

Refurbishment Solution for Deutsche Telekom AG:

A Sustainable Approach to Saving Resources

For over a decade we have managed logistics operations for Germany's largest communications group, Deutsche Telekom, serving their B2B and B2C customers from our state-of-the-art distribution center in Landsberg, Germany.



For more than ten years, Arvato has been our reliable partner in shaping our supply chain. With Arvato's expertise and commitment, we have overcome complex challenges, created seamless customer experiences and successfully maintained our leading position in the market.

Oliver Gerz

Vice President SCM at Telekom Deutschland



Together, we developed a successful refurbishment program for routers and media receivers, processing over one million devices annually. This forward-thinking initiative not only reduces waste but also significantly contributes to environmental preservation by promoting device reuse over manufacturing new ones.

Initial Situation

In 2009 Deutsche Telekom took a significant step towards sustainable practices when it introduced a rental model for routers and media receivers, allowing customers to return devices they no longer needed. To minimize waste and protect the environment, Deutsche Telekom initiated a refurbishment program, processing returned devices for reuse by other customers instead of producing new ones. However, at that time, the remanufacturing process was managed internally and primarily manually, leading to high costs, time consumption and variable quality. To address these challenges, Deutsche Telekom outsourced the remanufacturing task to Arvato in 2012.

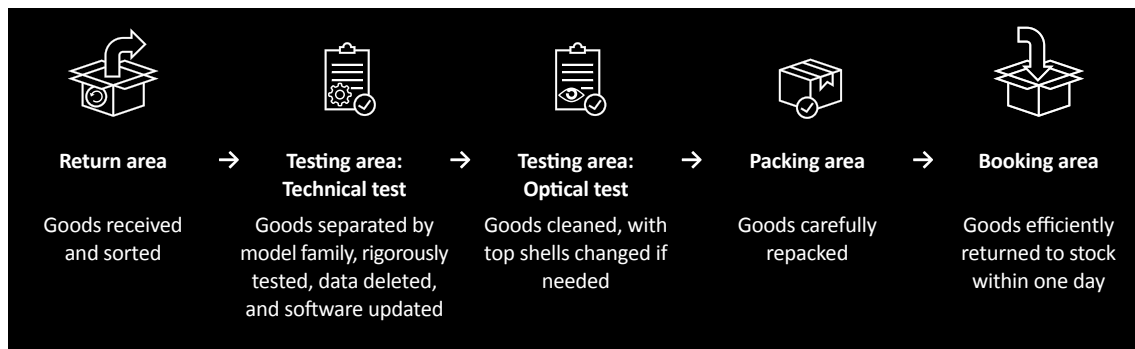
Goal: Reduce processing times and ensure reliable deadline logistics, allowing remanufactured devices to be promptly sent back to customers. Additionally, reduce transport costs.

Automated Refurbishment Solution

We started with the development of the first concept for the refurbishment of two router models, which was fully implemented within a mere six months after thorough testing. The goal was to completely redesign the business model, focusing on maximizing device availability for sale shortly after receiving returns. To ensure efficient processing, our in-house technical team developed an automated testing solution that enables simultaneous, parallel testing of multiple devices, significantly reducing turnaround time and guaranteeing consistent quality.

65%

Of all returned fixed-network products go through the automated testing solution, with 90% being reintegrated into the inventory.



Over the years we have broadened the refurbishment solution's scope to include additional router models, media receivers, business routers, and mesh repeaters. Our software platform and model-independent test boxes allow the rapid extension of test scenarios to new device models within three weeks. Notably, device manufacturers seldom provide test software or specify pass/fail criteria, leaving us to define and establish these crucial parameters in close collaboration with Deutsche Telekom.

After meticulous data deletion and software updates, devices undergo visual inspection and, if needed, receive new top shells. Within a single day of arriving in the returns department, the refurbished devices are expertly repackaged and made available for rental once more. This seamless process has been successfully replicated in 2021 for Magenta Telekom in Austria, extending refurbishment benefits to a significant portion of the routers and media receivers returned there.

Sustainability Impact of the Refurbishment Model

The refurbishment solution has helped Deutsche Telekom to become Germany's leading provider of remanufactured fixed-network products, making significant strides towards sustainability. With over one million devices reused annually in Germany and Austria, these refurbished products play a vital role in demand planning throughout their life cycle as remanufacturing not only ensures higher product availability but also positively affects safety stock requirements.

By continually incorporating additional products into the refurbishment process, Deutsche Telekom eliminates the need to manufacture new devices, resulting in substantial savings, notwithstanding refurbishment, spare parts, transport, and disposal costs.

The success of the refurbishment model has been extending beyond economic benefits to significant sustainability advantages. The refurbishment model directly aligns with Deutsche Telekom's sustainability strategy. To date, this initiative has saved more than 300,000 metric tons of CO₂ equivalents.

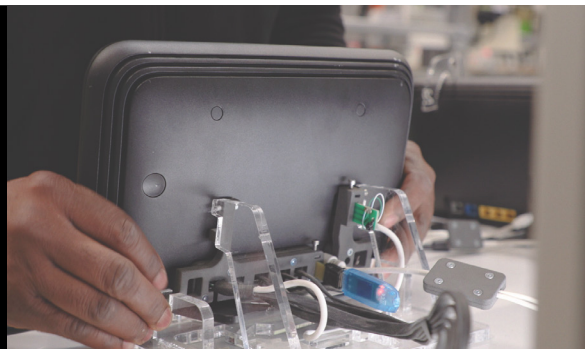
44 kg
CO₂e

Every refurbished device on average prevents the generation of 44 kg of CO₂ equivalents that would have occurred during the production of a new product.

Moreover, transparency and sustainability are essential aspects of Deutsche Telekom's vision, and they expect the same from their service providers. The entire Landsberg site is already CO₂-neutral and therefore not only stands for our own climate goals, but also for those of our client Deutsche Telekom.

Benefits of the solution

- Scalability
- Consistent quality
- Faster processing times
- Economic & environmental sustainability



Do you have any questions?

We're here to help.

We make it happen