



Improving the UK's Extended Producer Responsibility Regime for Waste Batteries and Accumulators

The JTA welcomes Defra's open dialogue with stakeholders as they start to consider current issues, their strategic objectives and the options for changes to the UK's Extended Producer Responsibility (EPR) regime for Waste Batteries and Accumulators (WBA). This paper initially explores how the current system might be improved to address the over-contribution of portable lead acid batteries and puts forward a range of options for the Department's consideration and feedback.

About us

The JTA (Joint Trade Associations) is a grouping of ten leading Trade Associations in the electro-technical sector. Three Producer owned/led Producer Compliance Schemes (PCSs) contribute to the work of the JTA.

The Trade Association members of the JTA are AMDEA, BEAMA, BIPBA, BTHA, MAKE UK, GAMBICA, LIA, PETMA, SEAMA and tech UK. The PCSs who contribute to the work of the JTA are ERP UK, Recolight and REPIC.

Rationale for change

Well set targets can drive ambition, provide a measurement point and incentivise performance by providing a benchmark between multiple stakeholders. On the other hand, poorly designed targets can be demotivating, give a false impression of effort and achievement and be a contributing factor to system failure. With over ten years' experience of working within the current batteries regime, there is now a growing concern within the producer community that the system is not only failing but undermining the environmental objectives it was meant to deliver in the first place.

In the JTA's view, the % targets based on tonnage placed on the market in the UK is part of the underlying problem - too crude an instrument for a complex system which is increasingly resulting in unintended consequences, such as PCSs competing for the same sources with no additional environmental benefit. Furthermore, since the design of targets, there have been rapid developments in technology, significant changes to product routes to market and use of electronics by consumers. All of which cannot be accounted for by the current regime.

In the broader context of the UK's departure from the European Union, there is an opportunity to consider moving away from arbitrary European targets that no longer reflect national market realities. Rather we would welcome an approach which targets specific actions & activities in order to achieve change and improve the UK's environmental performance in relation to WBAs. This would be based on good data on flows of batteries onto and off the market (as waste) to drive circularity and apply market interventions only where there is unsatisfactory disposal.

In this paper we make a series of recommendations – first on some potential interim measures for remedial action in the short term and then secondly, policy mechanisms for reform which could be combined into a new national batteries strategy. To avoid unintended consequences for this complex EPR regime in the

UK, we emphasise that any changes must be considered and implemented in a carefully planned manner and we would welcome the opportunity to work with the Government constructively in its approach.

Interim measures

Recommendation 1 – Level playing field & enforcement

The first priority should be to ensure a level-playing field is established across the UK's Extended Producer Responsibility regime for batteries. Whilst we welcome amendments that deliver better environmental outcomes for battery collection and recycling, there is concern that possible under-reporting of portable sealed lead-acid (SLA) placed on the market skews the data and therefore confuses the issue for which solutions are sought. We are aware that one large producer is not reporting in line with the rest of the producer community. Furthermore, if there is a concern about over-reporting of portable SLA evidence generated by Approved Battery Treatment Operators (ABTOs), the issue should also be resolved ahead of considering modifications to the regulatory system and all supported by more comprehensive enforcement in ensuring fair and correct implementation of the legislation. Together, these need to be resolved as a top priority before additional solutions are explored and implemented.

Recommendation 2 – Obtain better data

Establishing accurate baseline information for stakeholders about battery flows onto and off the market is essential before constructive feedback on changes can be given. Alongside the actions above we suggest capturing data on the following:

Reporting Placed on the Market (POM) by chemistry

UK data is currently only collected in lead acid / Ni-Cd / Other categories. This hampers current and future attempts to understand battery flows onto and off the market. Rather, producers should be required to report batteries placed on the market (POM) in a wider range of chemistries. It is likely that producers have this information and already report data in this way in other countries – a cross check against existing and potential future EU requirements should identify appropriate categories. Some producers may be able to assist further by providing this UK data for previous years – allowing a reasonable estimation of historic data to be made.

However, producers would only be supportive of such an approach on the understanding that compliance by individual chemistry at 45% is not attempted. This is because such an approach has many flaws in concept as batteries do not flow neatly onto and off the market within the 3-year time horizon provided by the Directive and Regulations.

Obtain data on actual collections

Data reported on the NPWD under the heading 'portable batteries collected' is frequently misunderstood – it represents the volumes of batteries on which evidence has been issued as a result of sorting / export / application of PSLA protocol. The environment agencies may have data on actual in-year collection levels from schemes, ABTOs and licensed facilities in current and recent years which it could aggregate, anonymise and share with Defra in order to build up a picture of actual collection levels by chemistry. If this is not the case, then it is likely that the environment agencies would be in a good position to obtain it.

N. B. as such data is likely to be considered commercially sensitive confidential information by schemes – it is important to ensure that this is respected.

Review data in light of battery life

The main concern raised by Defra is apparent over-reporting of portable SLA battery recycling. The most recent figures (2017) show 9,520 tonnes being recycled against an average POM volume for 2015 – 2017 of 1,994 tonnes – a return rate of 477%. However, few commentators would anticipate an average battery life for portable SLA batteries of only 1.5 years. Significantly greater volumes of portable SLA batteries were reported as being placed on the market in 2009 – 2011 (an average of 6,219 tonnes) resulting in a return rate of 153%. No comparable data is available for the years prior to 2009 so it is not possible to extend this analysis to a longer period.

In January 2017, EUCOBAT¹ published the findings of its study to evaluate the impact that the battery life cycle had on the amount of batteries discarded and collection performance. They concluded that the assumption that all batteries are collected within three years following their market entry is simply not accurate and that usually the battery age is much longer than that, on average 5.2 years. Furthermore, it is worth noting that the report also identified that specifically for lead acid, the average age before collection was 9 years.

We believe their analysis further supports a need to better understand the different impacts of the varying lengths in time of a portable lead acid battery being placed on the market and being collected for recycling.

A final note is that the report did also provide an indication of average age for other types of chemistry, including:

Chemistry	Average Age
Alkaline-zinc	4.2 years
Lithium rechargeable	6.4 years
Ni-Cd	12.5 years
NiMH	7.3 years
Primary lithium	6.1 years

Establishing accurate baseline information for stakeholders about battery life is essential before constructive feedback on changes can be given.

Research of battery second-life

We suspect that significant quantities of portable batteries leave the UK through export of working / second-hand electrical equipment containing batteries. More research into batteries that reach the end of life outside of the UK is required to accurately assess market conditions and set appropriate targets. Parallel work is being conducted for EEE, using funds from the WEEE Compliance Fee mechanism. While we welcome correct implementation of the waste hierarchy, the export of such goods restricts the potential for targets for non-SLA portable batteries to be met. Once this issue is better understood, it could be built into the methodology for calculating appropriate targets for the future. Establishing accurate baseline information for stakeholders about battery flows onto and off the market is essential before constructive feedback on changes can be given.

Establish a UK battery flow model

The current all WEEE flows research aims to provide a significantly better set of data and understanding of flows of EEE and WEEE in the UK – this is regarded by most stakeholders as essential to enabling Defra to establish policy, including setting annual targets for WEEE. A similar approach would be invaluable for batteries.

Recommendation 3 – Compliance fee mechanism

We consider the introduction of a compliance fee mechanism, similar to the one in existence for WEEE, as only a short-term measure for schemes in meeting future targets for portable non-SLA batteries. It not only supports greater regulatory alignment with WEEE but would ensure the potential for excessive over-charging for battery evidence is restricted and allow PCSs to meet their obligation in the event targets are not achievable.

It is essential that whilst challenging, targets must be realistic, otherwise the existence of a compliance fee option could result in market distorting behaviour. The funds generated could be reinvested in much needed collection/infrastructure projects, research or consumer awareness campaigns. The Environment Bill makes provision for ‘Compliance Fees’ to be introduced in relation to any UK EPR regime. However, this requires secondary legislation.

¹ EUCOBAT, “How battery life cycle influences the collection rate of battery collection schemes,” January 2017

In the long term however, this approach is unlikely to see more batteries collected through the system and should therefore also not be used to justify untenable targets as we have seen in recent years under the WEEE regime.

Recommendation 4 – Substantiated estimates for Batteries

In line with the WEEE Regulations, the use of substantiated estimates to demonstrate recycling performance could be considered for the batteries regime.

For example:

- As noted in recommendation 3, it could be that a substantial amount of batteries are being exported in working / second hand equipment which could be included in the UK performance figures.
- As lead acid batteries are collected and recycled as a result of their metal value² and a small proportion of these are portable batteries there is the potential for these volumes to be identified and recorded as substantiated estimates at the UK level rather than as evidence issued to schemes. Existing sampling / sorting activities at ABTOs provide an estimate of the volumes of PSLA batteries currently being collected – and this could be applied as a % to the total lead acid batteries collected and recycled in the UK or collected in the UK and exported for treatment abroad. At some point it would be necessary to carry out some further sampling to re-validate the % being used.

Measures for longer term reform

Recommendation 5 – UK targets vs Producer Compliance Scheme (PCS) targets

We recommend separation of UK battery collection targets as a Member State (currently 45% of batteries placed on the market in the current and previous two compliance periods) from those applied to Producer Compliance Schemes (PCSs). This is consistent with the UK's approach for WEEE where it is recognised there are flows of end of life product that compliance schemes are unable to access or influence.

Recommendation 6 – Obligation calculation

We recommend changing the data used for the placed-on market calculation. We suggest that in-year data should not be included in future so that producers and PCSs understand their obligation shortly after the start of the compliance year commencing.

Currently, obligations can rise unexpectedly at the end of the year, for example due to member resubmissions or because quarter 4 is often a peak period for battery sales which causes difficulties in arranging the increased collections required in time. Should there be greater focus on the collection of portable non-SLA batteries in future, this difficulty would be dramatically amplified. This would also bring greater consistency with the UK's EPR regulations for WEEE and Packaging where in-year data is not used in calculation of current year recycling obligations.

An alternative for consideration would be adopting a calculation methodology focusing on the 'availability of collection' underpinned by good data and understanding (recommendation 2).

Recommendation 7 – Consider research on consumer attitudes and actions in relation to batteries

Understanding of consumer attitudes and actions is important to ensure that the UK adopts appropriate strategic and policy approaches to achieve the desired increases in collection and recycling of portable batteries.

Several previous studies provide information on the UK – or which may be relevant to the UK - and so it is possible that a literature review rather than new primary research will be sufficient. We note the following as an initial list:

² As per Ends report month year referenced a 1996 study 85 – 95% collection levels due to demand from secondary smelters

- WRAP collection methodology trials (pre-UK regulations)³
- IPSOS Mori report on WEEE
- Studies commissioned by the government ahead of Battery Directive negotiations (as cited in The ENDS report)

Recommendation 8 - Allocation

At present access to battery collection sites is an open marketplace for PCSs. Whilst this has worked adequately so far, there are signs that this is becoming increasingly competitive with collectors (local authorities, supermarkets, waste management companies) who control access to significant volumes expecting that they can obtain an access to waste fee. This is an additional cost burden being placed on producers and ultimately the consumer. With the exception of collection from distributors, the obligation of a PCS is to accept waste portable batteries free of charge into its collection network, not to provide a free of charge collection service or pay for access to waste portable batteries.

In addition, the right of distributors to request a free uplift of waste portable batteries from a PCS, and the Environment Agency requirement for battery collection boxes to be collected at least annually, can result in very small quantities being collected that are neither cost effective nor environmentally desirable. If a PCS were confident of being able to establish a regional collection network, this would not only improve cost and operational efficiency but could also offer more opportunity to develop new collection initiatives.

The distributor takeback obligations and rights of waste portable battery collectors are different under the Battery and WEEE regulations. Making these consistent would help all parties, including the consumer, PCSs, and collectors.

A system of allocating regional collection areas for distributor collections to PCSs should be considered. This would avoid undue burden being placed on smaller PCSs by distributors exercising their right of free collection, at the same time ensuring distributors receive a collection service when they require one. Minimum collection quantities should be specified to ensure an environmentally desirable outcome.

The regional allocation of other collection locations to PCSs could also be considered. The recent packaging EPR consultation considers ways in which local authority sites could be categorised for cost recovery and whilst not directly relevant here the principle of categorising sites according to rurality, population coverage etc. could be used.

Recommendation 9 - Visible Fee

A visible fee is considered to act as a mechanism to increase public awareness amongst consumers of the need to dispose of waste batteries separately from other waste. Under the Batteries Directive however, the use of a visible fee is not permitted across EU member states.

Outside of Europe however, the use of a visible fee has provided an easy control mechanism for authorities related to EPR compliance and could be considered an important element of a sustainable EPR concept. There are examples of a visible fee working successfully in Canada including in British Columbia, Saskatchewan, Manitoba and Quebec since 2017.

It is worth noting that the JTA has also identified some concerns with the application of visible fees in that these may not be suitable for all battery sales / battery products and support from retailers would be required overcoming the perceived disproportionate time and cost versus the consumer benefit.

Recommendation 10 - Other collection routes

Kerbside collections of batteries was identified (in the early research and trials by WRAP) as likely to be the highest yielding approach to collecting batteries from households.

³ [WRAP, Household battery collection trials, April 2005 – March 2008](#)

To date, some local authorities have provided this – but data on yield rates and public attitudes is not available. In general, there has been a reluctance to bolt this on to existing collections due to the significant additional costs of equipment, containers and communications. Usually however, collections have been added when a contract /service change has allowed a change in the specification of vehicles and containers and when communications to households would anyway be necessary. In these circumstances the marginal cost of adding batteries to kerbside collections is much more economic and is supported by producers.

It is also worth noting that in many authorities – and for the future - it is likely that the practical approach could extend to small mixed WEEE (many items of which also contain batteries) as well as batteries themselves. To enable the extension of this approach to be considered we recommend research on existing kerbside collections of batteries – particularly focusing on practical approaches with different kerbside collection systems; costs, communications, yield rates. Subject to the results of this, batteries could be added to the list of materials for [UK collections consistency](#) in the longer term. Planning for this over the long term will allow this to happen at relatively low cost.

Recommendation 11 – Online freeriding

We recommend that Defra implement the proposal made in the 2019 [packaging regulations consultation](#) regarding online freeriding. The consultation document included a proposal to “create a new class of producer that would put an obligation on the operators of online marketplaces for the packaging on all of the products they sell through their platforms/websites that are imported to the UK.”

Potential combination of policy recommendations into a new UK Battery Strategy

When taken together, these policy changes would allow for a different strategic approach to batteries in the UK. The objectives would be to maintain headline portable battery performance and achievement of EU targets for now whilst focusing on the key purpose of battery EPR which is to ensure the correct treatment and recycling of waste portable batteries requiring disposal.

This could result in an approach similar to that used for WEEE:

1. Using substantiated estimates to fill the gap between total achievement by PCSs and UK targets (recommendation 7)
Substantiated estimates could include:
 - i. PSLA recycling,
 - ii. batteries exported within products for reuse
 - iii. Others developed through research into battery life flows
2. PCS targets are fixed, taking into account what is available for collection at the start of the compliance year (recommendation 5);
3. Whilst not the JTA’s preferred option, if the UK does decide to continue with the status quo (% based POM targets) then we would recommend an approach which sets an annual PCS targets for non-PSLA batteries with progressive but realistic increases:
 - i. Targets could be set for several years ahead (as was the case for batteries in 2010 – 2016, and is currently used for packaging material targets);
 - ii. A trajectory of increases, based on an ongoing study of battery life flows could be consulted on and adopted by government;
 - iii. This allows schemes and other stakeholders to plan ahead in development of collection activities, communications etc to increase the volumes of batteries collected.
4. Aligning PCS waste portable battery collection and treatment obligations with the WEEE system (recommendation 8)
 - i. Facilitating the establishment of PCS regional collection networks would improve the cost and environmental efficiency of collections and provide opportunities to develop new initiatives

5. Compliance Fee available for schemes as an alternative means of compliance to meet their target in the short term (recommendation 6)
 - i. CF mechanism to be determined – but in WEEE this is based on the weighted average net cost of collecting WEEE with an escalator mechanism (formula) so that schemes with a greater shortfall pay a higher rate per tonne;
 - ii. CF funds would be made available for research, promotion etc (similar to WEEE Fund).

6. To achieve the above objectives, it may also be worth considering incorporating the requirements of the waste batteries legislation within the WEEE regulations. This could be done by adding two additional categories to the WEEE regulations. Category 15 – lead acid batteries and, Category 16 – other chemistries. There are good reasons for doing this:
 - i. Batteries are always associated with EEE, and often supplied with EEE
 - ii. The requirements in both sets of regulations are similar, and indeed the proposals in this document would drive further convergence, making incorporation even more logical.
 - iii. It reduces complexity and bureaucracy for producers, schemes, and the environment agencies
 - iv. It would reduce the government legislative time taken to implement the recommendations contained within this proposal
 - v. The WEEE and batteries regulations are already scheduled for review and consultation before the end of 2020.

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