Subj: **902-928 MHz "ATLIS" proposal, status and petition for rulemaking**
Date: Friday, October 4, 2002 5:46:42 PM
From: wchavens
To: kham@fcc.gov, dfurth@fcc.gov, rarsenau@fcc.gov, jknapp@fcc.gov, pkolodzy@fcc.gov
cc: rhaller@frci.com, mcfarquhar@hhlaw.com, jstobaugh@telesaurus.com

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Messrs. Furth, Arsenault, Knapp, and Kolodzy,

I will try to individually reach you soon for a brief discussion. I discussed with you in the past my initial proposal involving the 902-928 MHz band, and would like to discuss further now that I have completed the proposal (called "ATLIS"), discussed it with appropriate "stakeholders" (see below), and will soon file a petition for rulemaking to consider implementing the proposal. The proposal involves to a large extent public safety and private wireless, and includes a number of features of interest to the Spectrum Task Force (see my filing in Docket 02-135). I discussed this proposal today with Kathleen Ham (see below summary) who, as you know, is involved in public safety and private wireless.

Sincerely, Warren Havens

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Ms. Ham,

Thank you for your time today on the phone conference regarding our "ATLIS" proposal.

This is a summary of our discussion including for purposes of an ex parte filing under §1,1206(b)(2) in docket RM-10403 (the "Progeny proceeding regarding 902-928 MHz) and docket 02-135 (Spectrum Task Force).

As we discussed, I will contact you in the near future regarding a convenient date and time for an in-person meeting at the time I have a final draft of a petition for rulemaking. I will ask Ralph Haller and/or Michele Farquhar, two advisors to me, to attend as well. We discussed inclusion of other FCC staff, including OET.

I noted that I had earlier met with Mr. Knapp and others in OET on some initial concepts underlying the ATLIS proposal, but it was prior to the final ATLIS proposal which solves, I believe, many of the objections raised or likely to be raised by Part 15 entities, and prior to the concept of using Non-multilateration spectrum as described below.

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I summarized the "ATLIS" proposal, centered around 902-928 MHz (I didn't discuss today the other bands described in the proposal), with side-by-side allocations for Public Safety (Federal, State, local) ("PS"), Critical Infrastructure ("CI"), and Private Enterprise ("PE"):

PS and CI would each have one half, 6.5 MHz, of the spectrum currently used by Non-Multilateration licenses (short-distance toll tag readers and the like).

Non-multilateration systems would be fully protected. PS and CI could use the PE spectrum to cover the "holes" in wide area coverage caused by the Non-multilateration systems.

PS would have access the PE spectrum and network capacity in emergencies.

PS, CI, and PE could, if they choose, share network infrastructure, each having secure virtual private networks. PS and CI have most of the basic infrastructure needed already: antenna sites, backhaul, etc.

With 26 MHz total, there would be sufficient capacity for justifying spectrum-efficient advanced technology, and large economies of scale would result.

Current equipment and services on Part 15 basis used for networks, such as meter reading for utilities and local data networks could continue and indeed should expand (since PS, CI, and PE would all have far better and more secure opportunities in this band under the ATLIS proposal), but would switch to a controlled, Part 90 licensed basis, and under this, could use, where useful, higher power and antenna height for greater range and lower cost of coverage.

Part 15 consumer electronic devices are migrating to 2.4 GHz and are better off using higher frequencies for their low-power very-local applications, just as wide-area higher-power mobile applications (especially for PS and CI) are better off with, indeed require, a band with longer-range propagation such as 900 MHz.

The majority of all mobile wireless devices in the world are in the lower 900 MHz range (mostly due to GSM 900 MHz), which will allow for use of current and future advanced cost-effective components.

There are other important aspects of the ATLIS proposal than noted above.

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Also, I noted Motorola Project 25 and EADS-EDSN Tetrapol as technology candidates. Wide-area OFDM (Wi-Lan, others) shows promise, supplemented as needed by smart antenna systems, for enhanced capacity and services (the 5.9 GHz DSRC ITS standard is OFDM, as is 802.11a).

I noted my discussions with SAIC (technology and systems planning, integration, and deployment).

The ATLIS proposal suggests collaboration with the DARPA XG project (next-generation wireless) (Paul Kolodzy is familiar, he headed it prior to coming to FCC).

I noted communications I have had to date with various organizations and persons involved with PS and CI, and the generally interested responses. I mentioned conference calls I am arranging to continue the dialog, and get input for the petition for rulemaking (next).

I mentioned the petition for rulemaking in 902-928 MHz consistent with the ATLIS proposal, and in this regard, I noted the pending proceeding, RM-10403 (see above). I noted that principal rules to be suggested will include rules to establish spectrum set-asides and licensing mechanisms for PS and CI for the Non-multilateration spectrum, subject to full protection for the short-range Non-multilateration systems as noted above.

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My goal is to maximize the potential of this band, address needs of PS and CI, including Homeland Security, and in this endeavor, increase opportunities for and minimize objections from parties already involved.

Again, thanks for your time.

Sincerely,

Warren Havens
President, Telesaurus Holdings GB LLC
Berkeley, California (510) 841 2220