

Mr M D Fleming
HM Senior Coroner, West Yorkshire (Western) Area
HM Coroner's Office
Cater Building
1 Cater Street
Bradford
BD1 5AS

6 October 2026

Dear Mr Fleming,

Inquests Touching the Deaths of Sohaib Ahmed and Manahal Nazir Ahmed

Haier Smart Home UK & I Limited's Response to Regulation 28 Report to Prevent Future Deaths

Thank you for your Regulation 28 Report to Prevent Future Deaths ("the Report"), issued following the tragic deaths of Sohaib Ahmed and Manahal Nazir Ahmed. We, Haier Smart Home UK & I Limited ("Haier UK") write to respond to the Report, with the intention of providing as much reassurance as we can that the risk of future deaths arising from similar circumstances is prevented. We hope that this response can be meaningfully read alongside the expected response from the Office for Product Safety & Standards ("OPSS"), who the Report was also directed towards, and with whom we have regular dialogue to promote product safety.

At the outset, we wish to express our deepest condolences to all of the family and friends of Sohaib and Manahal. Individuals at Haier UK have been profoundly affected by this tragic incident. In addition, these condolences come not just from Haier UK but from the entire Haier group of companies.

You have set out three matters of concern, which fundamentally ask us to consider the appropriateness of a root cause analysis into the specific model DX C10DCER-80, and similar models; and to consider whether sales of the model are halted. The majority of our activities since the Report was issued have focused on addressing these matters of concern, and those activities are set out at section 4 of this letter. In advance of that section, we have considered a range of other topics that are intended to contextualise section 4, and reassure you that the risk of future deaths is prevented in a range of ways across the sector.

This is not intended to distract from the core matters at section 4. Please also be reassured that we have not only *considered* the appropriateness of a root cause analysis as directed, but we have substantially already *completed* a root cause analysis.

This letter sets out the following:

1. the existing legal framework supporting product safety for tumble dryers in the UK;
2. our internal processes for ensuring product safety and compliance;
3. our engagement with relevant industry bodies and stakeholders to help ensure product safety;
4. our activities in relation to the three specific matters of concern identified in the Report; and
5. our forward-looking approach in light of ongoing regulatory developments.

Assuming that you and the Chief Coroner wish to publish your Report, we confirm that we wish for this letter to be published in full. We have taken care not to name any individuals other than Sohaib and Manahal, and the content of this letter comes from information in the public domain, or from information confidential to us that we have chosen to release for transparency and public benefit.

1. The existing legal framework supporting product safety for tumble dryers in the UK

- 1.1. Over many years, the UK has developed a comprehensive product safety framework, heavily derived from a wider EU regime but more recently progressed with UK interests and consumers in mind. That framework obliges businesses to ensure that substantial mandatory product safety requirements are met before products can be placed on the UK market.
- 1.2. A fundamental obligation arises under the General Product Safety Regulations 2005, that businesses shall only place products on the market that are safe products. A range of supporting obligations uphold this central protection. In addition, Part II of the Consumer Protection Act 1987 facilitates the creation of sector specific safety regulations. In relation to tumble dryers, relevant regulations of this nature include the Electrical Equipment (Safety) Regulations 2016 (“EESR”) and the Radio Equipment Regulations 2017.
- 1.3. EESR contains numerous obligations that a business must ensure conformity with, with an important focus on ensuring that products including tumble dryers meet necessary safety objectives. The most effective way to achieve this is by demonstrating conformity with designated standards, such as applicable parts of IEC 60335. As such, a business must design and manufacture its product to ensure that it conforms with the relevant safety objectives and designated standards, and produce technical documentation to demonstrate that and to ensure that the various EESR obligations are met. This then enables the business to mark the product with a UKCA or CE mark and place it on the UK market.
- 1.4. We have set this out to reassure you that the tumble dryer you considered, and others that are similar, have been through this rigorous process. We, Haier UK, do not ourselves manufacture tumble dryers; we import them into the UK. Others in the group of companies are responsible for manufacture. We mention this because it means that we gain the benefit of substantial technical expertise of others in the group, who also take care to ensure that tumble dryer products meet the requirements necessary before placing them on the market in other countries in Europe.
- 1.5. It may also be helpful to note that particular components that you were concerned with, such as the PCB (printed circuit board), are part of the conformity assessment because they are incorporated into our tumble dryers when testing occurs. In addition, appreciating that such components are typically manufactured by others, those component manufacturers must ensure conformity with relevant general and sector specific regulations applicable to their components.
- 1.6. We have mentioned IEC 60335 above, which is a very detailed standard, split into multiple parts. IEC 60335-2-11 focuses specifically on tumble dryers. IEC is the International Electrotechnical Commission. A great deal of expertise exists within and also flows into the IEC, including from bodies such as the UK’s British Standards Institution. This expertise helps to ensure that relevant standards are monitored on an ongoing basis, taking into account the occurrence of tragic events like this, so that enhanced versions of relevant standards are produced for the future.
- 1.7. There are always improvements that can be made to standards. We appreciate, for example, that the OPSS is considering whether future versions of standards should include tests that help to improve containment of fires within tumble dryers. This could lengthen the time that fires take to spread outside of tumble dryers, providing a greater window of opportunity for those at home to reach safety. We are engaging with the OPSS and the sector on that topic.

2. Our internal processes for ensuring product safety and compliance

- 2.1. In this section, we have set out our processes that help to ensure that our tumble dryers are safe, and that when risks are identified, appropriate steps are taken. Our explanation below
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mirrors the product lifecycle, and it reflects the activities not just of Haier UK but of our group, including during design and manufacture.

- 2.2. However, no business should treat their processes as static or perfect. We regularly assess our processes, and we want you, and the family and friends of Sohaib and Manahal, to know that we are reflecting, and will reflect, about what can be learned from this fire.
- 2.3. We adopt the foundational principle that our tumble dryers should be safe by design, as well as energy efficient and high performing. The product development phase includes considering relevant standards and best practices to eliminate or reduce safety risks, and designing our tumble dryers in order to ensure conformity with safety requirements. This process includes placing exemplars under stress tests to simulate foreseeably abnormal conditions, and simulating the product's lifespan to assess how long it should perform. Technical documentation is produced and kept under review, and testing is undertaken under EESR and other relevant regulations to satisfy us of the product's safety, including by engagement with independent accredited testing companies as appropriate.
- 2.4. Manufacturing facilities are carefully scrutinised and controlled, as it is important to ensure that mass produced products are produced consistently, without deviations that could affect safety. Aside from carrying out regular assembly line tests and warehouse audits, we analyse sample tumble dryers after production, carrying out electrical safety tests and functional tests, and we conduct similar quality assurance, sample testing, and due diligence on various component suppliers. This activity facilitates root cause analysis as it helps us to verify the integrity of the products or components produced, or detect issues.
- 2.5. Once our tumble dryers are sold on the UK market, we carry out ongoing surveillance of product safety. In practice we receive information about safety incidents from various sources, including customers contacting our call centre directly, local authorities including Trading Standards or fire services informing us of incidents, and occasionally through third party insurers, solicitors or forensic experts. Our processes govern how best to act upon those incidents, obtain more information, and log the data. In many instances, and assuming we are allowed access, we directly inspect, or appoint an independent forensic expert to inspect, appliances present at the incident scene.
- 2.6. You heard evidence from the expert witnesses in the inquests that fires could occur in tumble dryers due to lint igniting within the tumble dryer. This is an inherent risk within condenser tumble dryers, affecting all manufacturers. That is why customers are instructed to regularly clean the filters in their tumble dryers, and why not doing so can cause a fire. Reputable independent bodies such as the London Fire Brigade and Electrical Safety First run campaigns to emphasise this¹. When we investigate fire incidents, we and others often find from inspection that lint build-up is the likely cause. However, when we record incident data in these circumstances we capture, where we can, a range of relevant information that helps to identify any trends that can inform future design, and inform any root cause analysis. This might include capturing data relating to the components that appear to have been involved in the initiation of the fire, and the manner in which the tumble dryer was maintained, including the extent to which the filters were regularly cleaned. Put another way, we learn as much as we can from these incidents in order to try and prevent future occurrences, for example by informing future design choices, even if the fire arose from this inherent risk.
- 2.7. Incident information is collated into an incident report log, and this facilitates further analysis by those with relevant technical expertise. This includes identifying trends from the data, that help inform us whether there are any potential safety issues and whether any corrective action

¹ See e.g. <https://www.london-fire.gov.uk/safety/the-home/electrical-items/whitegoods/> and <https://www.electricalsafetyfirst.org.uk/safety-advice/products-and-appliances/kitchen-appliances/tumble-dryers/>

is required such as design change, issuing of service bulletins or safety information to customers, and product withdrawal or recall.

- 2.8. The technical expertise deployed throughout the product lifecycle has been specifically applied to consider the three specific matters of concern you raised in your Report, set out at section 4 below.

3. Our engagement with relevant industry bodies and stakeholders to help ensure product safety

- 3.1. We have outlined certain legal frameworks and safety issues above that are of sector wide application. We have done that not to divest responsibility from our own business, but to help you understand that there is a collective expertise and resource across the sector, that has an interest in some of the concerns you have raised.
- 3.2. We have set out below some of our own external engagement, through which we can share some of your concerns and seek to prevent the risk of future deaths.
- 3.3. We have mentioned at section 2 above our engagement with bodies including local Trading Standards departments (including in particular the body that we have a Primary Authority relationship with, meaning that this body co-ordinates information from other Trading Standards departments) and fire services. This helps to ensure that we are provided with information about incidents, that we can investigate.
- 3.4. We are also a member of AMDEA², which is the Association of Manufacturers of Domestic Appliances. It represents 90% of the white goods brands in the UK. It includes our main competitors in the tumble dryer sector, and provides a platform to work together in relation to product safety, sharing best practice and determining, for example through specific working groups (such as the technical committee and small appliance group, and the safety and liaison panel), how to best navigate through specific safety issues and consider improvements to relevant product safety standards and practices.
- 3.5. AMDEA, in turn, engages on behalf of the sector with various other stakeholders to promote tumble dryer and other white goods safety, such as Electrical Safety First and the British Standards Association.
- 3.6. We also have substantive, ongoing dialogue with various individuals at the OPSS. Whilst we appreciate that the OPSS has enforcement duties, we are appreciative of the fact that it devotes substantial attention to engaging with businesses and trade associations³ generally and positively. We are engaging with the OPSS on various topics relating to condenser tumble dryers, and tumble dryers more widely. This specific dialogue aligns with the OPSS' recent reorganisation into 15 sectors, of which one is domestic appliances. We appreciate that this will help the OPSS focus sector specific knowledge into improving product safety, and more effectively engaging with us and other businesses in the sector.

4. Our activities in relation to the three specific matters of concern identified in the Report

- 4.1. Your Report identified three bullet-pointed matters of concern. You were particularly concerned with the DX C10DCER-80 condenser tumble dryer, as this was the model present at Sohaib's and Manahal's home. However, you were also concerned that other tumble dryers which may share that model's characteristics could present a risk. You asked us to consider

² See here - <https://amdea.org.uk/>

³ As outlined, for example, here - <https://www.gov.uk/government/organisations/office-for-product-safety-and-standards/about/our-governance>

certain actions. We have done so, and we have set out our activities in relation to each of those three matters of concern below.

First matter of concern

- 4.2. You asked us to consider the appropriateness of a root cause analysis in relation to the DX C10DCER-80 condenser tumble dryer, and examine similar incidents involving this model. You heard evidence during the inquests that this model fell within the ‘Infinity’ platform period, introduced in 2018 and manufactured until the first quarter of 2022.
- 4.3. The incident data that we collect, as set out in section 2 above, includes a field for the model number. This helps us to determine whether any trends arise in relation to specific models, that would cause us to consider them in greater detail and potentially take corrective action. In most incidents, the model number can be determined either because it or related information can be seen from the tumble dryer, even where it has been subject to some damage, or we can derive this from the appearance and features of the tumble dryer, or we have information on our system e.g. if the customer has registered it.
- 4.4. We have carefully reviewed our incident data, searching for any other safety incidents involving the DX C10DCER-80 model. We confirm that there are no other safety incidents where we are certain that this model is involved. There has been one other safety incident where the customer believed they had this model. However, it was purchased via eBay and the model could not be determined from the incomplete product details provided, or during a forensic inspection. In any event it was concluded from that inspection, which included an independent expert review, that the fire most likely occurred due to lint ignition following inadequate cleaning of the filter and/or condenser. We are satisfied that there is no elevated safety risk in relation to this model.
- 4.5. We are mindful that you heard evidence during the inquests that there had been a “significant number of...product fire notifications from fire services across the UK that involve this model”, and that there is “regular dialogue with the business about this product”. As such, you may be concerned that what we have said at 4.4 above differs from the live evidence that you heard. What we understand to have been meant by ‘model’ in the live evidence was not the specific DX C10DCER-80 model, but condenser tumble dryers more generally. We say this because it aligns with the fact that we and the OPSS are in regular dialogue about condenser tumble dryers (principally in relation to the risk assessment process discussed later in this letter), and also because the list of fire service notifications we received from the OPSS, which contains a specific column for ‘model’, does not contain any entries which state ‘DX C10DCER-80’, other than the Russell Close fire (which states the model as ‘DXC10DCERNFC’).
- 4.6. You asked us to confirm whether the DX C10DCER-80 model has been subject to any recurrent failure modes, alterations to its design, issue of technical service bulletins, or a recall or safety campaign. We confirm that it has not been subject to any of these actions.
- 4.7. As explained in the next section below, the root cause analysis you asked us to consider for this model is best conducted as part of the root cause analysis across a wider range of similar tumble dryers.

Second matter of concern - scope

- 4.8. You asked us to consider the appropriateness of a root cause analysis for similar branded condenser or vented tumble dryers which may share the characteristics of model DX C10DCER-80, in order to determine whether such products present a risk which requires corrective action.
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- 4.9. We decided immediately upon receiving your Report that it was appropriate to conduct a root cause analysis of this nature, particularly as it would inherently encompass the DX C10DCER-80 model along with various others.
- 4.10. The first question that we then had to determine was the scope of tumble dryer models to include. In order for the root cause analysis to be meaningful, we read ‘similar’ with reference to safety, and we do not seek to exclude any just because of differences in functionality, performance or aesthetic. With that in mind, it caused us to consider which models have the same or similar components that are relevant to safety; meaning either that they perform a safety critical function (e.g. the type and/or positioning of a thermal cut-out device), or could be involved in a safety incident (e.g. a heater). The fundamental design of the tumble dryer is also relevant to this, as condenser tumble dryers by design have a different safety profile to vented tumble dryers (a condenser tumble dryer recirculates warm air, but a vented tumble dryer expels it).
- 4.11. Having considered what would be most meaningful as a root cause analysis that fits with your concern, we determined that we would focus on numerous models of condenser tumble dryers. In addition, since many of the components that are relevant to safety are common across the Infinity platform and the prior ‘pre Infinity’ and subsequent ‘EOLO’ models, we have included all relevant models within those platforms too. In other words, we have not limited the root cause analysis to the Infinity platform.
- 4.12. This scope aligns with the scope of a wider risk assessment that we agreed with the OPSS that we would conduct, and which is mentioned later in this section.
- 4.13. We have then considered which potential failure mechanisms to focus on. Despite considerable expert evidence in the inquests, you understandably concluded that the evidence did not allow you to determine how the ignition occurred. However, you outlined the possibilities of tracking, defective solder joint, heater relay failure or another internal electrical failure. We have therefore focused on these. In addition, there was a focus on the PCB (for example tracking from lint potentially reaching the PCB from a blocked filter and igniting to cause damage to the PCB), so we have significantly (but not completely) focused on the PCB when conducting root cause analysis.

Second matter of concern- actions

- 4.14. We have reviewed our quality data records for the tumble dryer, which capture component replacements that fail safely before their expected life span. It is inherent in consumer electrical products that most or all components have a finite life span, and will fail safely at different rates over time.
- 4.15. We have reviewed our data on the rate at which the PCB is replaced. This shows a consistently low and stable failure rate in tumble dryers, in line with what we see across our product range generally, and this rate has generally been decreasing over time. In reviewing this data, we have not seen any evidence of a recurring or systemic problem. This analysis is based on data collected during manufacturing and drawn from failure rate trend data.
- 4.16. We have also reviewed our internal quality records covering the past several years, including the log of quality improvement actions taken on this product line, and the record of defects identified and corrected during manufacturing control. We have found no evidence that any corrective action was ever required because of the type of faults you were concerned with, particularly cracked PCBs or weak soldered joints. We also reviewed the manufacturing defect log, which is intended to capture issues such as manufacturing deviations, and we confirm that there are no entries for the type of faults you were concerned with.
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- 4.17. We have also compared photographs of the relevant area of the PCB scrutinised by the expert witnesses in the inquests, with other similar machines where PCB related faults have previously been recorded, to consider whether the same pattern of damage has occurred elsewhere. There are no other incidents exhibiting tracking at the same point, meaning there is no evidence of a systemic weak point.
- 4.18. In addition to reviewing data from a range of sources, we have been carrying out physical examination of an exemplar model. To understand whether heat generated during use could lead to the issues you considered, we carried out thermal testing on the PCB while the tumble dryer was running a substantial drying cycle. Using a thermal imaging camera, we identified that the warmest point on the PCB, during ordinary use, is the area at and around the heater relay, which is an area that you were considering. During a full cycle, that area reached a maximum temperature of 80 degrees Celsius, approximately 55 minutes into a 70 minute cycle. Even with an extended cycle of 3 hours 40 minutes, the maximum temperature reached on the PCB was 81.8 degrees Celsius, towards the end of the cycle. The circuit board material used is rated to withstand temperatures of at least 130 degrees Celsius, so this represents a substantial safety margin under normal operating conditions. The constant movement of air created by the rotating drum keeps the surrounding temperature stable and helps to prevent it from climbing further during use. You may also wish to note that the temperatures correlate with when the heater is and is not operating, and that the heater is programmed to switch on and off multiple times during the course of the cycle. This provides natural cooling periods including at the PCB heater relay when the heater is switched off.
- 4.19. We have also carried out forced failure testing, which is where we put the tumble dryer into an abnormal state and try to force the sort of failure you were concerned with. We increased the electrical supply voltage to 10% above the top of its normal working range, which is a significant overload, and we also deliberately weakened the soldered connections on relevant parts of the board, removing most of the solder from some of the connection points to simulate a poor quality joint. Even under these combined, very abnormal conditions, the highest temperature recorded was around 83 degrees Celsius, only marginally higher than in normal use, and still well below the 130 degree rating of the board. It is helpful to note that each of the relevant connections is made using two separate soldered points rather than one, so that if one connection point was faulty, the other connection point can and will maintain a secure and stable contact. This is a built-in safeguard which makes it unlikely that a single poor connection on its own could lead to the type of failure of concern.
- 4.20. We separately checked the temperature of the door safety switch during normal use and found it rises only slightly above the surrounding temperature inside the tumble dryer, even when carrying the full electrical current, so this component is not observed to be under any meaningful thermal stress.
- 4.21. We continue to conduct forced failure testing to determine what may happen if lint builds up on the PCB during use. Based on our experience, lint typically needs to reach around 250 degrees Celsius before it can ignite, which is very significantly above any temperature we have recorded on the PCB, but we are carrying out further testing to confirm this. In any event, there are various thermostats and cut-out devices positioned within the tumble dryer to stop it from operating, if a temperature above a certain level is detected; including at around 80 degrees Celsius in some areas, and 160 degrees Celsius near the heater (it is higher because the heater naturally radiates the most heat).
- 4.22. In addition, the plastic components used in the relevant electrical connectors are subject to standard, recognised safety testing, as required under the applicable product safety standards, which confirms that even if a poor electrical connection were to cause a brief electrical arc, the surrounding plastic would not sustain a fire. It is designed to resist ignition and, if briefly affected, to extinguish itself within a fraction of a second.
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4.23. Taken together, and subject to the completion of the final activities described above, this analysis and testing gives us confidence that the potential failure mechanisms you were concerned with do not exhibit a widespread, replicable or systemic safety issue within the various Infinity, pre Infinity and EOLO condenser tumble dryer models that are similar to the model you considered.

Third matter of concern

4.24. You asked us to consider whether it is appropriate to halt sales of the model pending the root cause analysis and any approval or assessment by the OPSS.

4.25. The DX C10DCER-80 model is no longer on sale, with production of it and other similar Infinity platform models having ended by the first quarter of 2022. We cannot rule out the remote possibility of some third party retailers still having very modest levels of 2022 or earlier stock to sell, but this is highly unlikely. Typically, models that are a year or two old are cleared by us and retailers through discounted sales in order to make space for newer models, and tumble dryers are bulky products that take up significant warehouse space.

4.26. We have set out above that there has been one other safety incident that may have involved model DX C10DCER-80, but this could not be determined with certainty, and that incident appears to have been caused by lint ignition from an inadequately cleaned filter and/or condenser.

4.27. We have nonetheless looked more widely than just that specific model. The above root cause analysis has evidenced to us that there is no systemic safety issue arising from the concerns that you raised.

4.28. Distinct from this, in the second quarter of 2026 we conducted, voluntarily and by agreement with the OPSS, a risk assessment relating to the same scope of condenser tumble dryers that we have considered in response to your Report. That risk assessment involved a substantial analysis of fire incident data, with a focus on determining and analysing any failure clusters, where there was commonality of facts between incidents. Where any failure clusters were identified, we considered and documented the controls that were in place and gave the failure cluster a tiered risk rating. There is no template risk assessment in the public domain to capture this, so we created one.

4.29. Failure clusters that we documented that you may consider relevant to your matters of concern are 'PCB Area Failure', 'Connector Area Failure' (which included but was not specific to the PCB), and 'Lint Induced Failure'. PCB Area Failure and Connector Area Failure were determined to be in the lowest tier, 1. This is defined as "failure cluster fully addressed by type tests and certified components, residual risk low / well controlled".

4.30. Lint Induced Failure was determined to be in the middle tier, 2. This is defined as "failure cluster fully addressed, but reliance is placed on appropriate user behaviour including the adherence to user manuals and warning notices, or open improvement actions, subject to ongoing monitoring". This means that we recognise the risk arising from lint migrating from blocked filters and igniting, and that we will continue to monitor this, make design improvements, and work with the sector to help inform customers of the importance of regularly cleaning filters.

4.31. We raise the risk assessment because even though it falls outside the root cause analysis you have asked us to consider, we want to demonstrate an additional, wide analysis that is relevant to the concerns you raised.

4.32. In these circumstances, we have determined that it is not appropriate to halt sales of the DX C10DCER-80 model, or other similar models. We hope that you are reassured that this is reasonable, but we do wish to emphasise that we will continue to monitor for risks and take appropriate corrective action when appropriate. We will also be willing to discuss this further with the OPSS.

5. Our forward-looking approach in light of ongoing regulatory developments

- 5.1. We hope that the above content helps to reassure you of the activities carried out to date in relation to tumble dryer safety and the concerns you have raised in your Report. In this last section we seek to reassure you further, by outlining key future developments that will promote product safety across the sector.
- 5.2. As I hope is evident from the above content, we will continue to monitor, contribute to, and adapt to, regulatory developments and improvements relating to tumble dryer product safety. Since our group operates globally, it applies expertise from multiple countries, and particularly incorporates best practice that helps ensure conformity with not just UK but EU product safety expectations.
- 5.3. We will also continue to engage with the various external stakeholders mentioned at section 3 above, contributing to relevant working groups and helping to promote positive change.
- 5.4. In the UK, the Product Regulation and Metrology Act 2025 will result in a range of future-proofed product safety regulations, some of which will be relevant to tumble dryer safety, and may help to alleviate some of your wider concerns. Such areas may include indelible marking of products to help ensure traceability even in the event of fire damage, more effective means of providing safety instructions and warnings to customers, and enhanced recording, investigating and reporting of safety incidents. However, we do not necessarily wait for regulation in order to make the most of technology; for example we have already used push notifications through our apps in relation to our 'connected' tumble dryers to distribute product safety content to our customers. We will continue to find new ways to uphold product safety.

We thank you for providing us with the chance to explain what we have done, and are doing, to prevent the risk of future deaths. We express again our condolences to the family and friends of Sohaib and Manahal.

Yours faithfully



Haier Smart Home UK & I Ltd