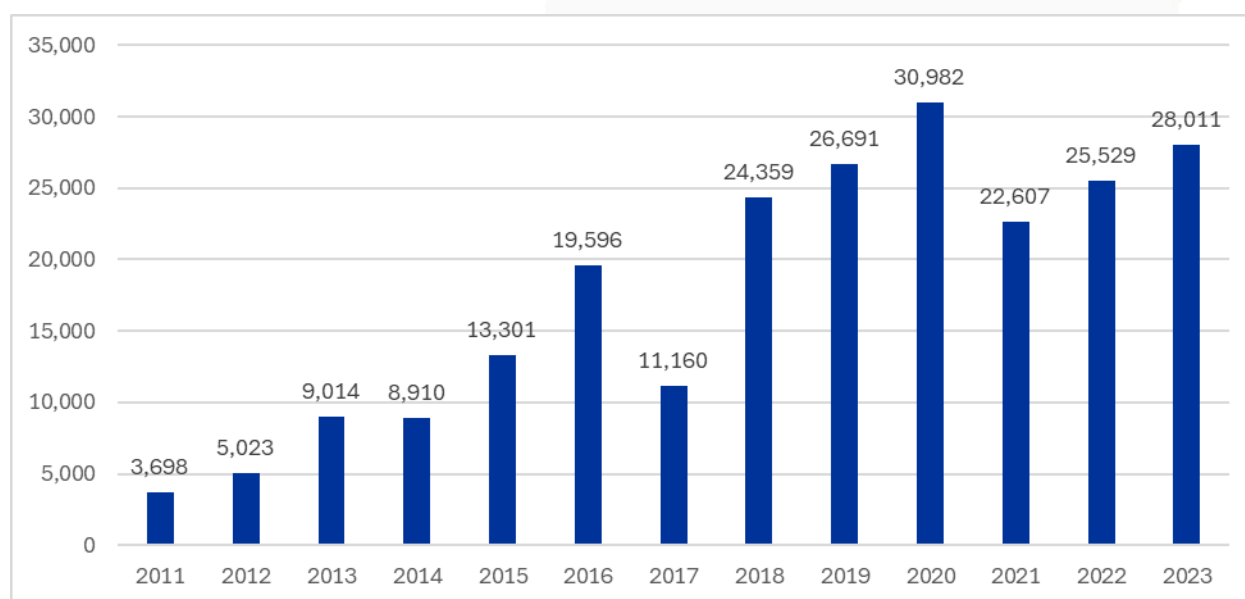
Source: HSA, BeSmart 2024

User numbers, with the exception of the COVID-19 pandemic-affected years have also shown a steady year-on-year increase as illustrated in Figure 5.

Figure 5: The number of BeSMART.ie users (registered and guest) by year

Source: HSA, BeSmart 2024

The total number of OSH-related documents downloaded each year is illustrated in Figure 6.

Figure 6: The number of BeSMART.ie OSH-related documents downloaded by year

Source: HSA, BeSmart 2024

7 Examples of collaboration by BeSMART.ie

There is extensive collaboration between the BeSMART.ie team, their HSA labour inspector colleagues as well as with the wider Irish OSH community.

The BeSMART.ie team also continuously collaborate with representatives of small companies and the self-employed, either directly or through the social partners to ensure the suitability, utility and relevance of content. Example organisations where this collaboration exists include Ibec, which is Ireland's largest lobby and business representative group and detailed in Case IE4,⁹ as well as the National Irish Safety Organisation (NISO; see Case IE5¹⁰), the Irish Small and Medium Sized Enterprises (ISME) association,¹¹ the Irish Management Institute (IMI),¹² as well as the following national advisory committees hosted by the HSA:¹³ the Construction Safety Partnership Advisory Committee, the Farm Safety Partnership Advisory Committee, and the recently established Health and Social Care Advisory Committee. The views and opinions of users themselves is also a source of collaboration. This user collaboration is achieved via a telephone and email support mechanism that provides additional feedback and suggestion for the BeSMART.ie team and platform.

8 Examples of innovation by BeSMART.ie

The use of BeSMART.ie to nudge compliance among its users is particularly innovative. Content innovation continually evolves with each year bringing additional platform information and utility. New content is added on the basis of risk. In 2024, new additional educational provider content feature was added for primary schools and the higher education sector. There are also plans to add more data analysis tools. Direct online access to field inspectors typically via telephone or email is also an

⁹ Case IE4 is available at: <https://osha.europa.eu/en/publications/ibec-and-its-online-community-good-practice-supporting-occupational-safety-and-health-compliance-case-ie4>

¹⁰ Case IE5 is available at: <https://osha.europa.eu/en/publications/irelands-niso-community-practice-supporting-occupational-safety-and-health-compliance-case-ie5>

¹¹ See: www.isme.ie

¹² See: www.imi.ie

¹³ See main report available at: EU-OSHA, 2025. Ireland's approach to supporting occupational safety and health compliance: the role of labour inspectorate and prevention services. Available at: <https://osha.europa.eu/en/publications/irelands-approach-supporting-occupational-safety-and-health-compliance-role-labour-inspectorate-and-prevention-services>

innovative facility provided by the BeSMART.ie platform. This is an important aspect for building safety culture and demonstrates the advisory role of HSA as opposed to strict enforcement and sanctions.

With over 500 hazards, BeSMART.ie users are now able to create customised business types such as hairdressers or gyms. Users are also provided with the flexibility of adding or removing hazards and thereby further customise risk assessments according to their specific business needs and hazard profiles. In addition, specific NACE and sectoral reporting is planned to be provided by 2025 allowing for further analysis of user groups by the BeSMART.ie team.

9 Transferability

The transferability of the BeSMART.ie concept in terms of scope and applicability to other Member States is eminently feasible. This can be evidenced by a number of further online interactive risk assessment (OiRA) tools provided by EU-OSHA, freely available to download.¹⁴ In addition, BeSMART.ie currently covers a very wide range of business types that can utilise this platform's content. In a similar manner OiRA covers a wide range of sectors and risks, tailored for use by the EU27 Member States. This comprehensive approach to supporting OSH compliance in the small companies and self-employed can also be considered as part of any transferability initiative.

10 Conclusion

Since the inception of BeSMART.ie in 2011, this free and anonymised OSH resource has gone from strength to strength and continues to successfully engage with small companies and the self-employed in Ireland. A sense of the scale and effective use of HSA resources can be attained by considering that since 2011 a staff complement of circa two senior professionals and three support workers have been able to allow BeSMART.ie users to: generate over 90,000 free and anonymised risk assessments and download over a quarter of a million OSH-related documents that have been produced by over 100,000 users from the notoriously hard-to-reach, small companies and self-employed.

A clear example of a comprehensive online OSH compliance resource to reach the micro-enterprises sector for all jurisdictional Labour Inspectorates is therefore presented by BeSMART.ie. This low-resource, credible, trustworthy, high engagement with hard-to-reach sector initiative, with its inclusive OSH content, would be a beneficial innovation for all Inspectorates.

A further notable finding by the BeSMART.ie team was that engagement with BeSMART.ie increased after the HSA publicised a COVID inspection campaign by its field inspectors. This resulted in higher levels of risk assessment downloads. Engagement with BeSMART.ie can therefore be seen to increase when HSA inspectors attend stakeholder events and demonstrate the platform for attendees. This inspector-led initiative further enables BeSMART.ie to extend its reach in hard-to-reach sectors, allowing users themselves to conduct more comprehensive risk assessments and safety statements.

¹⁴ See: <https://oira.osha.europa.eu/en>

References

IS EN31010:2019. Risk Management – Risk Assessment Techniques. International Standards Office Geneva.

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