

1. Access to Last Mile Facilities

There is a material likelihood of market failure in the retail corporate IP communications services market – as well as in the larger corporate communications market – because of bottlenecks in last mile access to corporate premises. The Commission therefore should impose economic regulations in this area to address the effects of these bottlenecks.

It is well known that Incumbent Local Exchange Carriers (“ILECs”) control the overwhelming majority of last mile access facilities to office buildings throughout the U.S.⁴ Large corporate users depend on access to reasonably priced, efficiently provisioned special access lines to deliver IP-enabled services. Special access, however, remains a bottleneck controlled by the ILECs. In the absence of effective pricing restraints, ILECs will be able to leverage their dominance over the special access market to control the market for IP-enabled services. Consider the following:

- ILECs own the majority of loops connecting office buildings and end offices, and dominate the market for special access services.⁵
- Serving large corporate customers requires the use of ILEC special access services, which must be purchased directly from the ILECs or purchased through resale via AT&T and MCI.
- Special access service prices are exceedingly high and amount to between 40 to 60 percent of the price charged to customers to connect U.S.-to-U.S. locations.

⁴ See generally *In the Matter of AT&T Corp. Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services*, RM-10593, *Petition for Rulemaking* (filed Oct. 15, 2002) at 25, 28-31. See also *Ex Parte* Presentation of the Special Access Reform Coalition (“SPARC”) (May 1, 2003), filed in RM-10593, at 3 (“competitive carriers usually have *no option* but the Bells for last mile access”).

⁵ See *id.* See also *Ex Parte* Presentation of SPARC (Oct. 1, 2003), filed in RM-10593, at 3 (“over 90% of the special access services in the United States is provided by incumbent local exchange carriers”).

- ILEC return on special access services is between 30 and 50%.⁶
- In most locations, there are no UNE-based or facilities-based providers offering competing special access services.
- Competitive Local Exchange Carriers today do not provide widespread special access services, and it is unlikely that they will be able to emerge as a competitive alternative in the near-term because of continued uncertainty surrounding the Commission's unbundling rules.
- Cable does not offer a competitive alternative for corporate customers because the vast majority of office buildings in the U.S. are not appropriately wired for cable telephony.
- Fixed wireless does not offer a cost-effective competitive alternative for corporate customers except in limited situations, and its service quality can be erratic.
- Broadband-over-Power Line remains in a nascent stage and does not provide a go-to-market access solution for the corporate services market.
- Existing DSL access products in the U.S. are not robust enough to support IP-based voice services for large corporate customers.

ILEC dominance of special access markets is poised to make the market for IP-enabled services more expensive for corporate customers and impede its continued growth and development.⁷ This will result in unrealized productivity gains for U.S. organizations because fewer will commit to the solutions promised by IP technology.

⁶ See George S. Ford and Lawrence J. Spiwak, "Set It and Forget It? Market Power and the Consequences of Premature Deregulation in Telecommunications Markets," Phoenix Center Policy Paper, Number 18, July 2003, available at <http://www.phoenix-center.org/ppapers.html>, at 8 (concluding that the FCC's deregulatory scheme for special access "has produced *substantial* and *sustained* price increases . . . found to be the consequence of ILEC market power rather than price adjustments reflecting costs").

⁷ The Commission's *NPRM* suggests that economic regulation may not be needed for IP-based services "given that customers often can obtain these services from multiple, intermodal, facilities- and non-facilities-based service providers." *NPRM* at ¶ 74. However, because ILECs continue to control

To ensure that the benefits of IP-enabled services are maximized, the Commission should act in the pending special access proceeding to tighten special access rate regulation. The Commission also should adopt a uniform approach to classifying all services that affect access. Specifically, the Commission should classify all transmission services as, at a minimum, “telecommunications,”⁸ regardless of whether they are IP- or TDM-based services and regardless of whether these services are delivered using wireline, wireless, mobile, cable, satellite, power line or any other physical facility. This will ensure that providers of last mile transmission services could, if necessary, be classified as “telecommunications carriers”⁹ and subject to the appropriate level of economic regulation. If wholesale IP-enabled services provided by the ILECs are classified as “information services,”¹⁰ then the Commission’s ability to regulate the bottleneck in last mile transmission services for corporate customers will be impeded.¹¹

The Commission should examine each market for “telecommunications” individually to determine whether it is subject to effective competition.¹² If a market is

critical last mile facilities and services in the corporate services market, economic regulation of those bottlenecks remains a necessity.

⁸ See 47 U.S.C. § 153(43).

⁹ See *id.* at § 153(44).

¹⁰ See *id.* at § 153(20).

¹¹ Only when the market for transmission services is fully competitive should the Commission ease retail regulation of ILEC corporate IP- and TDM-based communication services. Under the new European Community (“EC”) framework, effective competition can exist only if the following four elements are present in the relevant wholesale market: (1) accounting separation between wholesale and retail business units; (2) forward looking cost-based accounting; (3) nondiscrimination; and (4) adequate performance measurements and reporting. Without all four elements, wholesale regulation cannot be effective, and national regulators are required to implement regulatory controls on the dominant provider’s retail services.

¹² The EC has identified eighteen product and service markets in telecommunications. The Commission should consider adopting the approach set forth by the EC in assessing the state of competition for these products and services. See Attachment A.

found to have a dominant provider (as is the case today for ILECs providing special access service), the Commission should classify such providers as “telecommunications carriers” and apply the appropriate level of economic regulation to make sure that this dominant provider does not retard the development and growth of IP-based services.

2. Numbering

The Commission should make non-geographic numbering ranges available for corporate Voice-over-IP (“VoIP”) services and associated VoIP applications. Doing so will avoid caller confusion about the rates applicable when a caller dials numbers associated with VoIP services. If solely geographic numbers are assigned to VoIP services, a caller may have expectations as to what the charges should be for calling the area code associated with that geographic number. The caller would not know that the called party may be in another part of the U.S. or the world when the caller establishes a connection with the called party, and the caller may be concerned about higher applicable charges. Furthermore, the caller may not know that a range of multimedia services and functionalities could be associated with that called number for which higher charges could apply. Providers, of course, would have to find a way to notify the calling party before the call is connected of a higher applicable charge and give the calling party the option of proceeding with the call, but at least the calling party would expect variable charges and features with a new non-geographic range dedicated to IP services.

For these reasons, the Commission should assign non-geographic numbers for VoIP products offering trans-Public Switched Telephone Network (“PSTN”)

functionality and mandate implementation of these numbering ranges by other providers. However, until non-geographic numbering ranges have been implemented and operationalized by other providers, the Commission must make geographic numbering ranges available for corporate VoIP services at the prevailing rates associated with geographic numbers to minimize confusion. Under such circumstances, providers initially can limit features and functionalities and therefore variability of pricing to minimize confusion.

3. Social Policy Issues

While BTA is keen to support the various social policies identified by the Commission in its *NPRM*,¹³ regulation may not necessarily be the best way to achieve the objectives of all stakeholders. Regulation should be imposed to achieve critical social policy goals only if they cannot be achieved through other means, and, to the extent regulation is necessary, it should be narrowly tailored to achieve those objectives.

Public Safety and Disability Access: Corporate network services provided by BTA – including IP-enabled services – are specially designed to meet the needs of specific customers. Emergency and disability services may be important features required in particular corporate networks. Regulatory mandates concerning emergency and disability access are not necessary for corporate networks. Corporate customers are

¹³ See, e.g., *NPRM* at ¶¶ 51-57 (Public Safety), ¶¶ 58-60 (Disability Access), ¶¶ 63-66 (Universal Service). The *NPRM* states that the Commission plans to initiate a rulemaking in the near future to address matters raised by law enforcement in connection with the development of IP-based communication services. *Id.* at n.158. Although BTA may submit comments in that rulemaking proceeding when it is initiated, it is worth noting here that the IP communications services industry should be encouraged to develop solutions in cooperation with the law enforcement community, rather than have solutions that are divorced from commercial realities imposed by regulatory fiat. BTA looks forward to working with law enforcement in the U.S. to develop the appropriate solutions where required. This is precisely what BTA's corporate parent, BT Group, does in the U.K.

well-equipped to seek and obtain the services they require. Therefore, insofar as corporate networks are concerned, the market will assure that any necessary provision of special services is available.

Universal Service: Today, universal service assessments are made on the basis of revenues received from end-users for the provision of “telecommunications.” As this proceeding reflects, questions regarding the appropriate classification of IP-enabled services are difficult and complex. The Commission separately is considering a new universal services regime in which assessments would be based on the number and size of connections to the PSTN. The Commission has recognized the advantages of a connections-based system. That approach would not require carriers to distinguish between telecommunications and non-telecommunications services, distinctions that do not apply easily or naturally outside of the traditional TDM-based wireline context.¹⁴

The Commission also has noted that the current system is inefficient because “consumers pay contribution recovery fees to multiple providers, regardless of how many connections or lines they purchase.”¹⁵ The adoption of a new universal service regime may address some of the difficult classification issues inherent in the current methodology. Further, subjecting a plethora of new services to assessments under the current approach would only magnify the acknowledged inefficiencies for consumers. For these reasons, the Commission should not apply universal service assessments to IP-

¹⁴ See *In the Matter of Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, *Further Notice of Proposed Rulemaking and Report and Order* (rel. Feb. 26, 2002) at ¶ 71.

¹⁵ See *id.* at ¶ 72.

enabled services until a new universal service regime that appropriately addresses all services is implemented.

Respectfully submitted,

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COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 11/02/2003
C(2003)497.

COMMISSION RECOMMENDATION

of 11/02/2003

**On Relevant Product and Service Markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communication networks and services
(Text with EEA relevance).**

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THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communication networks and services¹, and in particular Article 15 thereof,

Whereas:

- (1) Directive 2002/21/EC (hereinafter the Framework Directive), establishes a new legislative framework for the electronic communications sector that seeks to respond to convergence trends by covering all electronic communications networks and services within its scope. The aim is to reduce ex-ante sector-specific rules progressively as competition in the market develops.
- (2) The purpose of this Recommendation is to identify those product and service markets in which ex ante regulation may be warranted. However, this first Recommendation has to be consistent with the transition from the 1998 regulatory framework to the new regulatory framework. Directive 2002/19/EC of the European Parliament and of the Council on access to, and interconnection of, electronic communications networks and associated facilities², hereinafter the Access Directive, and Directive 2002/22/EC of the European Parliament and of the Council on universal service and users' rights relating to electronic communications networks and services³ hereinafter the Universal service Directive already identify specific market areas which need to be analysed by national regulatory authorities in addition to the markets listed in this Recommendation. In accordance with the Framework Directive, it is for national regulatory authorities to define relevant geographic markets within their territory.
- (3) Under the 1998 regulatory framework, several areas in the telecommunications sector are subject to ex ante regulation. These areas have been delineated in the applicable

¹ OJ L 108, 24.4.2002, p. 33.

² OJ L 108, 24.4.2002, p. 7.

³ OJ L 108, 24.4.2002, p. 51.

directives, but are not always "markets" within the meaning of competition law and practice. Annex I of the Framework directive provides a list of such market areas to be included in the initial version of the Recommendation.

- (4) As the title of Annex I of the Framework directive makes clear, all the market areas listed therein need to be included in the initial version of the Recommendation in order that NRAs can carry out a review of existing obligations imposed under the 1998 regulatory framework.
- (5) Article 15(1) of the Framework directive requires the Commission to define markets in accordance with the principles of competition law. The Commission has therefore defined markets (corresponding to the market areas listed in Annex I of the Framework directive) in accordance with competition law principles.
- (6) There are in the electronic communications sector at least two main types of relevant markets to consider: markets for services or products provided to end users (retail markets), and markets for the inputs which are necessary for operators to provide services and products to end users (wholesale markets). Within these two types of markets, further market distinctions may be made depending on demand and supply side characteristics.
- (7) The starting point for the definition and identification of markets is a characterisation of retail markets over a given time horizon, taking into account demand-side and supply-side substitutability. Having characterised and defined retail markets which are markets involving the supply and demand of end users, it is then appropriate to identify relevant wholesale markets which are markets involving the demand of products of, and supply of products to, a third party wishing to supply end users.
- (8) Defining markets in accordance with the principles of competition law means that some of the market areas in Annex I of the Framework directive comprise a number of separate individual markets on the basis of demand side characteristics. This is the case of products for retail access to the public telephone network at a fixed location and for telephone services provided at a fixed location. The market area in Annex I referring to wholesale leased lines is defined as separate markets for wholesale terminating segments and wholesale trunk segments on the basis of both demand side and supply side characteristics.
- (9) In identifying markets in accordance with competition law principles, recourse should be had to the following three criteria. The first criterion is the presence of high and non-transitory entry barriers whether of structural, legal or regulatory nature. However, given the dynamic character and functioning of electronic communications markets, possibilities to overcome barriers within a relevant time horizon have also to be taken into consideration when carrying out a prospective analysis to identify the relevant markets for possible ex ante regulation. Therefore the second criterion admits only those markets the structure of which does not tend towards effective competition within the relevant time horizon. The application of this criterion involves examining the state of competition behind the barriers of entry. The third criterion is that application of competition law alone would not adequately address the market failure(s) concerned.

- (10) In particular, as far as entry barriers are concerned, two types of entry barriers are relevant for the purpose of this Recommendation: structural barriers and legal or regulatory barriers.
- (11) Structural barriers to entry result from original cost or demand conditions that create asymmetric conditions between incumbents and new entrants impeding or preventing market entry of the latter. For instance, high structural barriers may be found to exist when the market is characterised by substantial economies of scale and/or economies of scope and high sunk cost. To date, such barriers can still be identified with respect to the widespread deployment and/or provision of local access networks to fixed locations. A related structural barrier can also exist where the provision of service requires a network component that cannot be technically duplicated or only duplicated at a cost that makes it uneconomic for competitors.
- (12) Legal or regulatory barriers are not based on economic conditions, but result from legislative, administrative or other state measures that have a direct effect on the conditions of entry and/or the positioning of operators on the relevant market. Examples are legal or regulatory barriers preventing entry into a market where there is a limit on the number of undertakings that have access to spectrum for the provision of underlying services. Other examples of legal or regulatory barriers are price controls or other price related measures imposed on undertakings, which affect not only entry but also the positioning of undertakings on the market.
- (13) Entry barriers may also become less relevant with regard to innovation-driven markets characterised by ongoing technological progress. In such markets, competitive constraints often come from innovative threats from potential competitors that are not currently in the market. In such innovation-driven markets, dynamic or longer term competition can take place among firms that are not necessarily competitors in an existing “static” market. This Recommendation does not identify markets where entry barriers are not expected to persist over a foreseeable period.
- (14) Even when a market is characterised by high barriers to entry, other structural factors in that market may mean that the market tends towards an effectively competitive outcome within the relevant time horizon. This may for instance be the case in markets with a limited - but sufficient - number of undertakings having diverging cost structures and facing price-elastic market demand. There may also be excess capacity in a market that would allow rival firms to expand output very rapidly in response to any price increase. In such markets, market shares may change over time and/or falling prices may be observed.
- (15) The decision to identify a market as justifying possible ex ante regulation should also depend on an assessment of the sufficiency of competition law in reducing or removing such barriers or in restoring effective competition. Furthermore, new and emerging markets, in which market power may be found to exist because of “first-mover” advantages, should not in principle be subject to ex-ante regulation.
- (16) In undertaking periodic reviews of the markets identified in this Recommendation, the three criteria should be used. These criteria should be applied cumulatively, so that failing any one of them means that the market should not be identified in subsequent recommendations. Thus, whether an electronic communications market continues to be identified by subsequent versions of the Recommendation as justifying possible ex ante regulation would depend on the persistence of high entry barriers, on the second

criterion measuring the dynamic state of competitiveness and thirdly on the sufficiency of competition law (absent ex ante regulation) to address persistent market failures. A market could also be removed from a recommendation once there is evidence of sustainable and effective competition on that market within the Community, provided that the removal of existing regulation obligations would not reduce competition on that market.

- (17) The Annex to this Recommendation indicates how each market in the Recommendation is linked to the market areas in Annex I to the Framework Directive. When reviewing existing obligations imposed under the previous regulatory framework, in order to determine whether to maintain, amend or withdraw them, NRAs should undertake the analysis on the basis of the markets identified in this Recommendation, in order to give effect to the requirement that market definition for the purposes of ex ante regulation should be based on competition law principles. Pending the first market analysis by NRAs under the new regulatory framework, existing obligations remain in force.
- (18) The identification of markets in this Recommendation is without prejudice to markets that may be defined in specific cases under competition law.
- (19) The range of different network topologies and technologies deployed across the Community means that in some cases national regulatory authorities must decide the precise boundaries between, or elements within, particular markets identified in the Recommendation, while adhering to competition law principles. National regulatory authorities may identify markets that differ from those of the Recommendation, provided they act in accordance with Article 7 of the Framework Directive. Since the imposition of ex-ante regulation on a market could affect trade between Member States as described in recital 38 of the Framework Directive, the Commission considers that the identification of any market that differs from those of the Recommendation are likely to be subject to the appropriate procedure in Article 7 of the Framework Directive. Failure to notify a market which affects trade between Member States may result in infringement proceedings being taken. Any market identified by national regulatory authorities should be based on the competition principles developed in the Commission Notice on the definition of relevant market for the purposes of Community competition law⁴, and be consistent with the Commission Guidelines on market analysis and the assessment of significant market power and satisfy the three criteria set out above. Should an NRA consider that demand and supply patterns may justify an alternative market definition of a market listed in this Recommendation, it should then follow the appropriate procedures set out in Article 6 and 7 of the Framework Directive.
- (20) The fact that this Recommendation identifies those product and service markets in which ex ante regulation may be warranted does not mean that regulation is always warranted or that these markets will be subject to the imposition of regulatory obligations set out in the specific Directives. Regulation will not be warranted if there is effective competition on these markets. In particular, regulatory obligations must be appropriate and be based on the nature of the problem identified, proportionate and justified in the light of the objectives laid down in the Framework Directive, in particular maximising benefits for users, ensuring no distortion or restriction of

⁴ OJ C 372, 9.12.1997, p. 5.

competition, encouraging efficient investment in infrastructure and promoting innovation, and encouraging efficient use and management of radio frequencies and numbering resources.

- (21) The Commission will review the need for any update of this Recommendation no later than 30 June 2004 on the basis of market developments.
- (22) This Recommendation has been subject to a public consultation and to consultation with national regulatory authorities and national competition authorities.

HAS ADOPTED THIS RECOMMENDATION:

- 1. In defining relevant markets in accordance with Article 15(3) of Directive 2002/21/EC, national regulatory authorities are recommended to analyse the product and service markets identified in the Annex.
- 2. This Recommendation is addressed to the Member States.

Done at Brussels, 11/02/2003

For the Commission
Erkki Liikanen
Member of the Commission

ANNEX

Retail level

1. Access to the public telephone network at a fixed location for residential customers.
2. Access to the public telephone network at a fixed location for non-residential customers
3. Publicly available local and/or national telephone services provided at a fixed location for residential customers.
4. Publicly available international telephone services provided at a fixed location for residential customers.
5. Publicly available local and/or national telephone services provided at a fixed location for non-residential customers
6. Publicly available international telephone services provided at a fixed location for non-residential customers.

These six markets are identified for the purpose of analysis in respect of Article 17 of the Universal Service Directive.

Together, markets 1 through 6 correspond to “the provision of connection to and use of the public telephone network at fixed locations”, referred to in Annex I (1) of the Framework Directive. This combined market is also referred to in Article 19 of the Universal Service Directive (for possible imposition of carrier call-by-call selection or carrier selection).

7. The minimum set of leased lines (which comprises the specified types of leased lines up to and including 2Mb/sec as referenced in Article 18 and Annex VII of the Universal Service Directive).

This market is referred to in Annex I (1) of the Framework Directive in respect of Article 16 of the Universal Service Directive (“the provision of leased lines to end users”).

A market analysis must be undertaken for the purposes of Article 18 of the Universal Service Directive which covers regulatory controls on the provision of the minimum set of leased lines.

Wholesale level

8. Call origination on the public telephone network provided at a fixed location. For the purposes of this Recommendation, call origination is taken to include local call conveyance and delineated in such a way as to be consistent with the delineated boundaries for the markets for call transit and for call termination on the public telephone network provided at a fixed location.

This market corresponds to that referred to in Annex I (2) of the Framework Directive in respect of Directive 97/33/EC (“call origination in the fixed public telephone network”).

9. Call termination on individual public telephone networks provided at a fixed location.

For the purposes of this Recommendation, call termination is taken to include local call conveyance and delineated in such a way as to be consistent with the delineated boundaries for the markets for call origination and for call transit on the public telephone network provided at a fixed location.

This market corresponds to the one referred to in Annex I (2) of the Framework Directive in respect of Directive 97/33/EC (“call termination in the fixed public telephone network”).

10. Transit services in the fixed public telephone network

For the purposes of this Recommendation, transit services are taken as being delineated in such a way as to be consistent with the delineated boundaries for the markets for call origination and for call termination on the public telephone network provided at a fixed location.

This market corresponds to the one referred to in Annex I (2) of the Framework Directive in respect of Directive 97/33/EC (“transit services in the fixed public telephone network”).

11. Wholesale unbundled access (including shared access) to metallic loops and sub-loops for the purpose of providing broadband and voice services.

This market corresponds to that referred to in Annex I (2) of the Framework Directive in respect of Directive 97/33/EC and Directive 98/10/EC (“access to the fixed public telephone network, including unbundled access to the local loop”) and to that referred to in Annex I (3) of the Framework Directive in respect of Regulation No 2887/2000.

12. Wholesale broadband access.

This market covers ‘bit-stream’ access that permit the transmission of broadband data in both directions and other wholesale access provided over other infrastructures, if and when they offer facilities equivalent to bit-stream access . It includes ‘Network access and special network access’ referred to in Annex I (2) of the Framework Directive, but does not cover the market in point 11 above, nor the market in point 18.

13. Wholesale terminating segments of leased lines.

14. Wholesale trunk segments of leased lines

Together, the wholesale markets 13 and 14 correspond to those referred to in Annex I (2) of the Framework Directive in respect of Directive 97/33/EC and Directive 98/10/EC (“leased line interconnection”) and to those referred to in Annex I (2) of the Framework Directive in respect of Directive 92/44/EEC (“wholesale provision of leased line capacity to other suppliers of electronic communications networks or services”).

15. Access and call origination on public mobile telephone networks

Referred to (separately) in Annex I (2) of the Framework Directive in respect of Directives 97/33/EC and 98/10/EC.

16. Voice call termination on individual mobile networks

This market corresponds to the one referred to in Annex I (2) of the Framework Directive in respect of Directive 97/33/EC (“call termination on public mobile telephone networks”).

17. The wholesale national market for international roaming on public mobile networks

This market corresponds to the one referred to in Annex I (4) of the Framework Directive.

18. Broadcasting transmission services, to deliver broadcast content to end users.

Note

National regulatory authorities have discretion with respect to the analysis of the market for “Conditional access systems to digital television and radio services broadcast” in accordance with Article 6(3) of the Access Directive. Article 6(3) of the Access Directive provides that Member States may permit their NRAs to review the market for conditional access system to digital television and radio services broadcast, irrespective of the means of transmission.