

From Megabit to Gigabit:

**How vouchers help with the transition
to FTTB/H**



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1. Basic considerations and requirements for a meaningful and legally permissible use of vouchers

Vouchers for fiber-optic connections in non-gigabit-supplied areas **benefit homeowners** who connect their home directly during the roll-out of an area (connection vouchers), **but also customers** who switch from copper to optical fiber faster (contract voucher). **This helps expanding companies and investors** to increase demand and reduce connection-related roll-out costs. This will reduce the number of uneconomic areas and the necessary further funding. **Qualitative competition is strengthened** and **strategic overbuild with vectoring is made unattractive**. The otherwise required complex funding procedures and **bureaucracy is reduced**. The **roll-out in adjacent areas is facilitated**, especially in rural areas. More targeted **advertising for gigabit-capable connections and digitalisation** is urgently needed and will be made easier and more efficient for policymakers, communities and businesses alike. Overall, the **goals of the German federal government will be easier and faster to achieve**.

The voucher solution is **permissible under state aid law**. The EU Commission has only recently approved a corresponding application by Greece. Such a stimulation of demand will significantly increase the profitability of the new networks and thus support their expansion. As vouchers do not serve to overbuild existing gigabit-capable infrastructures (FTTB/H and HFC networks based on DOCSIS 3.1), they are to be assessed as **neutral under competition law**. **Sensibly limited funding volumes** are ensured by the fact that conurbations that are already easily accessible are excluded from a voucher regulation. Another advantage is that, thanks to vouchers, the **scarce construction capacities** in rural areas are allocated as a matter of priority where **demand and use** are created **for as large a number of citizens** as possible. The **avoidance of deadweight effects** can also be sufficiently ensured by such a concept. From an **administrative** point of view, it is possible to resolve the issue of vouchers centrally and as **unbureaucratically** as possible, e.g. via the BAFA (Federal Office for the Environment), which is used to promote solar energy.

2. Following these guidelines, it is necessary to clarify what, where, to what extent and how to use vouchers and, as a result, where less funding is required.

WHAT should be promoted with vouchers?

- **Fiber-optic connections FTTB/H based on Open Access, but in no case transition technologies such as vectoring or hybrid mobile products**, as vouchers are financed by state funds and the coalition agreement's stated goal is **Gigabit expansion and competition**.
- **End customer contracts based on this new infrastructure**. It is all about the fast utilization of the best networks and the increase of the take-up rate independently of the homeowner.
- **In-house cabling (FTTH), to a limited extent**, as this is not technically feasible or economically viable everywhere, hence in particular where in-house cabling is relatively easy to do, or where Gigabit would not arrive at the customer due to rotten cables.

WHERE should vouchers be used?

- **Outside of FTTB/H and HFC supply, i.e. not in areas that can already be supplied with Gigabit capacity**, in order to avoid competition problems and waste.
- **Outside metropolitan areas in suburban locations and in rural areas**. Unlike a direct subsidy resulting from a market analysis that is state-aid-relevant and impacts self-sufficient roll-out of networks, vouchers benefit all companies willing to expand. Therefore, very simple demarcation criteria can be used here.

HOW MUCH MONEY should the voucher represent?

- **Connection Voucher for the house connection € 500**
With 75% FTTB/H and HFC supply, approx. 10 million households remain - including about 5 million in the more rural area - in which vouchers would be used. The concrete conversion to house connections is difficult to make but should lie at a factor of 1.6 in the rural areas (1.6 households per house connection, so slightly less than the national average). With a good 3 million house connections, this means a budget of just over € 1.5 billion. With a realistic average attainable take-up rate of a maximum of 60-70% (today, the average is below 40%), this results in a corresponding use of funds of **well below € 1.5 billion** (VATM estimates).

- **For contract vouchers (customers) € 500**

With 5 million households outside the metropolitan areas and an average target take-up rate of 60 - 70% at the maximum, the financing requirement would be around **€ 1.5 billion** (VATM estimates).

- **For inhouse FTTH**

Optional as far as resources are available. Suggestions could be developed by DibKom. An adjustment of the tax regulations would be an alternative. At € 300 per house connection – significantly more expensive connections should not be considered – and a 50% subsidy of € 150, the financial need would be at estimated 2.5 million suitable and thus **well below € 1 billion** (VATM estimates).

- **The correct amount of funding is crucial for the feasibility.** Extending support to all non-FTTB/H-connected households would significantly increase the necessary funding. With nearly 10% of homes passed - today still predominantly in the urban areas – there would still be close to 20 million homes in Germany to pass, for which a total of almost € 10 billion would be required alone in vouchers of € 500. It is also particularly important that sufficient funds remain for contract vouchers.

HOW should the Vouchers work in practice?

- **A tried and tested authority** should take over central control (e.g. BAFA, as proven in solar energy subsidies and car scrapping).
- Complete **online processing** via an electronic platform (see BAFA).
- Municipalities and companies can use uniformly designed "**hands-on**" vouchers for advertising purposes (reference to Internet / QR Code, etc.).
- **Payment** after the home has been connected.

The benefits of vouchers at a glance:

- **Vouchers turn uneconomic areas into economic areas** and, thanks to effective demand stimulation, reduce costly conventional subsidies.
- **Vouchers even save considerably** more subsidies in assisted areas than they cost, as they also increase the take-up rate there and thus reduce the profitability gap.
- **Vouchers support all roll-out models equally**, both economic viability and operator models.
- **Vouchers specifically help the best networks with their expansion**, their marketing and their utilization.
- **Vouchers have several positive effects compared to funding:**
 - Permanent gigabit, FTTB/H advertising by and for the state and the municipality, also useful for international chambers of commerce and business associations as a long-term advertising medium,
 - addresses citizens, both home owners and as users,
 - ultimately helps investors and companies in their own economic expansion.
- **Vouchers secure competition** thanks to open access, especially in the countryside. Customers also retain the choice of their retail and business customer offerings on fiber optic infrastructure.
- **Vouchers reduce the risk of overbuilding** by vectoring and significantly protect the investment of the first expanding FTTB/H investor.
- **Vouchers are legally easy to implement** if - as proposed here - competition and state aid problems can be excluded or at least resolved in consultation with the Commission.
- **Connection vouchers make the expansion more efficient**, as more homes can be connected in the first construction phase and less pure homes passed remain.
- **Connection vouchers are future-proof**, even if real gigabit contracts are only concluded later on - with increasing supply and demand.
- **Contract vouchers reduce barriers** to change despite higher contract costs for higher bandwidth contracts.
- **Contract vouchers bundle demand at the time of roll-out and reduce the profitability gap thanks to early demand development.**
- **Contract vouchers promote real wholebuy** as all customers can benefit from the best networks.

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