Demand control cycle for global component and spare parts management

Developing ideal control cycles for process management of optimal material needs planning in global equipment supplies for LRU (line replaceable units).

The aim of this work package is the development of ideal control cycles for process management of optimal material needs planning in global equipment supplies for LRU (line replaceable units). A suitable IT platform for ongoing calculation, validation and optimisation of planning parameters is also planned.

The basis for Lufthansa Technik’s optimal spare parts management in material supplies for LRU components is provided by the precise calculation of customers’ material needs. A large array of parameters (flight hours, quantity in aircraft, likelihood of replacement, time between component replacement, etc.) must be taken into account in order to precisely determine material needs. These parameters include on the one hand planned requirements, based on experience, and on the other hand actual values arising from needs that in fact occur. To correctly calculate these parameters in advance, the historically planned requirements must be continually compared with actual needs arising by way of control cycles, thereby allowing all relevant parameters to be simultaneously optimised. The more parameters are taken into account, the more precise the results. With the help of the findings from this research project, the economic feasibility of Lufthansa Technik’s global spare parts management will improve further, and with it the satisfaction of the company’s customers.

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City of Hamburg, Department of Economy, Transport and Innovation