

FAQs SHEET – SAFE USE OF AUTOMATIC BIN-LIFTS ON RCVs

*This WISH reference document is aimed at health and safety improvements in the waste management industry. This document is linked to **WISH INFO 26 Safety in the operation of automatic bin-lifts on RCVs** but is not a formal part of that document. It simply provides a series of FAQs on some of the topics covered in INFO 26.*

Introduction

These FAQs are primarily aimed at users of rear loading RCVs used for domestic waste collection where the automatic mode is frequently used. The term ‘users’ includes local authority direct labour organisations, local authority clients, TECKLEs and contractors. Contractors who do not own the vehicles they are using should work closely with their LA clients to manage this issue. Points to note include:

- This document is primarily concerned with risks from **existing** machines. However, it is not possible to disregard new machines entirely because many of the safe guarding solutions for existing machines may use the same technology as for new machines
- This is not an exhaustive list. However, WISH will update these FAQs periodically if new issues come to light
- This information is provided to help users meet their legal duties in controlling risks to workers and members of the public - WISH does not offer a consultancy service and cannot answer individual questions on this issue
- This document does not include commercial, warranty, or other similar issues as these are outside of the scope of WISH – it is confined to health and safety issues

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Q 1 - Why has this become a big issue now?

There have been several fatal accidents involving RCV bin lifts. These are powerful and dangerous pieces of machinery which present risks to both loaders and members of the public. It has also become apparent that there are many near-miss incidents. Following a recent fatality, the coroner issued a prevention of future deaths report. These are issued by a coroner to individuals, organisations, local authorities or government departments and their agencies where the coroner believes that action should be taken to prevent further deaths.

It has also become clear that the relevant standard (BS-EN 1501-5) does not adequately address the risks. A new Annex to the standard is due to be published shortly to address the Restriction placed on the standard (November 2023). This should eventually address the risks on new machines. The Annex recognises new technologies such as LIDAR, optical recognition, vision systems and artificial intelligence have become more commonplace in recent years. However, there are thousands of existing RCVs in use which pose varying degrees of risk. These FAQs are designed to support users in taking-action to significantly improve standards of safety associated with existing fleets of RCVs.

Q 2 - What is expected as me as a user of RCV's?

You need to work with the manufacturer to review the safeguarding of your machines to determine whether further physical safeguards might be practicable for the RCVs that you operate. Until appropriate physical safeguarding solutions have been developed for new machines and retrofitted to the GB fleet of RCVs currently in use, the procedural controls/approaches in INFO 26 'Safety in the operation of automatic bin-lifts on RCVs' represent 'good practice' to assist in managing the hazards and minimise the risks to workers and others [WISH INFO 26](#). You should keep in regular contact with the manufacturer as it is likely that newer and better retrofit safeguards will be developed which will achieve the ultimate aim of meeting emerging GB Annex to EN1501-5. Even after appropriate safeguarding measures have been developed, you will still need to have effective procedures in place to manage any residual risks.

Q 3 - My RCV supplier has approached me with a retrofit for my existing RCV fleet. What should I do and what do I need to consider?

You should satisfy yourself that the retrofits offered reduce the risks created by use of the RCV when used in automatic mode. Some questions that you may want to ask your supplier are listed below. This list is not exhaustive.

- Does the safeguard produce any additional risks which affects the safety of a machine by creating a new hazard, or by increasing any risk?
- Does it eliminate or reduce the risk? If the latter, are there any residual risks that need to be addressed by other controls?

- Do the safeguards operate quickly enough that people cannot access dangerous parts?
- If the safeguard fails, is it designed to fail to safety?
- What checks (including daily and pre-use checks), inspections, cleaning and maintenance need to be undertaken to ensure that the safeguard functions correctly?
- What specific additional training and/or information is required to be given to operators?
- Can you describe what is in place to prevent the safeguard from being easily bypassed, disabled or defeated by operators?

Q 4 - I have a lot of machines of different ages. How do I judge which machines I should tackle first?

The overall objective should be to bring all of the machines to the safest practicable state as soon as possible. You should assess the potential risks associated with your unmodified machines, the availability and ease of modification and the residual risks that remain once the machine has been modified. This should assist you to decide what needs doing. The order in which you tackle this issue is a matter for you. Below is a suggested list of priorities in descending order.

1. Machines that can be fitted with a modification which is available, easy to fit, and completely eliminates the risk
2. Machines that can be fitted with a modification which eliminates the risk but there are supply issues and/or the fitting is problematic
3. Machines that can be fitted with a modification which substantially reduces the risk. The modification is available and easy to fit
4. Machines that can be fitted with a modification which substantially reduces the risk. Getting the modification could take time and/or it is difficult to fit
5. If possible, redeploy the machines on to tasks which do not require the use of automatic mode.
6. The only available modification reduces the risk but not substantially. It is available and easy to fit
7. The only available modification reduces the risk but not substantially. There are supply issues and/or it is difficult to fit.

Note – it is inevitable that you will have to tackle some machines out of order for reasons of practicality – a pragmatic approach will be required.

Q 5 - Why can't I just rely on operator training to manage the risks?

Relying on people to follow procedures is known to be a weak risk control measure because people make mistakes, get distracted or fail to follow systems. It is always better to physically prevent access to dangerous parts of machinery (by guarding or protective devices) than rely on people doing the right thing. This is the basis for much health and safety legislation, in particular the Provision and use of Work Equipment Regulations (PUWER 1998).

The hazards from machinery should be identified by risk assessment. The purpose of the assessment is to identify measures that can be taken to reduce the risks that the hazards present. Considering the nature of the risks posed by RCV bin-lifts and that collections operatives using the lift need to interact closely and frequently with the machine during its normal operation, information, instruction, training and supervision will also be needed but should not be relied on alone, regardless of the level of protection provided.

Q 6 - Is it worth me upgrading my old machines which only have a couple of years until they reach their end of life?

As mentioned in Q4 above, this is a matter for you to decide; there is no single answer that will encompass all the situations that this question might cover. Where there is a readily available modification that can be fitted easily and which completely eliminates the risk, there can be no argument for not proceeding with the modification. If, however, there are substantial residual risks even with the modification and/or the modification is in limited supply and difficult to fit then you should redeploy the machine on to a task where the bin lift does not need to be operated in automatic mode for its remaining life and disable the bin-lift automatic mode.

In any case, users need to identify the residual risks as referenced in the user information provided by the manufacturer. You should put in place measures like those described in INFO26 to reduce or minimise these risks. The approach of “doing nothing because the machine only has a couple of years life left” is unlikely to meet your legal duties.

Q 7 - I bought a CE marked machine originally - why do I need to make retrospective changes to it now?

The background to this is contained Q1 above. It has become apparent that the safeguarding arrangements fitted to many existing RCVs in GB are inadequate to control the risks to persons approaching the rear of the machine. Technology now exists which has the potential to significantly improve the safeguarding of these machines.

Q 8 - What happens if I choose an alternative solution instead of the OEM's (original equipment manufacturer)?

This is a complex area, you may need to obtain competent advice, and is a matter for you to decide. You should consider your options carefully, and in conjunction with your OEM supplier. If you do decide to conduct your own modification/retrofit, then it must comply with relevant legislation and the required standards, the information in this FAQs sheet, and that in WISH INFO 26, which will apply no matter who conducts any modification/retrofit.

Q 9 – Will the conformity of my retrofitted vehicle need to be reassessed to maintain its CE/UKCA marking?

If users choose to modify machinery themselves with additional safety devices this may affect the validity of the CE marking on the machine and they may become the legal manufacturer of the machine. If the OEM provides modifications, these will have already been conformity assessed so your CE mark remains valid. This is a complex area for users and others – please see the following links for more detailed consideration of this issue.

<https://www.hse.gov.uk/work-equipment-machinery/refurbished-modified-machinery.htm#:~:text=Refurbished%20and%20modified%20machinery%20must,Explosive%20Atmospheres%20Regulations%2C%20etc>

<https://www.hse.gov.uk/work-equipment-machinery/faq-uk.htm>

Q 10 – Why was a restriction on the bin lift standard BSEN 1501-5 issued by OPSS?

RCV bin-lifting equipment is covered by the formal standard BS EN 1501-5. Following representations from the Health and Safety Executive (HSE), the Office of Product Safety and Standards (OPSS) issued a restriction on the current version of BS EN 1501-5. This came into force on 30th November 2023. The reason for the restriction is that BS EN 1501-5 does not adequately address the prevention of reasonably foreseeable human error, defined as ‘foreseeable misuse’ to be consistent with the terminology used in the ‘essential health and safety requirements’ (EHSRs) of the Supply of Machinery (Safety) Regulations.

Q 11 - How long have we got to fit necessary retrofitted safeguards?

HSE has not set a specific timeframe for this. Given the large number of vehicles involved and resources required, this is a matter for suppliers. In the interim, you should be following the procedural controls in WISH INFO 26.

Q 12 – What do I have to do if I sell, or lease used RCVs?

If you supply machinery for sale or lease (both new and used) you have legal duties to ensure the product is safe to use and meets relevant standards. In other words, even though you do not manufacture RCVs or bin-lifts, you still have the same duties as manufacturers to ensure that equipment you supply is safe and meets the relevant ‘Essential Health and Safety Requirements’ of the Supply of Machinery (Safety) Regulations 2008. Full details of you what the law requires are available here: [HSE guide design and supply](#).

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Products placed on the UK market which rely on the continued recognition of CE marking may rely on complying with harmonised standards to show that they have met the essential requirements in the EU product regulations. Where there is no UK designated standard or part of a designated standard is restricted so it does not exactly match the harmonised standard, manufacturers must carry out additional actions to evidence that they have adequately addressed the risks of the product. In some circumstances (such as where manual loading of an RCV is possible) more stringent conformity assessment procedures are required by a third-party.

Because of the complexity of RCVs, it is unlikely that you will want to devise and fit your own retrofit solutions to improve the safeguarding of the bin-lift mechanism. There is an option for compliance with the UK Supply of Machinery Safety Regulations 2016 (as it applies in GB) through adoption of the UK Annex to BS EN 1501-5. The British Standard Institution (BSI) can provide details of this. You are advised to contact your OEMs to agree any necessary retrofits, or removal/inhibition of automatic mode on RCV bin-lifting devices.