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THE TELECOMMUNICATIONS AND AUDIOVISUAL INDUSTRIES: REGULATION, COMPETITION AND TECHNOLOGY

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ARPÓN DE MENDÍVIL Y DE ALDAMA, Almudena

Electronic communications and competition

Abstract: The rules of free competition alone are initially insufficient to open up monopoly markets where infrastructure —essentially networks— is vital to conducting business. Consequently, competition in telecommunications has been introduced under cover of specific legislation. The present article analyzes industry regulation, which is separate from but complementary to competition legislation, and its enforcement by competent authorities.

Key words: telecommunications industry, regulation, competition, electronic communications, competition law, relevant markets.

JEL Classification: L12, L51, L96.

CABRERA DE LA IGLESIA, Jesús

Production costs and price orientation in telecommunications services

Abstract: The present article opens with an introduction to the implementation, reviewed from 1980 onward, of telecommunications operator cost accounting systems and their relationship to regulatory authority information needs in connection with service production costs. This first section also discusses the application of criteria of economic rationality consistent with the available Economic Theory of Regulation. This is followed by an analysis of the characteristic «arbitrary nature» of the opening of the industry to competition in the European Union and the «neo-classical» theoretical corollaries that have served as a basis for industry regulation —implemented by national regulatory authorities as set out in directives and recommendations. Finally, the theoretical model used is subject to critical analysis from the standpoint both of its theoretical weaknesses and shortcomings and the difficulties encountered in its practical application.

Key words: telecommunications industry, cost accounting, Economic Theory of Regulation, dynamic efficiency, bottom-up models, interconnection charges.

JEL Classification: L51, L96.

CALVIÑO SANTAMARÍA, Nadia

Regulation and competition in telecommunications: challenges posed by the new regulatory framework

Abstract: The last few years have been characterized by a substantial *rapprochement* between telecommunications industry regulation and defence of competition. In this context, the present article reviews the key characteristics of both instruments and recent legislative change. The aim pursued is to identify the elements most relevant elements to

the interrelations between the two policies and the avenues for minimizing potential conflict in overlapping domains.

Key words: telecommunications industry, competition, efficiency, regulation, networks, relevant market.

JEL Classification: L12, L51, L96.

ESCRIBANO, Álvaro and GARCÍA ZABALLOS, Antonio

Analysis of telecommunications industry pricing and discount plans, 1997-2004

Abstract: Telecommunications traffic volumes in Spain have increased significantly, particularly as regards calls originating or terminating in the mobile network, since the industry was opened up to competition in late 1997. Nonetheless, traffic began to decline in 2003 due to the steep slide in final prices, growing competition and the appearance of discount plans. All these factors have contributed to demand segmentation, encouraging new entrants to seek market niches with different pricing and discount plans closely tailored to demand-side needs in an attempt to achieve perceived differentiation for their products. With the introduction of capacity-based interconnection in 2001, the traditional concept of discount plans underwent substantial change. Indeed, with entrant operators now responsible for the efficient dimensioning of their interconnection points, they can attain significant reductions in interconnection costs, growing their margins and enhancing their competitiveness. Both under the traditional time-based and the capacity-based interconnection models, however, the national regulatory authority (NRA) has found it necessary to strictly monitor the specific structure of each end consumer price and discount plan to prevent price squeezing.

Key words: telecommunications industry, network economics, competition, regulation, capacity-based interconnection.

JEL Classification: L51, L96.

FEIJÓO GONZÁLEZ, Claudio; GÓMEZ BARROSO, José Luis and ROJO ALONSO, David

Competition in the telecommunications industry: development of European regulation and critical analysis of the present framework

Abstract: The telecommunications industry has undergone substantial structural change from its advent in the early twentieth century to its present status as the foundation for building what is known today as the Information Society. One of the major changes in this regard has been the introduction of market competition through world-wide, and more specifically Europe-wide, deregulation. At the same time, different regulatory frameworks have been instituted to adapt the objectives pursued at any given time to the evolution and status of competitive markets.

Specifically, on 1 January 1998 telecommunications networks and services were liberalized in most European Union countries under a legislative framework whose basic aim was to meticulously «guide» the development of competition. The present article summarizes the evolution of such regulation in the European Union, describing the most prominent characteristics of each stage. It concludes with a critical analysis of the new framework, its suitability and the main obstacles that may hinder its application, along with its potential to attain the basic objectives pursued by any competition policy.

Key words: telecommunications, competition, regulation, European Union.

JEL Classification: L12, L51, L96.

GARCÍA ZABALLOS, Antonio

Regulatory models for establishing interconnection charges

Abstract: The telecommunications industry has undergone a period of enormous change that began with the privatization of state-owned telecommunications companies and continued with market liberalization and ongoing technological progress. All of this has prompted change in incumbent operators' competitive strategies. Most network industries face the problem of stranded costs in at least one stage of their productive process, which prevent new operators from feasibly conducting all market businesses due to the costs involved that would be irrecoverable upon withdrawal. To solve this problem national regulatory authorities must ensure that all companies are granted paid access to non-duplicable network elements. In this context, access charge regulation is essential to fair competition on a level playing ground for all operators as well as to infrastructure owner perception that the payments received merit continued investment.

Key words: telecommunications, regulation, competition, productive efficiency.

JEL Classification: L12, L51, L96.

GONZÁLEZ MARTÍN, Matías and MORENO FERNÁNDEZ, Santiago

Introduction of new WiFi and WiMax technology based services

Abstract: Both WiFi and WiMax technology can be implemented as: (i) domestic networks; (ii) «campus» type networks for a community of private users; (iii) technology to supplement existing networks; (iv) general domain networks to provide public services. The article focuses on the third and fourth options in particular, scenarios which, if they arise, would drive change in the telecommunications industry. The likelihood and scope of such change are the subjects broached.

Key words: leadership, management, culture.

JEL Classification: L51, L96.

HERRERA GONZÁLEZ, Fernando

Application of the principles of competition law to telecommunications industry regulation

Abstract: The imposition of asymmetric obligations is one of the decisive aspects of the model implemented in Europe to liberalize the telecommunications market. Originally, such obligations were applied nearly automatically to incumbent operators. The EU regulatory framework instituted in 2002, however, requires a prior examination of the market to establish such obligations, identifying both the predominant operators on which such obligations are to be imposed and the market failures that justify their imposition. According to the above framework, this should be done in accordance with the principles of competition law, in the understanding that such an approach should carry the existing culture of industry regulation toward a focus on the horizontal regulation of competition, which is more in keeping with liberalized industries.

Key words: competition, regulation, telecommunications, relevant market.

JEL Classification: L12, L51, L96.

MORENO REBOLLO, Alberto

Reflections on the regulation of call termination charges in mobile networks: is there an alternative to cost orientation?

Abstract: The debate around the establishment of termination interconnection charges in mobile networks has lacked the objectivity with which issues of this importance should be analyzed. Any number of voices have been raised to defend the «inexcusable» as if it were a «dogma of faith») cost orientation of mobile termination charges. This position has often been adopted without stopping to think whether such a measure is in line with the principles of the new regulatory framework or whether it will actually maximize long-term user benefit. The present article analyzes the principles that should be followed to establish termination charges in the different mobile networks.

Key words: telecommunications industry, interconnection charges, cost orientation, ex-ante and ex-post regulation.

JEL Classification: L11, L51, L96.

PÉREZ ESCUTIA, Elena; GARCÍA-MORENO DELGADO, Almudena; PINILLOS CLEMENTE, Pablo and MORILLO GALLEGU, Jorge

Success and challenges in broadband deployment and IP service development

Abstract: The broadband market has now reached a level of development that was unthinkable only a few years ago. Technological advances, expanding demand,

increasingly specialized supply and institutions more and more concerned about the orderly development of this industry have driven radical market transformation. One result has been determined supply-side effort to personalize services as much as possible to meet increasingly demanding consumer expectations. Another is regulators' need to establish precise rules to prevent any interference with the technological developments that provide for network, platform and service integration and ensure they come on stream as the market needs them. This article attempts to review the factors that have made this change possible, the successful measures implemented to date, the challenges facing the various market participants and the future prospects around IP development.

Key words: broadband, DSL, IP, CMT (*Comisión del Mercado de Telecomunicaciones*, Telecommunications Market Commission), Telefónica

JEL Classification: L96, O32.

PLAZA, Crisanto

Notes on the Economic Theory of Regulation

Abstract: The article analyzes the assumptions of economic theory in connection with the economic theory of regulation, applied exclusively to telecommunications networks. The focus is on classic theory, Ricardo and Marx, and more extensively on Walras' marginalist theory, the welfare economy, Baumol's contestability theory, the LRIC (long-run incremental cost) and bottom-up models and, finally, the alternative to Schumpeter's development theory. The aim of this exercise is to identify the assumptions on which conventional Economic Theory of Regulation (CERT) is based, which often draw from theorists, not necessarily the most renowned, who have nonetheless had a huge influence on the models used by telecommunications regulators.

Key words: regulation, economic theory, telecommunications.

JEL Classification: L51, L96.

QUINTÁS CORREDOIRA, M.^a Ángeles and GARCÍA VÁZQUEZ, José Manuel

Volume of internationally generated technology business: characterization of multinational groups operating in Spain

Abstract: This article analyzes the differences between multinational groups that generate different volumes of technology business internationally, measured in terms of European patents. The results show that there are significant differences among groups: the ones with the highest volumes of internationally generated technology business have larger matrices and more group companies, greater geographic diversity, longer corporate histories and greater technological diversity and experience. The study also shows that the

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various groups are best differentiated by variables relating to both geographic and technological diversity.

Key words: multinational groups, international technology generation, European patents.

JEL Classification:

SÁNCHEZ-LORDA, Pablo

Acquisitions and alliances in the European telecommunications industry: empirical trends and capital market valuation

Abstract: This paper describes the characteristics of the strategic alliances and acquisitions undertaken by European telecommunications operators between 1986 and 2001. A dual objective is pursued. On the one hand, an analysis is conducted of the guidelines followed by these operators to adapt to a business environment in which globalization and liberalization have driven radical change in former characteristics and structure. On the other, an attempt is made to identify the characteristics of diversification and internationalization that may prompt different capital market responses to such processes.

Key words: business strategy, mergers and acquisitions, strategic alliances, telecommunications, industry analysis, study of events, abnormal profitability.

JEL Classification:

SUSTAXA, Jon

Cable operators: present status and future prospects

Abstract: Since the enactment of the General Telecommunications Act of 1998, cable operators are subject to a dual series of regulations: the system that governs telecommunications (network development and liberalized telecommunications services) and the system that regulates television broadcasting under government franchise. The Act instituted a liberalized regime for providing telecommunications services and establishing and operating telecommunications networks, opening the industry to free competition. This article analyzes and describes the present and future status of cable operators in the new framework and in the context of growing competition in the industry.

Key words: telecommunications industry, regulation, competition, cable operators.

JEL Classification: L12, L51, L96.