

## PROFESSOR FRANCIS R. COLLINS

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4 Dr. Collins is a senior member of the International Telecommunications  
5 Industry. He has made significant contributions to the science, engineering,  
6 business development and evolution of that industry. His professional science  
7 and engineering focus over the years has been the System Architecture, Design  
8 and Implementation of large scale public and private telecommunications and  
9 teleprocessing systems and networks. A few of the many possible examples  
10 are: the design and creation of the fundamental plan which included operations,  
11 finance, technology and training for the Public Switched Network in Saudi Arabia;  
12 a technical audit and re-engineering of the communications and telemetry  
13 systems serving the oil and gas fields in Algeria; the specification for operational  
14 and technology improvements in NIRT, the National Iranian Television Company;  
15 numbers of technical and economic audits of operating telephone companies in  
16 the United States; the technical audit and specification for quick fix technical  
17 improvements to the local exchange plant for CANTV, the telecommunications  
18 provider in Venezuela; the establishment of a strategy for and the technical  
19 evaluation of the proposals for the alternative telephone company in Australia;  
20 the establishment of competitive strategies for the National and International  
21 telephone companies in Australia; a technical, organizational and financial "due  
22 diligence" study including vendor recommendations for a 2,000,000 line switched  
23 telephone and broadband telecommunication project in Thailand; and from the  
24 commercial sector a few examples are: the design and architectural  
25 implementation of the Florists' Transworld Delivery (FTD) Mercury Network in  
26 North America; the design of corporate nationwide telecommunications and  
27 teleprocessing systems for a host of industrial clients and the provision of  
28 technical and economic counsel to communications co-carriers.

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30 Dr. Collins, among other professional assignments, has served as an  
31 advisor on Information and Technology to Governor Weld (Massachusetts). In  
32 addition he has served as member of the Board of Directors of both the  
33 Massachusetts Society of Professional Engineers and its Metropolitan Boston  
34 Chapter.

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1 While; a teaching professor, a Dean of Engineering, and a Provost of the  
2 University at Boston University, Dr. Collins provided consulting services in: Public  
3 Policy; Business Analysis; Revenue Production Strategy Development; the  
4 application of Science and Engineering to the design and development of public  
5 switched networks; and Economic and Financial Counsel. This work has been  
6 done for the national and international telecommunications, cable television, and  
7 information technology community.

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9 Dr. Collins' own applied research is in the design and implementation of  
10 unique communications, teleprocessing and information technology systems and  
11 the requisite requirements analysis and system design. In addition Dr. Collins  
12 has pursued an intellectually stimulating aspect of being a telecommunications  
13 scientist and professional engineer, that of addressing issues related to Public  
14 Switched Telecommunication System Design, Telecommunications Public Policy  
15 Development; Telephone Operating Revenue Requirements and Rate Design  
16 Issues for Developed and Developing Countries across the world. In addition the  
17 technological, economic and public policy concerns and issues to be faced in the  
18 introduction of technology and competition into those public telecommunication  
19 and broadband networks. For the past few years Dr. Collins' interests have  
20 centered on the introduction of deregulation and competition to the inter LATA,  
21 intra-state toll, and most recently the local exchange marketplace.

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23 Recently specific areas of work have included:

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25 - Providing economic and technical counsel to state governments and the  
26 representation of co-carriers in negotiations between LECs and CLECs to  
27 arrive at co-carrier agreements which satisfy the 96 Telecommunications  
28 Act requirements, currently in California, Connecticut, Idaho, New  
29 Hampshire, Massachusetts, New York, Nevada, Oklahoma, Rhode Island  
30 and Virginia.

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32 - The determination of the approach for and subsequent review of Total  
33 Service Long Run Incremental Cost Studies for the establishment of cost  
34 elements (and subsequently rates) for unbundled local exchange  
35 networks;

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- 1 - The provision of technical and economic counsel to and representation  
2 of parties in TSLRIC/TELRIC cost methodology development workshops  
3 whose goals are to make recommendations to regulatory bodies;  
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- 5 - Member of the Connecticut Telecom Industry Operations Task Force  
6 which was established by the Connecticut Commission;  
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- 8 - Member of the State of Connecticut Technical and Economic Task force  
9 providing oversight to the implementation of Alternative Regulation for  
10 SNET;  
11
- 12 - Technical Counsel to the Connecticut Carrier Change Process sub-  
13 committee established by the Connecticut Commission;  
14
- 15 - Member of the State of California PUC E911;  
16
- 17 - Member of the State of California Local Number Portability Task Force  
18 since its inception in 1995;  
19
- 20 - Representative to the West Coast Number Portability Limited Liability  
21 Corporation;  
22
- 23 - Member of the State of California Task Force on Billing and Routing;  
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- 25 - The provision of Technical and Economic Counsel to the a California  
26 Association regarding: NPA/NXX issues; New Regulatory Framework  
27 issues; Local Competition Rule issues; issues underlying Local Number  
28 Portability; the Provision of Emergency Services; Open Network and  
29 Network Architecture Issues, and the implications of the  
30 Telecommunications Act of 1996;  
31
- 32 - Technical and Economic Audits for Operating Telephone Companies,  
33 focusing on the Construction Program, the resulting Capital Investment,  
34 and its effect on the Rate Base;  
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- 1 - The design of a multi-variable computer program for doing first cost and  
2 upgrade costs of CATV and Video Dialtone Broadband Networks;  
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- 4 - The review and analysis of proposed Capital Programs and the proper  
5 allocation of costs to regulated and competitive services for local  
6 exchange operating telephone companies;  
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- 8 - The assessment of proposed Rate Design Structures and their  
9 relationship to the Capital Investment and the utility of that investment;  
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- 11 - The technical audit of portions of the CANTV Network in Venezuela with  
12 the recommendation for immediate and cost effect upgrading of that  
13 network through the evolutionary introduction of technology to the Capital  
14 Program;  
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- 16 - For the government of Australia, the evaluation of the optimum manner  
17 of introducing a significant advanced technology expansion to the existing  
18 network through the establishment of a "Second Carrier" for domestic  
19 local and long distance service;  
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- 21 - The managerial oversight of the design and implementation of a  
22 comprehensive training program in Saudi Arabia;  
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- 24 - The development of a major 124 hour technical training program in  
25 telecommunications and advanced broadband services for NYNEX. The  
26 program ran three years and over 1,200 staff members were trained.  
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- 28 - The technical and economic audit of a 2,000,000 line, 2.8 billion dollar  
29 expansion of the public network for video, data and voice services in the  
30 greater Bangkok, Thailand area for an investment banking firm's due  
31 diligence effort;  
32
- 33 - The Creation of the Fundamental Plan for the terrestrial and satellite  
34 based Public Switched Network for Saudi Arabia for; Operations,  
35 Revenue Requirements, Tariff Structures, Organizational Structures and  
36 Technology Introduction;

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- The Creation of the Specifications for the Loop, Switching and Trunking Equipment to Implement the Saudi Arabian Public Switched Network;

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- The Architectural Oversight of the Implementation of the Public Switched Network in Saudi Arabia;

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- The Analysis and Synthesis of an International Gateway Network using Space Satellite Links for Saudi Arabia;

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- The Design of a National Video and Digital Data Network for National Iranian Television;

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- The Analysis leading to recommendations for rectifying problems in the Telecommunications supporting the gas and oil fields in the Algerian Sahara;

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- The design of a Space Satellite International Gateway Complex to support international communications to/from The Republic of Vietnam;

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- The Planning and Design for a Voice and Data terrestrial and Satellite base Telecommunication System for the Provision of Educational and Medical Services to remote regions in the United States;

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- The analysis required for the design and then the design, installation, staff training, and establishment of operational and cost control systems for nationwide voice, television and data networks for private industry and national governments. These include projections of needed telecommunications capacity and services based on Operational Research methods applied to the particular situation;

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- The Architectural Design;, Public Policy Impact Analysis; and Financial Impact Assessment; System and Subsystem Specification; Integration, Test and Evaluation of Large Scale Teleprocessing systems;

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1 - The specification of components for nationwide on-line, real time  
2 voice/data systems employing thousands of terminals;

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4 - The architectural design and engineering specification for mobile  
5 telephone systems considering the cost performance aspects of standard  
6 vs cellular configurations;

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8 - The integration of cellular signaling and billing transmission protocols  
9 with Equal Access, Feature Group D formats;

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11 - The evaluation of start-up companies and their products for investors or  
12 venture capital concerns;

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15 Dr. Collins has had thirty eight years of experience as a systems  
16 engineer, engineering manager, executive and senior consultant in the  
17 telecommunication, navigation and digital electronic fields. He is recognized as  
18 an international expert in telecommunications; science, technology, economics  
19 and public policy. As a member of technical, middle and top management levels,  
20 he has held marketing, profit, overhead, cost, planning, and administrative  
21 control positions for a number of top companies: Bell Telephone Laboratories,  
22 the MITRE Corporation, the Magnavox Company, Analytical Systems  
23 Corporation, Arthur D. Little, Inc., and Boston University.

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25 His Executive Management positions have included:

- 26 - Executive Project Manager, the MITRE Corp.;
- 27 - Director, the Magnavox Communications Research Laboratories;
- 28 - Executive Vice President, The Analytical Systems and Engineering  
29 Corporation;
- 30 - Managing Project Director, Arthur D. Little Inc.;
- 31 - Dean of the College of Engineering, Boston University;
- 32 - Provost and Director of Sponsored Research, Boston University;
- 33 - President, CCL Corporation.

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35 He is the author of over 100 technical papers and has processed patents  
36 in the design of telecommunications, information technology, and multi-media

1 broadband networks and equipment. He currently is in the process of perfecting  
2 two patents related to the "convergence" of the cable and telephone industries.  
3 In addition, he has accomplished work and published confidential reports in the  
4 areas of requirement analysis and telecommunications system performance and  
5 design for the Army, Navy and Air Force. These systems, both satellite and  
6 terrestrial, typically employed advanced modulation techniques, equipment and  
7 systems to support generic mission profiles.

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9 Dr. Collins was awarded the B.S.E.E. degree Cum Laude by Northeastern  
10 University and the M.S.E.E. degree with high honors as part of Bell Telephone  
11 Laboratories Educational Program. This certificated program involved additional  
12 higher education above the Masters degree level. These courses were taken at  
13 the Massachusetts Institute of Technology and in residence at the Laboratories.  
14 In that work his educational emphasis was on digital switching and network  
15 transmission systems. His doctorate (Ph.D.) in Telecommunications was  
16 awarded by the Union Graduate School. In addition to being a professorial  
17 member of the faculties of Lowell University, Northeastern University and Boston  
18 University, in 1996 Dr. Collins was appointed to the "International Academy" in  
19 the position of Academician by the Faculty of the University of Moscow, St.  
20 Petersburg, Russia.

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23 Dr. Collins has been a Professor of Engineering of the undergraduate and  
24 graduate school faculties of Northeastern University, Lowell University, and  
25 Boston University. His academic career includes the organization and  
26 presentation of courses in the areas of: digital computer/electronics; solid state  
27 circuit design; synthesis of linear passive bilateral networks; the theory of time  
28 varying fields; the theories of dynamical systems with applications of classical  
29 (transform calculus techniques) and modern (state space formulations) solutions;  
30 communications theory and the design of communications systems. He was a  
31 Professor of Engineering and the Associate Dean for Research of the College of  
32 Engineering at Boston University from 1976 to 1978 and Associate Provost, a  
33 position similar to Executive Vice President, responsible for the research activity  
34 of the University with responsibility for The Office of Research Programs from  
35 1978 to 1981. During his tenure at Boston University Dr. Collins was sought  
36 after for consulting services by national and international businesses, industries,

1 and governments and provided these services to the extent allowed by his  
2 faculty affiliation.

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4 From 1981 to the present he has been providing consulting services  
5 through CCL Corp. and additionally is "Of Counsel" to a number of other  
6 distinguished firms including Arthur D. Little, Cambridge Strategic Management  
7 Group, Exeter Associates, and J.W. Wilson Associates.

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9 Dr. Collins is a registered Professional Engineer in the Commonwealth of  
10 Massachusetts; a member of both the Massachusetts and National Societies of  
11 Professional Engineers; a past Vice President and current Executive Board  
12 Member of the Massachusetts Chapter, a member of the Legislative and  
13 Government Affairs subcommittees of the National and Massachusetts Societies,  
14 a member of two national engineering honor societies, Eta Kappa Nu and Tau  
15 Beta Pi; a past member of the Institute of Electrical and Electronics Engineers; a  
16 member of the National Society of Engineering Educators; and a member of the  
17 National Association of Cable Television Engineers. He has served on numbers  
18 of National and International professional advisory boards, panels, and North  
19 American Standards setting Organizations over the years and has served  
20 Internationally as a member of the International Telecommunications Union in  
21 Geneva, Switzerland. Dr. Collins is also an elected member of "Who's Who  
22 Worldwide".

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24 528832.2

## CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing Petition for Preemption of Cox Virginia Telcom, Inc. was sent to each of the following parties by overnight mail and via hand delivery as indicated by the \* on this 12th day of December, 2000.

Magalie R. Salas\*

Secretary  
Federal Communications Commission  
445 12th Street, SW  
Washington, DC 20554

Chairman William E. Kennard\*  
Federal Communications Commission  
445 12th Street, SW, Room 8-B201  
Washington, D.C. 20554

Commissioner Michael Powell\*  
Federal Communications Commission  
445 12th Street, SW, Room 8-A204  
Washington, D.C. 20554

Commissioner Harold Furchtgott-Roth\*  
Federal Communications Commission  
445 12th Street, SW, Room 8-A302  
Washington, D.C. 20554

Commissioner Gloria Tristani\*  
Federal Communications Commission  
445 12th Street, SW, Room 8-C302  
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Federal Communications Commission  
445 12th Street, SW, Room 8-B115  
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Virginia State Corporation Commission  
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Richmond, VA 23219

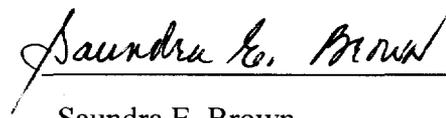
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Sandra E. Brown