

March 22, 1995



Building The
Wireless Future™

Mr. William F. Caton
Secretary
Federal Communications Commission
1919 M Street, NW, Room 222
Washington, DC 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

Cellular
Telecommunications
Industry Association
1250 Connecticut
Avenue, N.W.
Suite 200
Washington, D.C. 20036
202-785-0081 Telephone
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Re: *Ex Parte* Presentation
CC Docket No. 94-54

Dear Mr. Caton:

On Wednesday, March 22, 1995, the Cellular Telecommunications Industry Association ("CTIA"), represented by Mr. Brian Fontes, Senior Vice President for Policy and Administration and Mr. Randall Coleman, Vice President for Regulatory Policy and Law, along with AIRTOUCH Communications, represented by Ms. Kathleen Abernathy, Vice President, Federal Regulatory; and Mr. Brian Kidney, Executive Director of External Affairs for AIRTOUCH Cellular, met with Commissioner Susan Ness and Ms. Mary McManus, Legal Advisor to Commissioner Ness to discuss issues raised in the above referenced proceedings.

At the meeting, CTIA presented the attached document. Pursuant to Section 1.1206(a)(1) of the Commission's Rules, an original and one copy of this letter and attachment are being filed with your office. If you have any questions concerning this submission, please contact the undersigned.

Sincerely,

Randall S. Coleman
Vice President for
Regulatory Policy and Law

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INTERCONNECTION

(CC Docket No. 94-54)

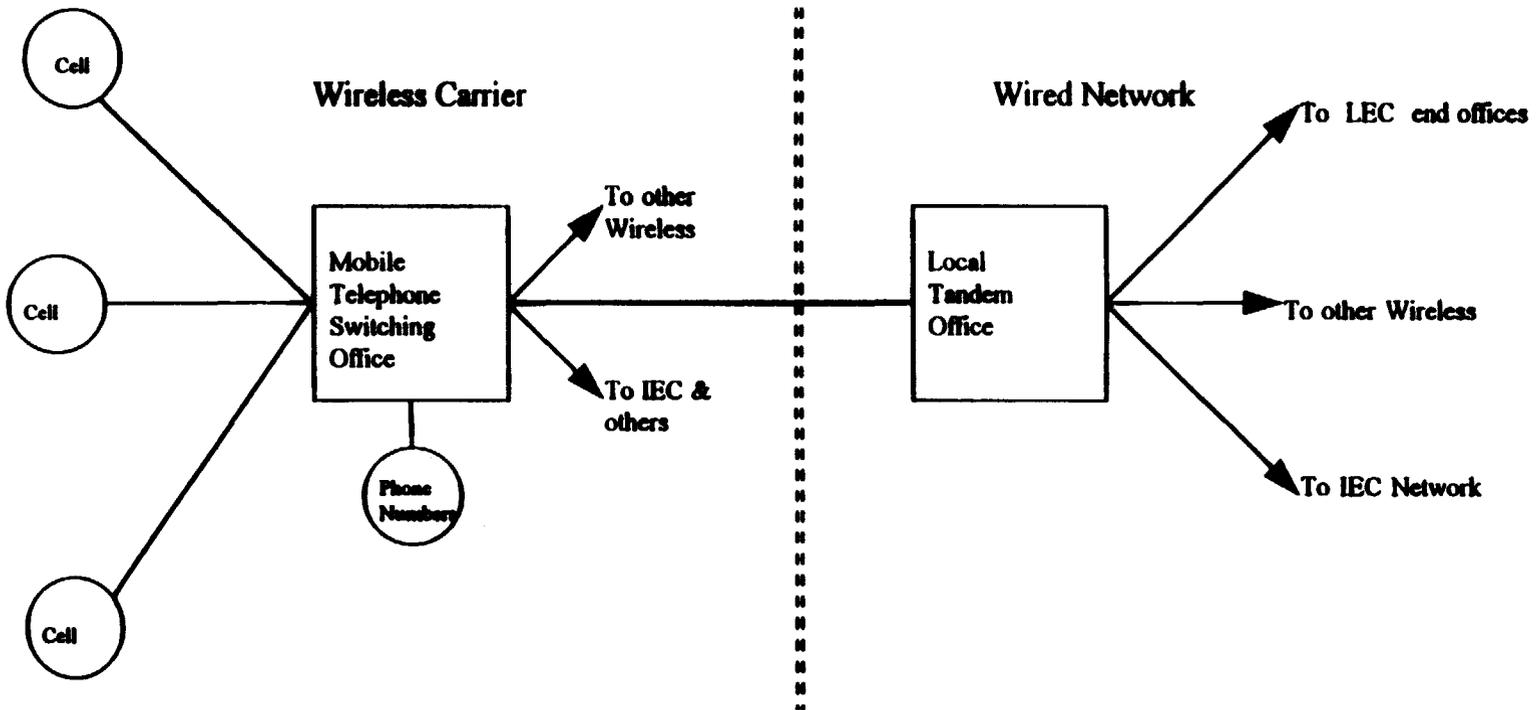
***Ex Parte* Presentation of
AirTouch Communications
and
Cellular Telecommunications Industry Association (CTIA)
March 22, 1995**

INTERCONNECTION

The ability of customers on one wireless network to reach customers on any other wireless or wired network.

- **GOOD INTERCONNECTION -- All networks interconnect, either directly or via the LEC, determined only by network efficiencies**
- **INEFFICIENT INTERCONNECTION -- Mandated interconnection between CMRS providers**
- **BAD INTERCONNECTION -- Piecemeal, Unbundled interconnection**
- **“MIS-NAMED” INTERCONNECTION -- Roaming and resale**
- **FUTURE POSSIBILITIES FOR CMRS INTERCONNECTION**

Wireless Network Connections To Any Demand Source



GOOD INTERCONNECTION

- **Existing rules require LECs to provide interconnection to all CMRS and long distance carriers on non-discriminatory terms.**

Result: All carriers currently interconnect to the PSTN through LECs and *any user can access another user.*

- **Wireless to wireless interconnection can and does happen today:**

Direct interconnection agreements are negotiated between cellular carriers *where enough traffic is exchanged to cover costs of additional trunk groups.*

No technical barriers exist as these are ordinary trunk groups designed by standards.

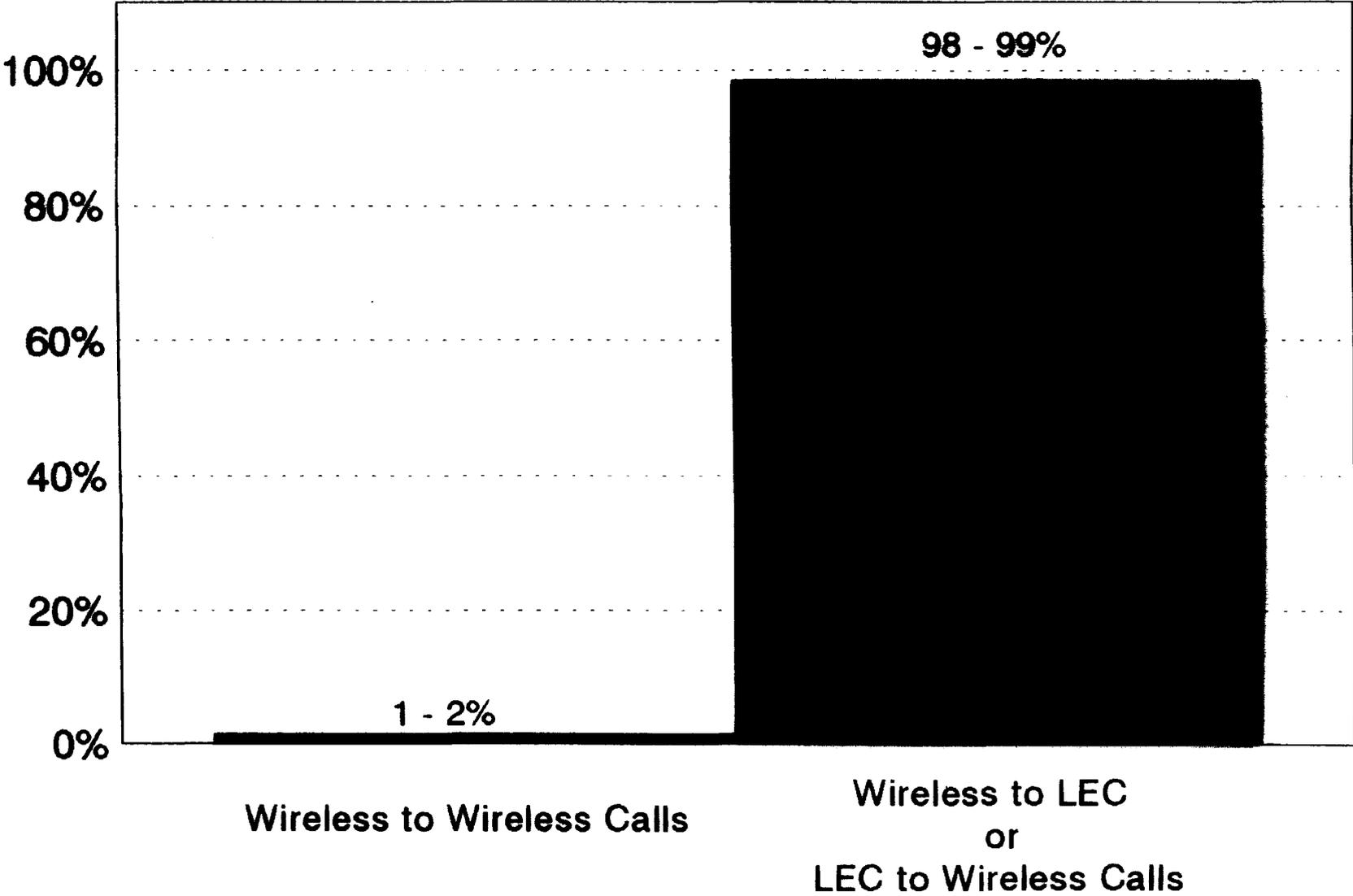
Agreements around the country will vary as market environments differ.

Considerations include assumption of risk for fraud, bad debt, billing errors and network failures.

Industry and technology are changing rapidly; markets need flexibility to respond quickly to competitive and technology changes.

- **As the following graph shows, 98-99% of current wireless traffic either originates or terminates with a LEC. Almost all of the traffic for new wireless carriers will also originate or terminate through LECs -- *so their direct interconnection with other CMRS carriers need not be mandated at this time.***

WIRELESS CALLS -- ORIGINATION AND TERMINATION



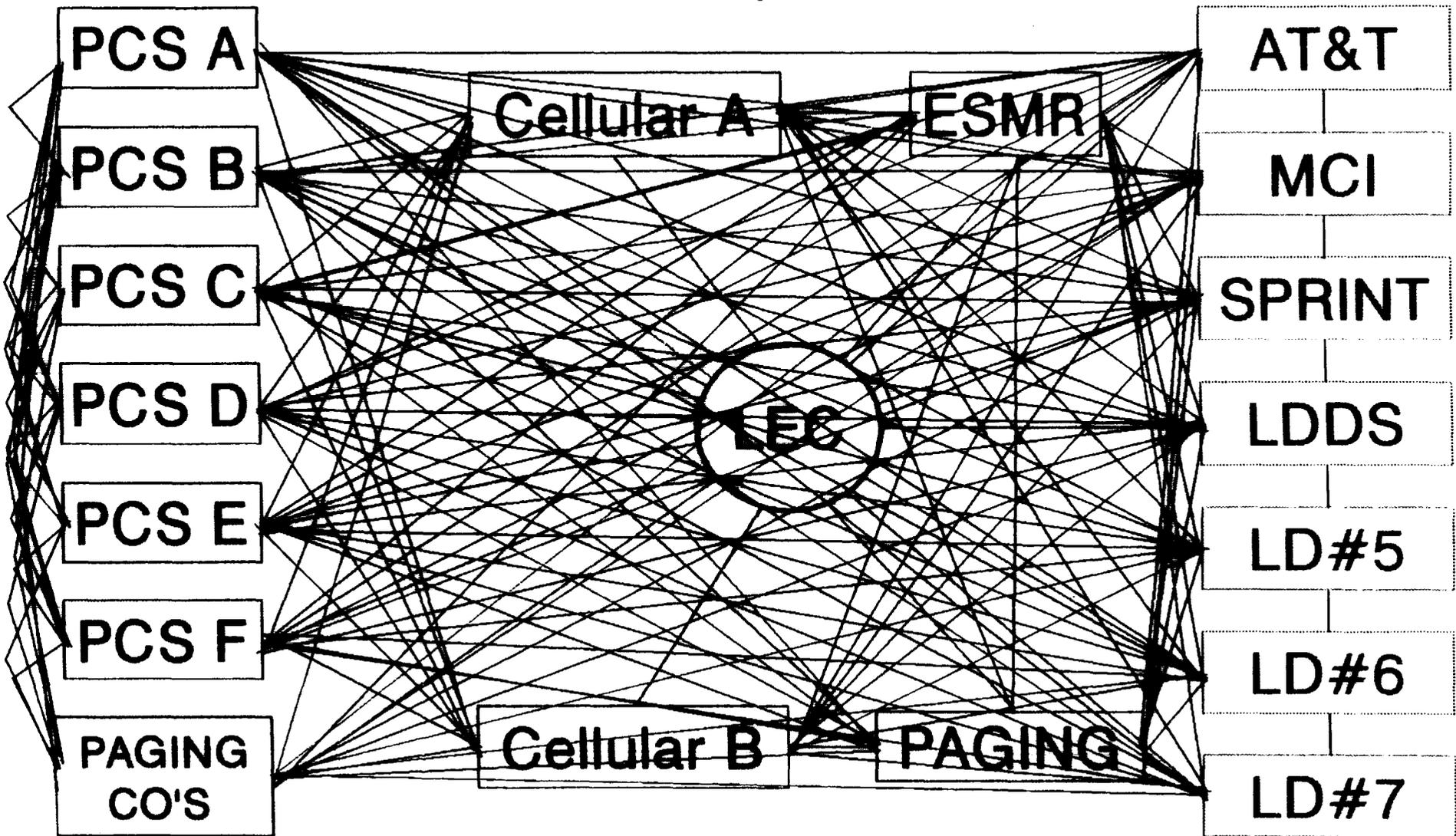
INEFFICIENT INTERCONNECTION

Mandated CMRS to CMRS Interconnection

- **Mandatory interconnection can create uneconomic results:**
 - Inefficient utilization of facilities and investment;**
 - Delays in the introduction of new technology.**
- **As traffic exchanged between any two (or more) wireless networks builds to a given level, it will be in the best interest of the carriers to directly interconnect. The decision will be based on least cost routing concepts.**
- **Absent a significant exchange of traffic, direct connection between wireless networks provides no value to either carrier.**
- **New wireless carriers are sophisticated entities with market experience.**

FULL CARRIER INTERCONNECTION REGULATION

The Proposed Law



BAD INTERCONNECTION

Piecemeal Unbundling

- **Unbundled interconnection is technically infeasible in CMRS. Unlike wired environment, CMRS requires constant seamless communication between switches-antenna-customer.**
- **Mandatory unbundled interconnection would result in a regulatory/administrative nightmare, *i.e.*, imposition of Uniform System of Accounts and additional FCC staff to police pricing of individual service “bundles.”**
- **Unbundled interconnection discourages the construction of competitive facilities.**

BAD INTERCONNECTION

Piecemeal Unbundling (Continued)

- **Non-facilities based resellers should not have interconnection rights.**
- **Reseller switch concept provides duplicate and inefficient network elements:**

Proposed efficiencies based on cost-based elements are inconsistent with competitive, market driven concepts;

Unbundling of facilities based carriers networks destroy economies, creates additional costs (e.g., software upgrades, new data circuits and protocol converters, increased call validation, maintenance, forecasting) and causes regulatory uncertainties;

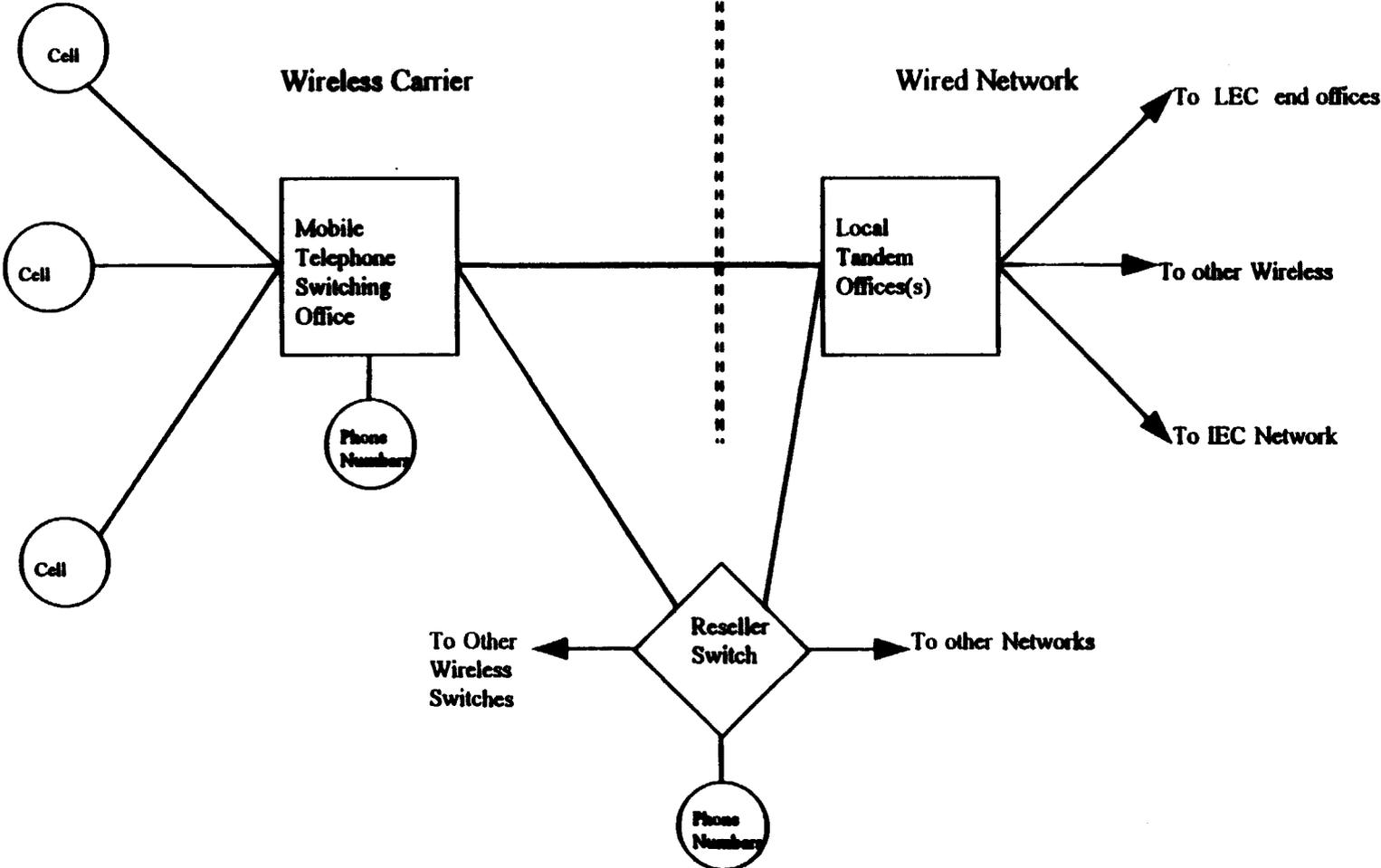
No “savings” result from direct reseller interconnection to the LEC because costs simply shift from cellular carrier to resellers;

Reseller switch proposals lack technical specificity;

Resellers create no value, since they will not be able to provide any features that the facilities based provider cannot;

Reseller switch can degrade service in the facilities based carrier’s system (e.g., blockage, reduced voice quality, inefficient use of network resources).

Reseller Switch Connection To Network



"MIS-NAMED" INTERCONNECTION

Roaming & Resale

PCS-Cellular Roaming Can Be Accomplished through Business Arrangements and IS-41 Connection.

- **PCS-cellular roaming is predicated on the use of *dual-band* (800-900 MHz and 2GHz) *cellular-PCS* telephones.**
- **Roaming between PCS and cellular carriers is made possible through cellular connections and business arrangements between carriers which permits the subscribers of one carrier to initiate and receive calls in the territory served by the other carrier.**
- **Both carriers must be connected to an SS7 network and adhere to the IS-41 protocol which:**

Allows tracking of the subscriber while out of the home calling area,

Allows pre-call validation of the visiting caller's account information as a check against fraud,

Obviates the need for cumbersome roamer access codes, and

Permits customers to access vertical features when roaming.

- **Outside of their existing territories, cellular carriers will be PCS providers. Thus, the ability to roam on cellular networks is just as important to them.**

“MIS-NAMED” INTERCONNECTION (Continued)

Cellular Resale Obligation

- **Cellular carriers have always been subject to a resale obligation.**

Exception: cellular carriers are permitted to deny unrestricted resale to an intra-market cellular competitor after completion of that competitor’s five-year fill-in period.

Currently, this exception does not apply to PCS or other similarly situated, non-cellular CMRS providers.

However, since a PCS system’s common air interface (CAI) is not compatible with a cellular system’s CAI, there is no need for a similar rule. If a PCS provider wants to provide its customers access to a cellular system, it will have to offer customers a *dual-band cellular- PCS telephone*. With a FCC-assigned system identifier (SID), the PCS customer would be entitled under the FCC’s rules to roam on any cellular system.

- **The cellular resale obligation would enable PCS providers to offer wide-area service while it completes network construction.**
- **Outside of their existing territories, cellular carriers will be PCS providers. Thus, the availability of cellular resale is just as important to them.**

FUTURE POSSIBILITIES FOR CMRS INTERCONNECTION

CMRS Interconnection via the LEC and Alternative Local Service Providers

- **Regulators are concerned that CMRS interconnection through the LEC perpetuates the LEC “bottleneck” environment.**
- **By encouraging and facilitating local exchange competition, the FCC embraces a regulatory structure where competition will continue to determine the most efficient and effective means of interconnection for CMRS providers.**
- **CMRS providers will have the choice of direct interconnection, interconnection through an Alternative Local Service Provider (ALSP) or interconnection through the LEC.**
- **Under a competitive regulatory structure, economic and technical feasibility will be the determining factors as to the type of interconnection the CMRS provider will use to best service his customers.**

CONCLUSION

- **New interconnection obligations are unnecessary.**
- **Market forces will lead to agreements between the parties that will accomplish interconnectivity of subscribers in a flexible and customized manner.**
- **At most, the FCC should issue a Policy Statement encouraging interconnection between CMRS providers, but not mandating it in the absence of harm.**