

Cellular Radio Position Paper
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Canadian Telecom accepts as a forgone conclusion that cellular radio represents the architecture for the next step in the evolution of the communications system at the local loop level. We believe that it will become competitive with wireline service in the long run.

Although there has been talk about large comsats interfaced directly with the land mobile industry (such as Marisat, or even Ivan Bekey's wrist transceiver) along with packet radio proposals, every indication points to cellular radio (with whatever standards are adopted) becoming an inevitable reality.

In the same manner that a time frame can not be accurately forecast for cellular's debut, this also holds true for predicting the economics of operating a cellular system. Many groups have published projected operating costs along with estimated rates of return on investments in cellular systems. The fact is that too many variables exist to formulate a definitive financial analysis for a cellular system in an specific area without extensive study. Even with such studies, the industry is experiencing the early stages of a learning curve, such that for large markets, financial analysis takes on a speculative tinge.

With great attention being paid by the FCC to the evolution of digital cellular systems, today's business market and tomorrow's mass market will use the cellular network for much more than simply voice traffic. One need look no further than Fortune 500 companies to support this view. As an example, Xerox's "Xten" proposal (fixed data services via satellite/microwave) adopts a cellular radio concept at the local loop level, completely by-passing the wireline telephone system.

Cellular radio has the potential to become all pervasive, resulting from the creation of a mass market for its services. We believe that the groundwork for this market is being laid today. While many studies indicate a glorious potential for cellular radio, we feel that most do not look far enough ahead to a time when virtually most people could and might own a cellular telephone. In short, we feel that cellular technology will revolutionize our society and impact it tremendously.

Even if a mass market does not materialize, cellular will still represent a major growth industry for the next two decades. As the cellular market is still pre-embryonic (it does not yet even exist), its potential is staggering. In B.C. alone, a market of five percent of the population subscribing to cellular services would be measured in the hundreds of millions of dollars. In the long run, any investment in a cellular system over the next few years could realize an exponential return.

The cellular concept has been charted for over a decade now, having the effect of removing much of the risks normally associated with new concepts. At the same time that the concept was being demonstrated, the companies risking substantial capital to develop cellular have been prohibited from entering the marketplace and capitalizing on their investment. The enormous sums invested in the cellular concept have been gifted to whomever eventually offers such a service. The question is no longer, what, when, or where; but whom?

The obvious answer to this situation is unity. The Commission must be shown in a concrete form (risks taken and funds expended), that the radio common carrier industry represents the most logical competition to the telcos in the cellular arena. The political mood, along with our history is favorable. We have only to act.

When AT&T made the decision to build AMPS system in Chicago, they realized that in the final analysis, their actions would speak louder than any words. When the final rulemaking is handed down, consideration will have been given to the risk and size of their project. When every other applicant is listing what they intend to do, Bell's costly and tangible investment cannot be ignored. To ignore such investment would be unjust and discourage risk taking when government needs require input and direction. History demonstrates that those willing to initiate risk for their beliefs, shape the form of future developments.

Although the foregoing centers on cellular developments in the U.S., it is relevant to Canada. The Department of Communications is currently awaiting the outcome of the U.S. inquiry. Whatever the U.S. decision, it is expected the situation will be prolonged in the courts by at least a year, and it is unlikely that a cellular system would be in place commercially earlier than 1984. In Canada, however, it is entirely possible that such a system could be in operation earlier than this due to differences between the two countries regulatory agencies. Additionally, fewer interest groups will fight over a cellular license in this country.

Just how should the RCC's take the lead in this new industry?

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There is no financial justification for Western Union's recent purchase of Air signal without a cellular equation being made. This acquisition was made for the same reason Millicom is soliciting carriers to become part of their proposal.

These companies realize that there exists today no group better positioned to obtain cellular licenses along with the telcos than the radio common carriers. This is due primarily to the U.S. carrier's trade association's vigilance on the implications of docket 18262.

If it is so obvious that that our industry will obtain cellular licenses, what could go wrong? After all, radio common carriers represent a national industry that operates the closest relative to a cellular service in existence today. There is no other comparable group. In addition, the regulatory and political environment has been swinging our way for the past decade as the national mood continues to embrace competitive markets.

The problem faced by our industry does not come from other contenders for cellular licenses, but from the carriers themselves. Many compare cellular to current services offered, while others ignore the issue completely. Others still, concentrate on attempting to individually capture a license for their service area alone. In short, many carriers lack foresight and/or understanding. We must begin participating in this area to a much greater degree, demonstrating our will and ability to construct and operate cellular systems.

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A limited partnership open to every radio common carrier in the province must be established now. The function of B.C. Cellular will be the funding of an engineering study, so that application can be made for the development of a cellular system on behalf of the partnership. The partnership will remain no more than a joint investment, with competition between carriers being maintained through a service resale arrangement. The carriers in the other provinces must be encouraged to follow suit with technically compatible proposals. If we wish to develop a Trans Canada Cellular System, then the time for dialogue is today. From this dialogue, the precise terms of a partnership will emerge.

In the same manner that we have found the use of geographic location for cellular's effect, this also holds true for estimating the economics of operating a cellular system. Many groups have published proposed operating costs, along with estimated rates of return on investments in cellular systems. The fact is that too many variables exist to formulate a definitive financial program for a cellular system in any specific area without extensive study. Even with such studies, the industry is experiencing the early stages of a learning curve, which sets for large margins. Financial analysis takes on a speculative tinge.

With your attention being paid by the FCC to the evolution of digital cellular systems, today's business market and tomorrow's mass market will use the cellular network for more than voice communication. We need not look no further than Fortune 500 companies to project this work. As an example, Xerox's "Axe" project filed this year, is the implementation of a cellular radio system at the local loop level, primarily by upgrading the wireline telephone system.

Digital radio has the potential to become all pervasive, resulting from the creation of a multi-media service. We believe that the groundwork for this market is being laid today. While many studies indicate a glorious potential for cellular radio, we feel that what does not seem to be enough shared is a basic sense of what people want and might own a cellular telephone. In short, we feel the cellular technology will revolutionize our society and improve it tremendously.

Even if a mass market does not materialize, cellular will still represent a major growth industry for the next two decades. At the cellular market is still not understood (it does not yet even exist), the potential is staggering. In B.C. alone, a market of five percent of the population subscribing to cellular services would be measured in the hundreds of millions of dollars. If the long run, low investment in a cellular system over the next few years could realize an exponential return.

The cellular concept has been abstract for over a decade now, having the effect of removing much of the risks normally associated with new concepts. At the same time that the concept was being demonstrated, the companies risking substantial capital in developing cellular have been producing firm contracts, the partnerships and dependencies on their investment. The carriers as well as investors in the cellular contract have their eyes on whoever eventually offers such a service. The question is no longer, what, when, or where, but whom?