Dear Ms Hagerup,

Subject: Commission Decision concerning Case DK/2013/1528: Access to the fixed telephone network provided at fixed location in Denmark
Comments pursuant to Article 7(3) of Directive 2002/21/EC

I. Procedure

On 6 November 2013, the Commission registered a notification from the Danish national regulatory authority, the Danish Business Authority (DBA), concerning the market for access to the public telephone network at a fixed location for residential and non-residential customers in Denmark.

The national consultation ran from 3 June 2013 to 1 July 2013 (on the market definition and SMP analysis) and from 6 September 2013 to 7 October 2013 (on the entire draft measures, including remedies).

A request for information (RFI) was sent to DBA on 18 November 2013, and a response was received on 21 November 2013. On 25 November the Commission held a telephone conference with DBA and received additional explanations on 26 November 2013.

Pursuant to Article 7(3) of the Framework Directive, national regulatory authorities (NRAs), the Body of European Regulators for Electronic Communications (BEREC) and the Commission may make comments on notified draft measures to the NRA concerned.

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II. DESCRIPTION OF THE DRAFT MEASURE

II.1. Background

In its second review\(^3\) of the market for retail access to the public telephone network DBA included access by means of PSTN, ISDN and managed Voice over Broadband (VoB). DBA concluded that managed VoB access should be included in the market on the basis of high broadband penetration and the assessment of substitutability. To the contrary, access services provided by mobile telephony were not included due to differences in pricing patterns, quality, availability and intended use. DBA designated TDC as having SMP. DBA noted that TDC maintains a high market share (74% for residential and 80% for non-residential), and concluded that the market is characterised by high entry barriers and lack of potential competition.

With regard to the PSTN and ISDN lines DBA imposed on TDC access obligations (including WLR), price control based on historic cost model, cost accounting, non-discrimination, transparency and accounting separation. DBA has not imposed any obligations with regard to VoB services, as it concluded that it would not be proportionate: VoB services were offered by a number of suppliers who can obtain the necessary inputs by means of their own infrastructure, LLU or regulated broadband access.

The Commission made no comments.

II.2. Market definition

As in its second round market review DBA considers that the relevant market is a single market for residential and non-residential customers encompassing access by means of PSTN, ISDN and managed Voice over Broadband (VoB). In addition, in the notified draft measure DBA proposes to include certain unmanaged VoIP access services, namely only those where the providers allocate to the end-users an 8-digit number of the Danish numbering plan; other types of unmanaged VoIP access services are excluded from the market\(^4\). Furthermore, DBA clarified that the unmanaged VoIP provider is required to have signed at least one interconnection agreement with a network operator in order to handle its voice traffic to and from other networks.

DBA concludes that managed and unmanaged VoIP, where the end-user is provided with an 8-digit number, are of comparable sound quality, stability and availability as PSTN-based telephony services.

DBA considers that the technological development and the telephone companies’ upgrade of the networks allows for higher bandwidths that support data intensive services. However, since VoIP-telephony services do not require particularly high bandwidth, DBA finds the difference between managed and unmanaged VoIP insignificant. In addition, DBA considers that the set-up of unmanaged VoIP is very simple, as one box connected to the broadband router is sufficient to use unmanaged VoIP as regular fixed telephony. For these reasons DBA concludes that both managed and unmanaged IP-based telephony services should be treated as one VoIP-product.

With regard to the mobile telephony DBA considers that it is not part of the relevant market as it is not a substitute of PSTN, ISDN or VoIP access due to different intended

\(^3\) C(2010)9112.

\(^4\) DBA also excludes from the market those unmanaged VoIP access services which differ in their functionality from PSTN, since both the calling and the called party are obliged to install a program to make or receive calls via the Internet.
use, lower sound quality, insufficient indoor coverage and drop-outs. 

DBA considers the geographical scope of the market as the whole territory of Denmark.

II.3. Finding of significant market power

TDC’s market share of the PSTN and ISDN subscriptions remains high and stable over time, while the total number of fixed network subscriptions is declining. Only the subscriptions based on unmanaged VoIP experienced a significant growth since 2009, but they represent only approximately 3% of all subscriptions5.

TDC’s market share of PSTN and ISDN subscriptions was 83% (down from 84%) and 75% (down from 82%), respectively. The subscriptions based on managed VoIP constitute 37% of the total market, and TDC’s share has increased to 61% (from 57%). DBA concludes that the market is characterised by high barriers to entry (in light of economies of scale and scope, sunk costs, vertical integration of the incumbent), lack of potential competition and lack of countervailing buyer power.

DBA considers that the barriers to entry for supplying VoIP access services are less significant compared to the supply of PSTN/ISDN access services, due to the availability of wholesale access products (LLU and bitstream). Nevertheless, according to DBA there is still a significant group of customers (approximately 24%) who are not willing to take up a broadband subscription (and thus a VoIP service), and there are also customers who prefer to keep their PSTN/ISDN subscription even if they have a broadband connection available. In addition TDC’s enjoys a relatively high market share of the managed VoIP connections (61%).

With regard to mobile telephony, although falling outside the relevant market, DBA considers that it is one of the factors which influences the developments on the market for access to the fixed telephone network. Nevertheless, DBA considers that even if there might be reasons to cancel a long term PSTN subscription, there are other reasons such as stability, safety, quality, usage and habits that limit the competitive constraints stemming from the mobile telephony subscriptions.

In view of the above DBA proposed to designate TDC as having SMP in the market for access to the fixed telephone network.

II.4. Regulatory remedies

DBA proposes to impose on TDC the following remedies: access obligation (including WLR), price control based on historic costs6, cost accounting, non-discrimination, publication of reference offer, transparency (including KPIs and SLAs) and accounting separation.

The remedies apply only to PSTN and ISDN access. With respect to fixed network subscriptions via managed and unmanaged VoIP, DBA concludes that it would be disproportionate to impose obligations. In contrast to PSTN and ISDN, VoIP based access services can be provided on the basis of the regulated local loop unbundling (LLU) and wholesale broadband access (i.e. bitstream service).

Moreover DBA clarifies that only the remedies concerning the wholesale access

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5 TDC does not provide unmanaged VoIP services.

6 In its reply to the request for information DBA clarified that in practice a hybrid of current and historic costs is applied to calculate the WLR access price. The cost for the access infrastructure is calculated on the basis of a LRAIC cost model, which is applied for setting the regulated wholesale access prices in markets 4 and 5, while additional elements necessary to provide WLR are priced on the basis of historic costs provided by TDC from its regulatory accounts.
(wholesale line rental, WLR) have been imposed with regard to the identified competition problems. Therefore no regulatory remedy is imposed on the retail access services.

III. COMMENTS

The Commission has examined the notification and the additional information provided by the DBA and has the following comments:7

Need for a clear market definition

The Commission notes that DBA clarifies that the distinction between managed VoIP and some unmanaged VoIP services is very theoretical. The technological development and increased availability of higher bandwidth connections have reduced the differences between these two services, in particular with reference to the connection stability and voice quality, to such an extent that they can be treated as the same VoIP product.

Nonetheless, DBA proposes to include in the relevant market only those VoIP services that assign end-users an 8-digit subscriber number from the Danish numbering scheme. DBA further limits the scope of the product market by including only those unmanaged VoIP services that are provided by an operator with a VoIP server, end-user equipment (i.e. a PSTN-adapter) and at least one interconnection agreement with another network operator which handles the traffic to and from the VoIP operator.

The Commission considers, however, that notwithstanding the above limitations, the wording of the currently notified draft measure still leaves some scope for interpretation as to which exact characteristics of unmanaged VoIP operators make their access services substitutable to PSTN and ISDN access.

The Commission therefore asks DBA to better substantiate and provide more explanations in the finally adopted measure as to the distinguishing characteristics of managed and unmanaged VoIP in Denmark. DBA should, in particular, further clarify whether and to which extent factors such as the control over the number assignment, the VoIP server, the end-user equipment (i.e. PSTN-adapter), the interconnection agreement, or any other factors demonstrate that unmanaged VoIP access services to be considered are part of the relevant market. In this respect the Commission asks DBA to explain how and why such distinguishing characteristics differ for the purpose of defining consistently the fixed access, call origination and the fixed call termination markets8.

Competition stemming from VoIP and mobile telephony

The Commission notes that DBA concludes that TDC still enjoys SMP on the market for access to the fixed telephone network. In that regard DBA concludes that overall the barriers to entry on the market are still significant, despite finding that managed and unmanaged VoIP belong to the same relevant market and the barriers to entry in the provision of these VoIP access services are less significant. The Commission considers that certain market characteristics, such as the high broadband penetration, the growing and significant take-up of VoIP access services and the significant decrease of fixed telephone subscriptions in

7 In accordance with Article 7(3) of the Framework Directive.

8 See Commission comments in cases DK/2013/1525 and DK/2013/1526.
Denmark\textsuperscript{9} could point towards a finding that over the current market review period, alternative operators may become more independent from the incumbent operator's network. In such a case the market concerned may, by the end of this review period, indeed tend towards effective competition.

Similarly, in view of the significant and increasing percentage of mobile only households in Denmark\textsuperscript{10}, the mobile telephony services seem to exercise a significant competitive constraint.

The Commission acknowledges that in view of the specific circumstances described above, but also other factors (the price trends, TDC's significant market share on the managed VoIP market, a still nascent unmanaged VoIP segment and the captive users preferring PSTN/ISDN subscriptions) DBA has concluded that TDC still enjoys SMP. Given the rapid developments in the market, including the significant decrease of fixed telephone subscriptions and the increasing percentage of mobile only households in Denmark, and the principle that \textit{ex ante} regulation should only be imposed where there is no effective and sustainable competition, the Commission invites DBA to closely monitor these developments and to re-assess the market with a view to potentially withdraw the remedies in a timely manner.

Pursuant to Article 7(7) of the Framework Directive, DBA shall take the utmost account of the comments of other NRAs, BEREC and the Commission and may adopt the resulting draft measure; where it does so, shall communicate it to the Commission.

The Commission’s position on this particular notification is without prejudice to any position it may take \textit{vis-à-vis} other notified draft measures.

Pursuant to Point 15 of Recommendation 2008/850/EC\textsuperscript{11} the Commission will publish this document on its website. The Commission does not consider the information contained herein to be confidential. You are invited to inform the Commission\textsuperscript{12} within three working days following receipt whether you consider that, in accordance with EU and national rules on business confidentiality, this document contains confidential information which you wish to have deleted prior to such publication.\textsuperscript{13} You should give reasons for any such request.

\textsuperscript{9} According to the most recent E-Communications Household Survey (Special Eurobarometer 396, 13 August 2013) Denmark experienced the fastest decline of fixed telephone subscriptions in EU (-15% since December 2011).

\textsuperscript{10} DBA acknowledges that it does not collect data on the percentage of mobile only households in Denmark. In that regard the Commission points towards other, reliable sources, such as the E-Communications Household Survey 2012 (Special Eurobarometer 381, June 2012). According to that source 48% of households in Denmark are mobile only.


\textsuperscript{12} Your request should be sent either by email: CNECT-ARTICLE7@ec.europa.eu or by fax: +32 2 298 87 82.

\textsuperscript{13} The Commission may inform the public of the result of its assessment before the end of this three-day period.
Yours sincerely,
For the Commission,
Robert Madelin
Director-General