

EXHIBIT 1

OVERVIEW

1. Company Background

ArrayComm, Inc., is the world leader in adaptive signal processing technology--smart antennas--for personal communications. The company is led by Martin Cooper, the inventor of the first portable cellular telephone while he was a corporate executive at Motorola. Among ArrayComm's team of 228 employees, are highly-skilled research scientists and software and hardware development engineers, 145 hold advanced degrees, including 42 PhDs. ArrayComm's IntelliCell product is deployed in the Personal HandyPhone System (PHS) in Japan, China and Taiwan and also in wireless local loop systems in the Philippines, China, the United Arab Emirates, Malaysia and Ethiopia. ArrayComm has more than 80 pending or issued US patents, and more than 80 foreign patent counterparts.

2. Reasons for Modifications

As indicated in Items 2(a) and 3 of this application, ArrayComm is requesting modification of WB2XIK in three respects: FREQUENCY (from 2300-2305 MHz to 1910-1920 MHz); POWER (from 50 W base and 1.3 W mobile to that permitted in Section 24.232 of the PCS Rules) and LOCATION (from the San Diego, California, area to an area around San Jose, California, the location of ArrayComm's headquarters, that would include parts of Santa Clara and San Mateo Counties.)

San Diego had been selected as the site for experimentation, including a market trial, particularly at the behest of one of ArrayComm's *i-BURST* investors. It was and is crucial to proceed in a manner that is responsive to both existing and prospective investors. Investor support is predicated on two criteria: 1) They must be convinced that the *i-BURST* technology is sound, that the system will perform as promised, and 2) Perhaps even more important in today's "bearish" climate, they need evidence that the system is economically sound, that at realistic price levels, it will attract and retain customers. BOTH criteria, in the view of our investors can be tested in a more cost-effective manner in San Jose, and in fact would be enhanced in San Jose vs San Diego.

One other drawback to San Diego was its limited number of available spectrum alternatives. The 2300-2305 MHz band emerged as the best available alternative in San Diego, although the presence of adjacent and co-channel users limited power to levels below what ArrayComm would have preferred.

Over the past year plus, ArrayComm has done substantial work both on site and at its plant in San Jose. The additional costs associated with San Diego, particularly the necessity of having our San Jose personnel spend substantial time in San Diego, were greater than anticipated. During this same time, we have seen a global slow-down in the telecommunications and wireless industry; confining our operations to a single location, where

the close proximity of engineering and field support exists can only lead to a more cost effective operation

Our broader community of investors, which includes potential operators, have requested a sole location where they could site their own staff to conduct both the technical and business aspects of their assessment of ArrayComm's progress and milestones. Further, while there was high interest in a market trial, location was not a high priority. In fact, SiliconValley is a more natural location, because of its concentration of Internet users and developers.

Thus, there are two major reasons for this request: cost reduction by locating closer to corporate headquarters and more felicitous operating conditions away from San Diego with its coastal and border problems, leading to a consequent lack of spectrum choices.

In looking at spectrum alternatives in San Jose we looked first at the 1895-1910 MHz PCS spectrum. In the San Jose area this band is licensed to Metro PCS. Unfortunately, Metro PCS asserted that it has an aggressive build-out schedule in the San Francisco area and refused to consent to ArrayComm's market test proposal. While we believe that ground rules could have been developed that would not have interfered with Metro PCS's operations, the rules require consent of the licensee and we have been unable to obtain it.

However, the 1910-1920 MHz band appears to be an excellent "fit" for ArrayComm's experiment, especially at this time. This 10 megahertz is part of a 20 megahertz "guardband" (1910-1930 MHz) for PCS. The 1910-1930 MHz band was allocated for Unlicensed PCS operations (UPCS). It was subdivided into two 10 MHz segments, the bottom 10 MHz for asynchronous use (data), the top 10 MHz for isochronous use (voice). The initial plan was to clear out and relocate existing microwave users and allow UPCS systems to transition in. In fact, the Commission's records show only four fixed systems in California operating in the 1910-1920 MHz band. None of these systems is located in or even near San Jose. The California systems are:

Call Sign	Licensee	Area
KMM 26	San Diego Gas and Electric Company	San Diego, CA
WAV72	County of Contra Costa	Marinez, CA
WNEW669	County of San Luis Obispo	San Luis Obispo, CA
WNEW671	County of San Luis Obispo	San Luis Obispo, CA

Whatever the verdict may be about the ultimate success of UPCS operations at 1920-1930 MHz (the Commission's recent Further Notice of Proposed Rule Making in Docket 00-258 raises the issue as to whether this entire band might be better used for other purposes), the 1910-1920 MHz portion has attracted neither users nor manufacturers willing to seek equipment authorizations. As a result there have been various proposals to change the permissible use of this band; to extend 1920-1930 MHz voice usage to 1910 MHz, as well as

the Commission's suggestion in the above referenced rule making that the band might be suitable for TDD operations.

Please refer, below, to the part of this Exhibit entitled "Scope of Experiment, Technical Details, Limited Marketing Trial" for ArrayComm's showing that its experimental operation at 1910-1920 MHz will furnish essential technical data on the impact, if any, to adjacent channel operations.

3. NOTES RE: ITEM 4 OF THE APPLICATION

Item 4 entitled "Particulars of Operation" is hereby supplemented with the following information:

1) The system employs a channel raster with 625 kHz spacing. A base station may operate with as many as 16 contiguous carriers at a time. Mobiles operate on one carrier at a time.

2) This is a smart antenna system with wideband (multicarrier) power amplifiers. The "Base" value in column B of the Table is the incoherent sum of the power from each amplifier, assuming full power operation and an antenna array with 10 elements.

3) With reference to G of the Table, the system employs a 500k Symbol/s symbol rate and a root-raised cosine filter with 25% excess bandwidth, leading to the 625 kHz bandwidth.

4. SCOPE OF EXPERIMENT, TECHNICAL DETAILS, LIMITED MARKETING TRIAL (ITEM 10 of the Application)

A. OBJECTIVES (Technical)

The primary technical objective of this experiment is to complete the development and optimization of the i-BURST technology. This can only be accomplished in a significant real world setting. Protocol optimization in various fading environments and under various loading conditions will enhance and confirm the robustness of the i-BURST technology.

The experiment will also enable ArrayComm to verify theoretical capacity calculations and coverage reliabilities. The engineering data obtained and the feedback from the participants in the experiment will demonstrate the i-BURST capabilities to potential investors, carriers and OEM manufacturers. The substantial investment required to bring the i-BURST technology to commercial readiness requires this experiment to demonstrate its capabilities.

Of additional importance, testing and trials at 1910-1920 MHz should provide valuable information to the Commission regarding the impact of TDD systems on adjacent users. ArrayComm will not occupy the entire 10 MHz at any one time during its technical testing or during the market trial. It will, therefore, be able to ascertain whether guard bands are needed to protect adjacent channel licensees, and, if so, how wide these bands should be. And if Metro PCS, has, in fact, an operational system during the trial period, ArrayComm can experiment,

if the need arises, with guard bands of varying size to determine how to resolve any interference to PCS.

On the 1920-1930 MHz side, useful information will also be obtained, although the fact that users of that band are unlicensed complicates the task. Again, however, it may be possible to assess the impact on those systems and ascertain whether guard bands could alleviate or resolve any interference. It certainly will enable ArrayComm to avoid any interference to fixed service licensees in that band which it is obligated to do under the terms of an experimental authorization.)

B. OBJECTIVES (Economic)

(In its application for an experimental license [including a market trial] in San Diego, ArrayComm made an extensive showing including an economic justification for a 3000 unit market trial. Since that material is equally pertinent to this application, we ask that it be incorporated herein by reference.)

In particular, the showing that ArrayComm made to justify a 3000 unit market trial with paying customers in San Diego (See pages 6-8 of its Exhibit) provides the reasons and rationale that ArrayComm believes is also applicable for the San Jose area. Simply put, a successful market trial of the i-BURST system will substantially increase the likelihood that i-BURST will be a reality.

ArrayComm wishes to repeat the major commitments made in conjunction with San Diego. ArrayComm will own all the transmitting and receiving equipment used in the experiment, including the market trial. All participants will be informed in writing that service is being provided under an Experimental authorization and is temporary. Further, they will be informed that the FCC may order that service be terminated at any time.

Finally, ArrayComm wishes to assure the Commission that it is aware that its authorization will be of limited duration and will not be extended beyond the license term without express Commission approval.

FAA, Environment and Station Identification Requirements (Items 12, 14 and 15). Our responses are the same as was submitted for San Diego; see page 3 of our Exhibit for San Diego.