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## Position Paper

# on the European Commission's Proposal for a Revision of the Guidelines on State Aid for Broadband Networks (the 'Broadband Guidelines')

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The German Association of Energy and Water Industries (BDEW) and its regional organisations represent over 1,900 companies. The membership comprises both privately and publicly owned companies at the local, regional and national level. They account for around 90 percent of the electricity production, over 60 percent of local and district heating supply, 90 percent of natural gas, over 90 percent of energy networks and 80 percent of drinking water extraction as well as around a third of wastewater disposal in Germany.

## Introductory Remarks

Through the current Guidelines on State aid for broadband networks which were adopted in 2013, the European Commission has set the foundation to accelerate the expansion of broadband networks throughout the EU. They have furthered the rollout of such networks in the Member States in general and in Germany in particular.

Based on the evaluation of the current guidelines, in light of developments in technology and telecommunications markets, and in order to clarify the existing rules, the Commission considers it necessary to revise the current State aid Guidelines. The revision aims at enabling the rollout of performant, reliable and secure telecommunications networks in order to facilitate the digital goals of the EU as laid out in the European Gigabit Society objectives and the Digital Compass.

The German Association of Energy and Water Industries (BDEW) represents both owners and operators of utility networks in the areas of gas, electricity, district heating and waste water, which under certain circumstances must make their infrastructures available to operators of public telecommunications networks for joint use, and operators of public telecommunications networks themselves. In total, BDEW represents over 1900 companies. The spectrum of members ranges from local and municipal to regional and national companies (both public and private). They represent about 90 percent of electricity sales, 60 percent of local and district heating sales, 90 percent of natural gas sales as well as 80 percent of drinking water production and about one third of waste water disposal in Germany. BDEW also accounts for 94 percent of the electricity grid length, 92 percent of the gas grid length and 78 percent of the heating and cooling grid length.

From BDEW's point of view, ensuring a fast and comprehensive expansion of high-speed networks for electronic communication is of great importance for economic growth and the development of new digital business models. At the same time, the revised guidelines should ensure the advancement of the technologies most appropriate to achieve the ambitious digital goals of the EU, encouraging and fostering an environment conducive to investment and development. State aid should complement and not inhibit the privately financed deployment of broadband networks.

BDEW welcomes the initiated review of the Guidelines on State aid for broadband networks and supports the Commission's efforts to create a coherent framework that creates legal certainty and clarity for investment in the sector. Particularly the clarification of concepts, such as the mapping concept, will create greater transparency and consistency. However, the revision must ensure coherence between the State aid Guidelines and the provisions of the Broadband Cost Reduction Directive (2014/61/EU, BCRD) which is currently also in the process of revision. While the legislative proposal is expected in the third quarter of 2022, the State aid Guidelines should contribute to the rollout of ultra-fast broadband networks while offering adequate protection for critical infrastructure such as drinking water, waste water and gas. Particularly, the exemption of drinking water pipes and systems from the deployment of broadband networks for hygienic reasons according to the EU Drinking Water Directive (2020/1984/EU) and the BCRD should be maintained. The revisions of both the State aid Guidelines and the BCRD should foster a more coherent legislative framework for the extension of broadband networks in Europe.

Against this background, BDEW has drafted the following recommendations on the central aspects of the revision of the Broadband Guidelines.

### Overview of BDEW Recommendations

- 1. Financially sustainable Development of electronic Communication Networks through Prioritization of Gigabit fixed Networks:** State aid should not be allocated to the development of networks less performant than fixed ultrafast access networks, thereby avoiding a piecemeal approach and the repetition of deployment projects in the short term. Particularly, the expansion of fibre-optic networks as the sustainable technology for Gigabit fixed networks should be promoted in white, grey and black areas also on the European level.
- 2. Protection of physical Assets of Drinking Water Infrastructure for hygienic Reasons as well as Information and Data of critical Infrastructure:** Coherence between the provisions of the Broadband Guidelines and the Broadband Cost Reduction Directive must be ensured. This pertains in particular to the exemption for drinking water infrastructure from any co-use obligations due to hygienic reasons according to the Drinking Water Directive while simultaneously introducing the possibility of justified rejection of co-deployment of broadband infrastructure. Moreover, in light of the status as critical infrastructure of the energy and water industries, the Commission should abstain from further increasing information obligations on existing infrastructure to mitigate the increasing risk to critical infrastructures.
- 3. Coherence between demand-side Measures and the Union's Connectivity Targets:** The introduction of State aid for demand-side measures, such as social and connectivity vouchers, is highly welcomed. However, State aid in form of vouchers should only be allocated to networks in line with the Union's connectivity targets. Thus, social and connectivity vouchers should support the subscription of end-users to networks that are able to deliver 1 Gbps download speed and preferably to fibre-based Gigabit networks.

### The BDEW Recommendations on the Commission Proposal in Detail

#### **1. Financially sustainable Development of electronic Communication Networks through Prioritization of Gigabit fixed Networks**

In order to reflect the increasing connectivity needs of end-users and to enable the achievement of the Union's Gigabit-targets, the Commission proposes to raise the speed thresholds for public support to Gigabit fixed networks. In concrete terms, this means that public support shall facilitate the equipment of all Union households by 2025 with an internet connectivity of at least 100 Mbps download speed, upgradable to 1 Gbps within the decade. In addition to that, so called socio-economic drivers, such as digitally intensive enterprises, schools, hospitals, and public administration should benefit from Gigabit

connectivity (1 Gbps upload and download) by 2025. Furthermore, all Union households should be covered by a **Gigabit network** by 2030. At the current stage of development, FTTH (fibre to the home), FTTB (fibre to the building) and DOCSIS 3.1 networks are able to deliver 1 Gbps download speed.

Since the Union's objectives for connectivity have increased sharply since 2013, the mere presence of a basic broadband network is no longer sufficient. While the guideline from 2013 distinguished between so called "basic broadband networks" and "Next Generation Access (NGA) networks" - including fibre-based access networks (FTTx) and advanced upgraded cable networks – the current revised proposal is more ambitious and focuses on the promotion of technologies able to provide at least 100 Mbps. According to the definition in chapter 2.3.1, recital 21, networks which are able to provide at least 100 Mbps download speed at a fixed location are defined as "**fixed ultrafast access networks**". Recital 22 specifies that this includes fibre-based networks and advanced upgradable cable networks using at least DOCSIS 3.0 standard.

**BDEW welcomes that the Commission raises the standard for networks supported by State aid, turning what was formerly known as "Next Generation Access networks" into the prospective standard. The promotion of such networks and eventually even more advanced technologies constitutes an incentive for the technologically sustainable deployment of broadband.**

### **1.1. Scope of the Mapping Exercise**

In order to identify areas of market failure, Member States must determine on the basis of a detailed mapping and public consultation, whether fixed or mobile networks are present or credibly planned to be deployed in the relevant time horizon (cf. recital 73).

Unfortunately, the mapping exercise as described in detail in Annex I only aims to gather and assess information on the availability and performance of networks in order to predict the "achievable performance" that can be relied upon under "peak-time conditions" in various areas. An analysis of the potentially privately financed deployment of broadband networks is not part of the mapping exercise. Carrying out such an analysis only as part of the public consultation phase falls short. A multitude of parallel public consultations (market survey procedures) could prevent privately financed broadband deployment projects which have a long-term perspective up to 2030. Thereby State aid would mistakenly be invested in projects for the extension of broadband networks which would also have been realized without State aid. Moreover, this would lead to an increased demand of already scarce civil engineering capacities and a subsequent cost explosion.

**For these reasons, BDEW suggests an analysis of the potentially privately financed deployment of broadband networks to precede the public consultation and, in the best case, be part of the mapping exercise already.**

### **1.2. Conditions for State Aid in White Areas**

The only exception to the promotion of fixed ultrafast networks appears in so called white areas. Recital 99 a) states that public support must at least double the download speed and reach at least 30 Mbps download speed when an already existing network is providing a download speed below 30

Mbps. Considering that recital 99 b) emphasizes the Union's strategic objective to reach a comprehensive downlink of at least 100 Mbps by 2025, recital 99 a) is not ambitious enough to reach these targets. Likewise, the target to develop Gigabit networks in the most sustainable way, contributing to the achievement of the European Green Deal objectives (cf. recital 8), public support should be allocated to infrastructure which is able to serve the connectivity needs beyond 2025. Instead of allocating subsidies first to the deployment of networks delivering at least 30 Mbps and then again requiring investment and State aid to raise the capacity to 100 Mbps download rate until 2025, public support should instantly be linked to the condition mentioned in recital 99 b).

**Therefore, we suggest refraining from allocating State aid to the development of networks less performant than fixed ultrafast access networks thereby avoiding a piecemeal approach and the repetition of deployment projects in the short term.**

### **BDEW Recommendation for Amendments to the Commission Proposal:**

Chapter 5.2.3.1.1, Recital 99

(99) Where the existing networks are not able to provide ultrafast download speed, public support must:

**a) ~~Below 30 Mbps download speed: at least double the download speed and at least reach 30 Mbps download speed.~~**

**b) ~~30 Mbps and above download speed:~~** at least triple the download speed and at least reach ultrafast download speed. The Union has set a strategic objective that, by 2025, 'all European households, rural or urban, will have access to Internet connectivity offering a downlink of at least 100 Mbps, upgradable to Gigabit'.

### **1.3. Conditions for State Aid in Grey and Black Areas**

In grey and black areas, the existence of a market failure of fixed access networks can be demonstrated if the existing or credibly planned ultrafast fixed networks cannot provide at least 1 Gbps download and 200 Mbps upload speed (cf. recital 57 and 60). Consequently, in order to eradicate the existence of a market failure, Gigabit networks (FTTH, FTTH, DOCSIS 3.1) would need to be developed. In this context, less performant network technologies as for example DOCSIS 3.0 are still considered as "fixed ultrafast access networks" and therefore fall under the category of possible eligible projects even though they do not reach the intended targets and would therefore not eradicate the present market failure. Since the Union clearly aims to reach not only connectivity targets of 100 Mbps but of 1 Gbps within the decade, it would be reasonable and financially more sustainable to deploy a standard that is high performant in the first place.

Since connectivity needs will prospectively increase even further, the only way to set up a sustainable and high performant broadband infrastructure in the long-term is to foster the deployment of fibre-optic cables. According to a study by the German Environment Agency, fibre-optic cables are the most

energy-efficient electronic communication networks<sup>1</sup> compared to, for example, cable-based technologies, and can thus contribute to a significant reduction in CO<sub>2</sub> emissions in the ICT sector. Hence, deploying fibre-based networks cannot only benefit the current and prospective connectivity targets but also contribute to the objectives of the European Green Deal. The new German Federal Government has already chosen this path and has committed itself to a fibre-to-the-home-objective in their coalition agreement<sup>2</sup>.

**From BDEW's point of view, allowing State aid for cable-based technologies would create an inconsistent incentive. In the context of sustainable investment and a contribution to the climate goals, BDEW argues in favour of a prioritized promotion of the expansion of fibre-optic networks also on the European level.**

#### **1.4. Conditions for State Aid in Mixed Areas (White and Grey)**

While the Commission's proposal in principle recommends financial intervention to be designed in such a way that the entire target area is either white or grey, chapter 5.2.2.1.3 introduces the possibility to intervene in selected target areas which are partly white and partly grey. In principle, the proposal prescribes that an undue overbuilding of the existing network should be prevented. Nevertheless, according to recital 59, Member States can demonstrate that a limited overbuilding of the existing network is proportionate and does not create undue distortion of competition. In this case, public intervention may take place. Footnote 50 specifies that this case may occur when, for example, a premise at the end of the street is to be connected and the premises passed would not be connected by the new network as well. This might lead to more costs. Therefore, the proposal allows for a certain amount of overbuilding limited to a maximum of 10 % of all premises in the target area.

**In general, BDEW agrees that the criterion of efficiency should prevail when considering allocation of public support. Nevertheless, overbuilding of already existing networks should be limited to the absolute minimum as this would draw upon the already scarce civil engineering capacities which should primarily be allocated in areas in which there are no ultrafast broadband networks at all (i. e. entirely white areas).**

## **2. Environmentally sustainable Performance of electronic Communication Networks**

As already mentioned, BDEW underlines that electronic communication networks should positively contribute to the European Green Deal and climate targets. Therefore, the Commission's approach to encourage Member States to consider award criteria pertaining to the climate and environmental performance of the network is welcomed (cf. recital 124). Especially the energy efficiency of the network is of great importance. BDEW therefore welcomes the ancillary possibility in recital 127 that Member

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<sup>1</sup> [https://www.umweltbundesamt.de/sites/default/files/medien/5750/publikationen/2021-06-17\\_texte\\_94-2021\\_green-cloud-computing.pdf](https://www.umweltbundesamt.de/sites/default/files/medien/5750/publikationen/2021-06-17_texte_94-2021_green-cloud-computing.pdf)

<sup>2</sup> For further information see chapter "Digitale Infrastruktur" (p. 16) in the coalition agreement, available here: <https://www.bundesregierung.de/resource/blob/974430/1990812/04221173eef9a6720059cc353d759a2b/2021-12-10-koav2021-data.pdf?download=1>

States may determine the desired level of performance of electronic communication networks, including with regards to energy efficiency, while adhering to the principle of technological neutrality. **Nevertheless, BDEW underlines that in order to establish coherence between the Union's climate targets and the Broadband Guidelines, energy efficiency considerations in the operation of the network should be a priority.**

## **2.1. Protection of physical Assets of critical Infrastructure**

In order to contribute to environmental or climate targets, the Commission supports the use of existing infrastructure as a measure to limit the negative impact of deployment of broadband networks on the environment. This is also meant to reduce the costs of network deployment. To enable operators to find infrastructure suitable for broadband roll-out, Member States must set up a national database on the availability of such infrastructure (cf. recital 129).

Moreover, recital 131 tasks Member States with encouraging operators participating in a competitive selection procedure to have recourse to any available existing infrastructure, so as to avoid unnecessary and wasteful duplication of resources and to reduce the amount of public funding. According to the proposal, this may include operator's own infrastructure, other operators' infrastructure, use of other existing utilities infrastructure including, for example water and sewage pipes and relevant electricity infrastructure, and public infrastructure.

Recital 132 requires operators of infrastructure – irrespective of whether it is actually used – to inform the aid granting authority and the NRA about that infrastructure during the mapping and public consultation exercise, to commit to make the infrastructure available for use by other operators, and to provide adequate information regarding the use of that infrastructure (including terms, conditions and pricing).

All aspects mentioned above – co-use of existing infrastructure and Single Information Point, i. e. national databases with information on co-usable infrastructure – are already subject to the European Broadband Cost Reduction Directive which is currently under revision. Some of the provisions of the present proposal for the Broadband Guidelines include measures inconsistent with the provisions of the Broadband Cost Reduction Directive. **Therefore, BDEW calls on the Commission to ensure coherence between the provisions of the Broadband Guidelines and the Broadband Cost Reduction Directive.**

### **2.1.1. Exemption of Drinking Water Infrastructure from the Scope and Introducing the Possibility of Justified Rejection**

The Broadband Cost Reduction Directive already includes an exemption of the drinking water infrastructure from infrastructure suitable for co-deployment of broadband networks. The Broadband Guidelines should analogously contain this exemption as well.

Drinking water is one of the most important common good for humans. In the context of water supply as a service of general interest, the focus lies on maintaining the quality of drinking water as a commodity and complying with the requirements of the EU Drinking Water Directive (2020/2184/EU). The

EU Drinking Water Directive prescribes in detail the monitoring of water supply in the Member States. With the deployment of cables, substances can get into water pipes and drinking water installations in the European Union, which entail an increased monitoring effort for the authorities responsible for the health of the population. It is doubtful how the increased enforcement burden in the Member States will be met. Deploying cables in drinking water pipes can represent an operational change to parts of a water supply system carrying drinking water, which can have a significant impact on the quality of the drinking water. The hygienic requirements of national and European legal requirements could not be guaranteed. Liability issues in the event of pipe damage or contamination that poses a risk to health could hardly be clarified in advance. The German Drinking Water Regulation (Trinkwasser-Verordnung) already prohibits objects such as broadband cables in drinking water pipes for hygienic reasons in § 17.

In light of the above, the protection of groundwater should take priority over the installation of cables in sewers in water safeguard zones. So far, there is no procedure to test sewers with more than one cable for watertightness. Even with one cable, the effort and thus the costs increase by approx. 60 per cent to 160 percent.

Also, with view to other utility infrastructure as for example gas or waste water infrastructure, co-deployment can bear risks. In the course of the deployment, damage to the existing infrastructure is often found because quality standards and safety obligations (information on pipes, manual excavation, search slots in horizontal drilling methods) are not respected. Furthermore, the implementation of maintenance and rehabilitation measures is subject to considerable restrictions if broadband lines are connected to the gas or water network. Hence, the deployment of broadband networks funded by State aid should not entitle to increased access to existing utility infrastructures.

**In order to protect security of supply, BDEW strongly requests the Commission to refrain from making the demand to encourage operators to have recourse to *any* available existing infrastructure. It is evident that not every existing infrastructure is suitable for co-deployment of electronic communication networks and might even endanger the well-functioning of the co-used utility infrastructure itself and the hygienic situation. Therefore, BDEW requests the Commission to introduce an exemption for drinking water infrastructure and to introduce the possibility of justified rejection of co-deployment of broadband infrastructure.**

#### **BDEW Recommendation for Amendments to the Commission Proposal:**

Chapter 5.2.4.3, Recital 131

Member States should encourage operators participating in a competitive selection procedure (bidders) to have recourse to **suitable** ~~any~~ available existing infrastructure, so as to avoid unnecessary and wasteful duplication of resources and to reduce the amount of public funding. This may include, among others: use of the operator's own infrastructure; use of other operators' infrastructure (including regulated products); use of other existing utilities infrastructure (including, for example, **water and empty pipes next to or parallel to** sewerage pipes and relevant electricity infrastructure) **unless co-deployment**



**would endanger the security of supply**; reutilisation of radio masts; public infrastructure, etc. **Drinking water infrastructure must be exempted from co-use.**

Chapter 5.2.4.3, Recital 132

Any operator that owns or controls infrastructure (irrespective of whether it is actually used) in the target area and that wishes to participate in the tender, must:

- a) inform the aid granting authority and the NRA about that infrastructure during the mapping and public consultation exercise;
- b) commit to make the infrastructure available for use by other operators in their bids; and
- c) provide adequate information regarding the use of that infrastructure (including terms, conditions, pricing).

**These provisions do not apply to drinking water infrastructure or other utility infrastructure whose operation would be endangered by co-deployment of broadband infrastructure in line with article 2 paragraph 2 and article 3 paragraph 3 BCRD (2014/61/EU).**

### **2.1.2. Protection of Information and Data of critical Infrastructure**

The Broadband Guidelines obligate Member States to set up a national database on the availability of existing infrastructure that could be re-used for the broadband roll-out (cf. recital 129).

With the so-called Infrastructure Atlas – a Single Information Point for broadband expansion as required by the Broadband Cost Reduction Directive – this provision is already fulfilled in Germany. The Infrastructure Atlas contains the data of almost 4,500 network operators and makes this information available to companies, but also to the Federal Government, federal states, districts, and municipalities.<sup>3</sup> Information on the possibilities of sharing physical infrastructure for broadband expansion as well as information on the location and availability of fibre optic lines, empty conduits, radio masts, and other infrastructures that can be used for broadband expansion can be accessed.

While it is important to reach an adequate level of information sharing and provision of information for the secure deployment of broadband networks, the sensitive nature of this type of information has to be emphasised. Companies of the energy and water industry represented by BDEW constitute critical infrastructure and are acknowledged as such nationally by the KRITIS Regulation<sup>4</sup> and on European level by the NIS Directive (2016/1148/EU, currently under revision) and prospectively also the Directive on the Resilience of Critical Entities (2020/0365(COD)) currently proposed by the Commission.

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<sup>3</sup> [https://www.bundesnetzagentur.de/DE/Sachgebiete/Telekommunikation/Unternehmen\\_Institutionen/ZiDB/ZiDB-node.html](https://www.bundesnetzagentur.de/DE/Sachgebiete/Telekommunikation/Unternehmen_Institutionen/ZiDB/ZiDB-node.html)

<sup>4</sup> <https://www.gesetze-im-internet.de/bsi-kritisv/BJNR095800016.html>

Consequently, requirements to provide information and data must not lead to a deterioration of the resilience of critical infrastructures. Ever increasing transparency requirements regarding concrete location data and routing of telecommunications infrastructure on the one hand and energy and water supply infrastructure on the other hand significantly increase the risk of physical attacks if access to the information is not restricted to concerned parties and instead is publicly available. In the case of the German Infrastructure Atlas access is only available to relevant actors.

Taking this and the high level of information already provided by companies and municipalities through the Infrastructure Atlas into consideration, it is essential to refrain from tightening the information obligations without any apparent added value. A tightening of the obligations and indiscriminate access of the public can increase the risk of physical attacks and endanger the security of supply. In addition, it leads to a disproportional administrative burden, particularly for SMEs. Taking into consideration the different recent and upcoming European legislative initiatives (e.g. Open Data Directive, Data Governance Act, Data Act, the revision of the INSPIRE Directive), it is of utmost importance to achieve a coherent legislative framework that avoids regulatory duplication and inconsistencies.

**BDEW appeals to the Commission to abstain from further increasing public information obligations on existing infrastructure in order to mitigate the risk to critical infrastructure.**

### **3. Coherence between Demand-side Measures and the Union's Connectivity Targets**

Chapter 6 of the Commission's proposal introduces vouchers as a take-up measure. While usually State aid is dedicated to the deployment of the infrastructure itself, vouchers are funding measures that are targeted directly at the end-user. It is assumed that the mere availability of an electronic communications network does not automatically ensure enough subscription to the broadband internet access by end-users. This may occur, for example, due to high retail prices or an insufficient willingness to pay by end-users. Therefore, the Commission proposes in recital 173 that in cases in which affordable access to suitable electronic communication services cannot be ensured, State aid may help to reduce the end-users' costs and thereby remedy such a market failure. Consequently, the granting of State aid may produce positive effects on the economic operation of the network and overall efficiency could be improved. This is coherent with measures envisaged by the new German Federal Government aiming at providing vouchers where support for inhouse-fibre-connection is necessary. The Commission proposes two kinds of vouchers:

Firstly, **social vouchers** (chapter 6.1) aim to support certain individual consumers whose financial circumstances justify the provision of financial aid for social reasons, in order to enable them to acquire or maintain a fixed or mobile subscription.

Secondly, the Commission introduces the category of **connectivity vouchers** (chapter 6.2), which may be designed for broader categories of end-users, such as all citizens or certain undertakings such as SMEs, to promote the take-up of fixed or mobile services contributing to the development of an economic activity. Even though connectivity vouchers must only cover up to 50 % of the eligible cost, they may be used for various purposes ranging from monthly subscription fees and set-up costs to costs for in-house wiring. BDEW welcomes the broad range of application possibilities. Particularly SMEs would

benefit from such measures which could ensure that they can effectively partake in the digital transformation instead of being left behind. Considering the future potential of digital applications and solutions in the energy and water industries, this is also of crucial importance for the companies represented by BDEW.

**In general, BDEW welcomes the Commission's approach to allow for State aid being dedicated to support individual end-users and a broader range of end-users including SMEs in the form of social and connectivity vouchers.**

The new German Federal Government is similarly pursuing the possibility of providing vouchers where support for inhouse-fibre-connection is necessary. Since the deployment of FTTH-connections are significantly lagging behind in Germany, the new Telecommunications Act (Telekommunikationsgesetz), which entered into force on 1<sup>st</sup> December 2021, introduced the possibility of a charge for the provision of fibre (Glasfaserbereitstellungsentgelt) and envisages ending the promotion of cable-based inhouse-connections. This measure is coherent with the new German Federal Government's commitment to the nationwide deployment of fibre-to-the-home-networks. Pursuing this target, it is reasonable to end financial support for cable-connections and instead to dedicate funding to the deployment and take-up of fibre-connections.

However, in contrast to the German proposal, the Commission prescribes the maintenance of the technology neutrality principle for both types of vouchers. This means that public support is not linked to the performance of the targeted internet connection. **From BDEW's point of view, the Commission should only permit State aid for networks in line with the Union's connectivity targets. Thus, social and connectivity vouchers should support the subscription of end-users to networks that are able to deliver 1 Gbps download speed and preferably to fibre-based Gigabit networks.**

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