

# Cloud billing simplifies traveling

Travelers and transport providers benefit from the digitized process



**“In releasing a complete cloud billing package for product and claim clearing from the Open Telekom Cloud, we have laid a cornerstone for the digital networking of public passenger transport.”**

Nils Zeino-Mahmalat, Managing Director of VDV eTicket Service

VDV eTicket Service (VDV-ETS) unites around 440 companies from the public passenger transport sector under the auspices of ((eTicket Deutschland. On behalf of these companies, VDV-ETS publishes the German standard for ((eTickets and supports the industry with the digitalization of sales. As early as 2003, VDV eTicket Service offered an eTicket service for various transport companies, a service that was constantly expanded, for example, to include contactless payment. The objective of ((eTicket Deutschland is to introduce nationwide electronic fare management (EFM) for users of local and long-distance public transport.

## At a glance

The VDV eTicket Service opens a new chapter for public transport: On the one hand, product clearing allows passengers to receive price information on their entire journey for the first time. On the other hand, claim clearing, which T-Systems has implemented on the basis of its standard cloud billing product, automates billing between the ((eTicket Deutschland companies. This claim clearing between the various transport companies involved makes the new digital distribution possible.

T-Systems operates both platforms for the VDV eTicket Service as a complete service on the Open Telekom Cloud.

- Nationwide product and price information available (fare server)
- Automated clearing between the participating public transport providers
- Complete service through SaaS model
- Usage-based costs
- No risk of investment

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# Reference in detail

## The challenge

Until now, it was not possible to obtain information on the total price of a fare for trips taken with various transport associations that use different providers. Users planning trips through multiple regions did not receive general travel information, including product and price. This was because Germany had no nationwide product and price database that contained fares for all of Germany's public transport networks and used them to calculate prices for selected routes. Without exact information on prices, integrated booking was also not an option, which meant that the travelers had to piece the trip together on their own. Only when timetable and fare information became available throughout Germany would integrated querying, booking, and payment be possible.

But an integrated ticket for a traveler poses a new challenge: How will the incoming payments from the traveler be correctly distributed to the respective transport suppliers? In technical jargon this is called "clearing of claims".

## The solution

The cloud billing solution from T-Systems handles this clearing of claims. The solution is based on individual modules in a microservice architecture that are connected via standardized APIs (interfaces). This type of software allows new solutions to be implemented quickly and flexibly. The cloud billing functions as a background service which ensures that ticket elements are correctly billed to the respective transport associations and providers. Cloud billing, like eTicket clearing, runs on the Open Telekom Cloud. Cloud billing is offered in an SaaS (software as a service) model. This provides VDV eTicket Service with numerous advantages. In addition to offering simple scaling, for example when adding new participants, and ensuring that the application performs well even under an increasing load, this approach provides VDV eTicket Service with transparent, calculable, and user-oriented costs for the service.

## Benefits for the customer

By operating on the Open Telekom Cloud, the VDV eTicket Service utilizes the key benefits of the cloud for its service: the digitization of sales can be offered on the market without high investments and the costs for IT use depend on actual demand. If the load increases or other providers join the platform, it can easily scale.

"We use the cloud service from T-Systems as a complete service, which saves us from having to use our own resources to provide and operate our clearing service," reports Nils Zeino-Mahmalat, Managing Director of VDV eTicket Service. "This keeps us flexible and allows us to focus our own efforts on the actual operation and utilization of the system. The constant further development of security, data protection, and services frees us up and allows us to focus on our core business."

Further benefits:

- Automated clearing between the different public transport providers
- Availability of nationwide product and price information (fare server)
- High level of safety
- High performance operation
- Technical support
- Scalable platform without investment risk with usage-based costs for future growth



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