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## **ARGUMENT**

### **POINT I**

**THE FCC HAS SOLE RESPONSIBILITY TO DETERMINE WHAT “MANNER” OF DEPLOYMENT OF ADVANCED TELECOMMUNICATIONS IS “CONSISTENT WITH THE PUBLIC INTEREST” AND THIS COURT HAS THE POWER AND RESPONSIBILITY TO ORDER THE FCC TO CONSIDER FACTORS IT HAS IGNORED THAT ARE RELEVANT TO THAT “PUBLIC INTEREST”**

The 33<sup>rd</sup> President of the United States, Harry S. Truman, had a sign on his desk in the Oval Office which read:

THE BUCK STOPS HERE

President Jimmy Carter liked Truman’s motto so much he restored it to the Oval Office during his term in office.<sup>1</sup>

The Members of the Commission need to understand that President Truman’s observation applies to them as well.

Congress has explicitly directed the Commissioners to determine what manner of deployment of telecommunications technology is “in the public interest.” (47 U.S.C. § 157.)

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<sup>1</sup>Some scholars believe that this phrase was of Truman’s own invention. ‘Passing the buck’ is a poker player’s expression. It refers to a marker that can be passed on by someone who does not wish to deal. (Nigel Rees, Cassell Companion to Quotations, (1997), pp. 543-544.)

**“(a) In general.** – The Commission and each State commission with regulatory jurisdiction over telecommunications services shall encourage the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans (including, in particular, elementary and secondary schools and classrooms) by utilizing, in a manner consistent with the public interest, convenience, and necessity, price cap regulation, regulatory forbearance, measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment. (Emphasis added.)

The legal obligation of the FCC to act in the public interest is especially relevant to the current head-long rush by telecommunications companies to invest in digital, high speed, broadband technology.

Congress directed the FCC to focus “in particular” on the delivery of advanced telecommunications to “elementary and secondary schools and classrooms.”

It is clear that 47 U.S.C. Section 157 relates to the very same broadband services discussed in our main brief at Point III (pages 46-51):

**(c) Definitions.** – For purposes of this subsection:

**(1) Advanced telecommunications capability.** – the term ‘advanced telecommunications capability’ is defined, without regard to any transmission media or technology, as high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics and video telecommunications using any technology.

(Emphasis added.)

The FCC issued a report in 1999, (FCC 99-5),<sup>2</sup> describing progress made toward increasing the availability of broadband services. The report (in par. 2) explained broadband as follows:

Increasingly, all electronic communications are becoming digital. Print, radio, video, voice, and data can all be transmitted in digital form, as collections of ones and zeros. Broadband makes it possible to send and receive enormous amounts of digital information at high rates of speed.

The FCC report waxed enthusiastic in describing the future possibilities of broadband (in par. 3) but made no mention of protecting against possible harmful environmental effects on human health:

For consumers, access to broadband capability means that many new services and vast improvements to existing services will be available. These services could include real-time video in addition to telephony, so that families that connect over the phone can see each other as well as talk to each other. They could also include the ability to download feature-length movies in a matter of minutes. In addition, access to broadband capability means being able to change web pages as fast as changing the channel on a television. As a result of these services, new possibilities will open up for electronic commerce. There may also be increased prospects for at-home learning and working at home (a special help for those who are home-bound due to age or disability), platforms for entrepreneurs to launch new information-based businesses and home-based businesses, great improvements in medical treatment, and health care at home in emergencies and for the chronically infirm – all potentially at prices that large numbers of consumers are likely to willingly pay. Some of these services will be possible with enhancements to today's cable, telephone, and other

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<sup>2</sup>Full text will be found on the FCC website ([www.fcc.gov](http://www.fcc.gov)).

facilities. Others, however, will require the deployment of entirely new technologies, especially in the last mile to the home. (Footnotes omitted.)

The FCC report gave special attention to the deployment of broadband services to schools. The FCC explained in paragraph 81 of the 1999 Report (FCC 99-5):

Section 706(b) of the 1996 Act specifically directs the Commission to assess the availability of advanced telecommunications to elementary and secondary schools and classrooms. In addition to recognizing the importance of providing schools with access to advanced services in section 706, Congress recognized the need for such access in section 254 of the Act, which for the first time provides universal service support for advanced services in schools and classrooms. (Footnotes omitted.)

In response to the Congressional mandate to provide for universal service support to schools, the Commission adopted a Universal Service Order (12 FCC Rcd at 9002-92), described as follows (in par. 83):

In the *Universal Service Order*, the Commission, among other things, established the federal universal service support mechanism for schools and classrooms. Consistent with the recommendations of the Federal-State Joint Board on Universal Service, the Commission concluded that all telecommunications services, Internet access, and internal connections would be provided at discounts ranging from 20 percent to 90 percent to eligible schools and classrooms. (Footnotes omitted.)

The FCC has never reviewed, questioned or altered its obsolete 1985 Radiofrequency Radiation Guidelines based on the potential environmental impact

of the new advanced broadband communications services on students at elementary and secondary schools. The FCC's order of August 14, 2003, which is the subject of this appeal, has now closed the door to any FCC-initiated research to determine whether guideline changes are required to protect schoolchildren from harm caused by broadband RF radiation.<sup>3</sup>

As noted in Petitioner's main brief (at pp. 44-45), the Dutch Ministries of Economic Affairs, Health and Communications issued a joint report in September, 2003 describing adverse health effects experienced by adults exposed to radiation from broadband service base stations. The report was summarized in a Reuters news wire dispatch from Amsterdam dated September 30, 2003 attached as Addendum B to our main brief. According to the summary:

The study, the first of its kind, compared the impact of radiation from base stations used for the current mobile telephone network with that of base stations for new third generation (3G) networks for fast data transfer, which will enable services such as video conferencing on a mobile device.

A base station, which usually covers a "cell" area of several square kilometers (miles), transmits signals to mobile phones with an electromagnetic field.

"If the test group was exposed to third generation base station signals there was a significant impact... . They felt tingling sensations, got headaches and felt nauseous," a spokeswoman for the Dutch

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<sup>3</sup>Full text of FCC 99-5 and the EMR order (FCC 03-191) are available at [www.fcc.gov](http://www.fcc.gov).

Economics Ministry said. (Emphasis added.)

The Government ministers called for follow-up research to confirm the findings and to look for longer-term health effects and biological causes.<sup>4</sup>

A comparison of the emissions levels in the Dutch Ministries study to the existing FCC RF Radiation Guidelines, shows that the level of emissions used in the study was well below the levels presently permitted by the FCC.

The peak field strength used in the Dutch study was 1 volt per meter. This corresponds to a peak power density of 0.265 microwatts/square cm. The present FCC RFR Guidelines use a thermal standard based not on peak field strength, but average power density. Since GSM signals are off about half of the time, the average power density of the Dutch test signal would be about half of the peak, or 0.133 microwatts/sq. cm. The complex amplitude modulation of the UMTS signal makes its average power density even less than half of the peak power density, so the Dutch UMTS test signal had average power density even less than 0.133 microwatts/sq. cm.

The Dutch test signals were transmitted at 945 MHZ, 1840 MHZ and 2140 MHZ. These are frequencies similar to those used in the U.S. The FCC public exposure standard at 945 MHZ is 630 microwatts/sq. cm, so the test signal

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<sup>4</sup>The full report of the Dutch study is available at:  
[www.ez.nl.beleid/home\\_ond/gsm/doc/TMO-FEL-REPORT\\_03148-definitief.pdf](http://www.ez.nl.beleid/home_ond/gsm/doc/TMO-FEL-REPORT_03148-definitief.pdf).

exposure at 945 MHZ was only 0.021% of the Maximum Allowable Exposure (MPE) under current FCC rules. At 1840 and 2140 MHZ, the FCC standard is 1000 microwatts/sq. cm, so the 1840 MHZ and 2140 MHZ Dutch test signals were at most 0.0133% of the MPE under current FCC rules.<sup>5</sup>

As schoolchildren are increasingly exposed to broadband radiation in U.S. schools and classrooms, existing FCC guidelines allow them to be subjected to radiation levels substantially higher than those used in the Dutch tests. The FCC plainly has a duty to find out if this is a likelihood, or even a possibility, and, if it is, it must change its regulations to protect the “public interest.” In the words of the Second Circuit in Scenic Hudson Preservation Conference v. Federal Power Commission, 354 F.2d 608, 620 (2d Cir. 1965):

This court cannot and should not attempt to substitute its judgment for that of the Commission. But we must decide whether the Commission has correctly discharged its duties, including the proper fulfillment of its planning function in deciding that the “licensing of the project would be in the overall public interest.” The Commission must see to it that the record is complete. The Commission has an affirmative duty to inquire into and consider all relevant facts.

In support of this statement, the Second Circuit cited this Court’s decision in Michigan Consolidated Gas Co. v. Federal Power Comm., 283 F.2d 204 (DC Cir. 1960), cert. denied, 364 U.S. 913, 81 S.Ct. 276 (1960).

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<sup>5</sup>Technical analysis provided by Alfred R. Hislop, MSEE, formerly a communications systems designer at the San Diego Naval Ocean Systems Center.

In the Michigan case, this Court, sitting in banc, defined its jurisdiction in reviewing administrative agency action as follows:

Where, as here, a regulatory agency has ignored factors which are relevant to the public interest, the scope of judicial review is sufficiently broad to order their consideration. These limits are not to be confused with the narrower ones governing review of an agency's conclusions reached upon proper consideration of the relevant factors.  
(Id. at 226)

That is the scope of judicial review we invoke in this case.

## **POINT II**

### **IN ITS PUSH TO DEPLOY BROADBAND SERVICE TO SCHOOLS, THE FCC MUST COMPILE AN EVIDENTIARY RECORD OF ITS EFFORTS TO PROTECT THE HEALTH OF SCHOOLCHILDREN FROM HARM**

In 2000, Great Britain issued a report concerning RF Radiation emissions near schools prepared by a group of independent experts headed by Sir William Stewart. The Stewart group had been commissioned by the British Government to recommend an approach to be taken by the government regarding mobile phones. The Stewart Group found no persuasive evidence at that time that the use of mobile phones by adults posed any health risks. However, their report regarding schoolchildren reached a different conclusion with respect to cell transmission base stations. These were the Stewart Group's conclusions:

There is evidence that at the frequencies used in mobile phone technology, children will absorb more energy per kilogram of body weight from an external electromagnetic field than adults (see paragraph 4.37). A one year old could absorb around double, and a five year old around 60%, more than an adult. Additionally, since children are being exposed to RF radiation from base stations (and from mobile phones) from a younger age than adults, they will have a longer time in which to accumulate exposure over the course of their lives, and a longer time for any delayed effects of exposure to develop.

(Report, par. 6.63) (Emphasis added.)

The UK study noted that some countries have prohibited the placement of base stations on schools, but observed that a base station located near a school “may cause higher exposure to pupils.” (Rep. 6.64)<sup>6</sup>

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<sup>6</sup>Petitioner makes an offer of proof that in central Harlem in New York City, groups of cell transmitters can be visually observed on apartment houses and commercial structures, between the 4<sup>th</sup> story and 7<sup>th</sup> story levels, at the following locations near three public schools within an area of only a few blocks:

NW Corner, 126<sup>th</sup> St. and Lenox Ave

NW Corner, 125<sup>th</sup> Street and Frederick Douglass Blvd.

SW Corner 125<sup>th</sup> Street and Frederick Douglass Blvd.

(above The Disney Store Magic Theatres)

NW Corner 121<sup>st</sup> Street and Frederick Douglass Blvd.

SE Corner 120<sup>th</sup> Street and St. Nicholas Avenue

SW Corner 120<sup>th</sup> Street and Adam Clayton Powell Blvd.

Elementary school students going to and from PS 76 (St. Nicholas School) at 220 West 121<sup>st</sup> Street; PS 154 (Harriet Tubman Learning Center) at 250 West 127<sup>th</sup> Street; and PS 242 (Gwendolyn P. Brown Computer School) at 124 West 122<sup>nd</sup> Street must walk through RF Radiation emissions from one or more of these cell transmitters every day.

The question the FCC must ask itself is: what are we doing to assure that these school children will not be harmed by accumulated exposure to RF radiation?

The Stewart Group recommended that cell transmitter base stations should not be placed at, or near, schools without the informed consent of the school and the parents:

We recommend, in relation to macrocell base stations sited within school grounds, that the beam of greatest RF intensity should not fall on any part of the school grounds or buildings without agreement from the school and parents. Similar considerations should apply to macrocell base stations near to school grounds.

(Par. 6.68) (Emphasis added.)

This recommendation was adopted by the British Government as official policy of the UK Department of Health, and it is still in effect today.<sup>7</sup>

NEPA obligates the FCC, like other Federal agencies, to “maximize international cooperation” in anticipating and preventing a decline in the environment. (42 U.S.C. §4332(F)) This mandated international cooperation requires the FCC to lend support to the UK’s initiative toward protecting children’s health and, in the spirit of international cooperation, to initiate research into biological effects from current and anticipated radiation emissions and particularly those resulting from the deployment of wireless broadband services.

The FCC’s litany of excuses for not conducting such inquiries, or requesting the EPA or other qualified public agencies to do so on its behalf, are

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<sup>7</sup>Summary of Stewart Group report and official government response can be found at [www.doh.gov.uk/mobilephones/index.htm](http://www.doh.gov.uk/mobilephones/index.htm).]

reminiscent of Herman Melville's character, Bartleby, a copyist of legal documents, whose repeated response to the prospect of an unpleasant task was "I would prefer not to."<sup>8</sup> This response is unacceptable from a federal agency charged with protecting the public interest.

The proper response from this Court is to order the agency to perform its duty to protect the public interest, and to do so without further delay.

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<sup>8</sup>Herman Melville, Bartleby, the Scrivener: A Story of Wall-street (1853):

I sat awhile in perfect silence, rallying my stunned faculties. Immediately it occurred to me that my ears had deceived me, or Bartleby had entirely misunderstood my meaning. I repeated my request in the clearest tone I could assume. But in quite as clear a one came the previous reply, "I would prefer not to."

"Prefer not to," echoed I, rising in high excitement, and crossing the room with a stride. "What do you mean? Are you moon-struck? I want you to help me compare this sheet here – take it," and I thrust it towards him.

"I would prefer not to," said he.

[The full text of this classic Melville short story is available at [www.bartleby.com](http://www.bartleby.com)]

## **CONCLUSION**

Petitioner repeats its request that the Court reverse the Order below and direct the FCC to issue a Notice of Inquiry to gather information and opinion about the need to revise Parts 1 and 2 of the FCC's Rules concerning the environmental effects of radiofrequency radiation, without further delay.

Respectfully submitted,

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**CERTIFICATE OF COMPLIANCE**

I, Whitney North Seymour, Jr., attorney for Petitioner, hereby certify that this Reply Brief is in compliance with the type-volume limitation under FRAP 32(a)(7)(B). The brief contains 2,660 words counted by the word-processing system used to prepare the brief.

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