



### **Reconstruction and Consolidation of FCC-owned Facilities in Columbia, MD**

We are requesting \$9.3 million to reconstruct and consolidate our laboratory, district office, and High Frequency Direction Finding Center (HFDFC) in Columbia, MD. Collectively, these facilities support an array of security and safety issues, ranging from providing engineering analyses to resolve public-safety related policy issues to investigating and resolving instances of interference to homeland security communications. Our enforcement and engineering personnel work in inadequate facilities that range in age from 30 to over 100 years. The condition of these facilities threatens to undermine our ability to perform these vital functions.

For example, the HFDFC—which is responsible for investigating and resolving interference to homeland security communications, including public safety, search and rescue, and aviation—is housed in temporary trailers. The HFDFC remotely controls 14 monitoring stations providing global coverage and annually responds to 1,000 public safety interference complaints and 5,000 requests for radio signal analysis or radio location assistance from the Drug Enforcement Administration, the Departments of Defense and Homeland Security, Radio Free Asia, Radio Marti, and the Voice of America.

At the Commission's 30-year old lab, there are significant structural issues, an outdated heating and air conditioning system, and electrical feeds that date to the 1940s. In addition, there is no sprinkler system and no automatic fire detection system. The Commission's lab performs critical technical functions and evaluates new equipment and spectrum bands; however, the lab also performs engineering analyses to support FCC decisions on National Security and Emergency Preparedness issues, such as the recent decision to eliminate interference to public safety systems in the 800 MHz band. In its degraded surroundings, the lab performs tests to assist various Federal agencies in analyzing national security concerns for various types of radio equipment.

To address these numerous deficiencies, we have completed a requirements study which concludes that consolidating and rebuilding the HFDFC, the district office, and the lab will cost \$3 million less than renovating the existing structures. To let the problems languish will require significant incremental expenditures and even more costly operational disruptions as the environmental, electrical, and other systems fail and life-safety issues remain.



The following chart reflects the estimated costs planned over a three year period (FY 2005 – FY 2007) and a schedule of the primary goals necessary to complete the project.

Description of Milestone	Schedule			Planned Cost
	Start Date	End Date	Duration (in days)	
1. A/E Concept Design, Phase 1	Jul 05	Sep 05	90	\$200,000
2. A/E Concept Design, Phase 2	Oct 05	Mar 06	180	\$600,000
3. Project Mgmt Contract	Apr 06	Mar 07	360	\$400,000
4. Building Construction and Contingency at 5%	Apr 06	Mar 07	360	\$8,300,000
5. Furnishing, Fixtures Equip	Feb 07	Apr 07	90	\$600,000
6. Telephone, Data Systems Basic infrastructure, no testing equip. or antennas	Feb 07	Apr 07	90	\$200,000
Completion date: May 2007			Total cost estimate at completion:	\$10,300,000

## UNIVERSAL SERVICE FUND

Under the Telecommunications Act of 1996, carriers that provide interstate and international telecommunications services are required to contribute funds for the preservation and advancement of universal service. The contributions are used to provide services eligible for universal service support as prescribed by the FCC. Eligible carriers receive support from the universal service funds if they (1) provide service to high cost areas, (2) provide eligible services at a discount rate to schools, libraries, or rural health care providers, or (3) provide subsidized telephone installation to low income consumers. Interest income on these funds is utilized to offset carrier contributions. Administrative costs of the program are provided from carrier contributions.

The FCC directed USAC to liquidate non-Federal investments in September 2004 and move balances into Federal securities. Program activity in 2004 and 2005 reflects accounting for these transactions.

Pubis Law 108-494 temporarily suspended the application of the Antideficiency Act to the Federal universal service fund programs authorized under section 254 of the Communications Act of 1934, through December 31, 2005. The Antideficiency Act requires that funds be available before incurring an obligation on behalf of the Federal Government. Suspension of this requirement allows the Universal Service Administrative Company (USAC) to issue funding commitments to schools and libraries prior to collecting the funding to support these commitments. Based on data provided by USAC and the FCC, the Fund will likely incur obligations in excess of available resources by an estimated \$200 million in fiscal year 2005.

		Unavailable Collections (in millions of dollars)		
		2004 Actual	2005 Est.	2006 Est.
<b>Receipts:</b>				
02.00	Universal service fund	6,550	7,191	7,806
02.01	Return of capital from sale of non-Fed. investments	9,458	197	--
02.20	Universal service fund (interest)	40	40	55
02.99	Total receipts and collections	16,048	7,428	7,861
<b>Appropriations:</b>				
05.00	Universal service fund	(6,550)	(7,191)	(7,806)
05.01	Universal service fund	(40)	(40)	(55)
05.02	Universal service fund	(9,458)	(197)	--
05.99	Total appropriations	(16,048)	(7,428)	(7,861)
07.99	Balance, end of year	--	--	--
<b>Program and Financing (in millions of dollars)</b>				
<b>Obligation by program activity:</b>				
00.01	Direct Program Activity	15,615	7,825	7,674
00.02	Program support	66	112	140
10.00	Total new obligations (object class 41.0)	15,681	7,937	7,814

**UNIVERSAL SERVICE FUND (Cont'd)**

<b>Budgetary resources available for obligation:</b>				
21.40	Unobligated balance carried forward, start of year	(56)	311	(198)
22.00	New budget authority (gross)	16,048	7,428	7,861
23.90	Total budgetary resources available for obligation	15,992	7,739	7,663
23.95	Total new obligations	(15,681)	(7,937)	(7,814)
24.40	Unobligated balance carried forward, end of year	311	(198)	(151)

**Program and Financing (in millions of dollars)**

	2004 Actual	2005 Est.	2006 Est.	
<b>New budget authority (gross), detail:</b>				
Mandatory:				
60.20	Appropriations (special fund)	7,191	7,806	
60.20	Appropriations (special fund)	40	55	
60.20	Appropriations (special fund)	9,458	197	
62.50	Appropriations (total mandatory)	16,048	7,428	7,861

**Change in obligated balances:**

72.40	Obligated balance, start of year	56	2,947	3,326
73.10	Total new obligations	15,681	7,937	7,814
73.20	Total outlays (gross)	(12,790)	(7,558)	(7,963)
74.40	Obligated balance, end of year	2,947	3,326	3,177

**Outlays (gross), details:**

86.97	Outlays from new mandatory authority	12,790	6,421	6,768
86.98	Outlays from mandatory balances	--	1,137	1,195
87.00	Total outlays (gross)	12,790	7,558	7,963

**Net budget authority and outlays:**

89.00	Budget authority	16,048	7,428	7,861
90.00	Outlays	12,790	7,558	7,963

**Memorandum (non-add) entries:**

92.01	Total investments, start of year: Federal securities: Par value	--	3,257	3,254
92.02	Total investments, end of year: Federal securities: Par value	3,257	3,254	3,152

**SPECTRUM AUCTION PROGRAM ACCOUNT**

This program provides for direct loans for the purpose of purchasing spectrum licenses at the Federal Communications Commission's auctions. The licenses are being purchased on an installment basis, which constitutes an extension of credit. The first year of activity for this program was 1996.

As required by the Federal Credit Reform Act of 1990, this account records, for this program, the subsidy costs associated with the direct loans obligated in 1992 and beyond (including modifications of direct loans and loan guarantees that resulted from obligations or commitments in any year), as well as administrative expenses of this program. The subsidy amounts are estimated on a present value basis and administrative expenses are estimated on a cash basis.

	<b>Program and Financing (in millions of dollars)</b>		
	2004 actual	2005 est.	2006 est.
<b>Obligations by program activity:</b>			
00.05 Reestimates of direct loan subsidy	382	754	0
00.06 Interest on reestimates of direct loan subsidy	228	520	0
00.09 Administrative Expenses	32	26	14
10.00 Total new obligations	<u>642</u>	<u>1,300</u>	<u>14</u>
<b>Budgetary resources available for obligation:</b>			
21.40 Unobligated balance carried forward, start of year	4	2	0
22.00 New budget authority (gross)	640	1,298	14
23.90 Total budgetary resources available for obligation	<u>644</u>	<u>1,300</u>	<u>14</u>
23.95 Total new obligations	-642	-1,300	-14
24.40 Unobligated balance carried forward, end of year	2	0	0
<b>New budget authority (gross), detail:</b>			
<b>Mandatory:</b>			
60.00 Appropriation	638	1,298	14
69.00 Offsetting collections (cash)	2	37	0
69.27 Capital transfer to general fund	0	-37	0
69.90 Spending authority from offsetting collections	2	0	0
70.00 Total new budget authority (gross)	<u>640</u>	<u>1,298</u>	<u>14</u>

**Program and Financing (in millions of dollars)**

	2004 actual	2005 est.	2006 est.
<b>Change in obligated balances:</b>			
72.40 Obligated balance, start of year	18	16	0
73.10 Total new obligations	642	1,300	14
73.20 Total outlays (gross)	-644	-1,316	-14
74.40 Obligated balance, end of year	<u>16</u>	<u>0</u>	<u>0</u>

**Outlays (gross), detail:**

86.97 Outlays from new mandatory authority	622	1,298	14
86.98 Outlays from mandatory balances	22	18	0
87.00 Total outlays (gross)	<u>644</u>	<u>1,316</u>	<u>14</u>

**Offsets:**

Against budget authority and outlays:			
88.00 Offsetting collections (cash) from: Federal sources	2	37	0

**Net budget authority and outlays:**

89.00 Budget authority	638	1,261	14
90.00 Outlays	641	1,279	14

**Summary of Loan levels, Subsidy Budget Authority and Outlays by Program (in millions of dollars)**

	2004 actual	2005 est.	2006 est.
<b>Direct loan upward reestimate subsidy budget authority</b>			
1350 Spectrum auction	610	1,274	0
1359 Total upward reestimate budget authority	610	1,274	0
<b>Direct loan downward reestimate subsidy budget authority</b>			
1370 Spectrum auction	-3	-37	0
1379 Total downward reestimate budget authority	-3	-37	0
<b>Administrative expense data:</b>			
3510 Budget authority	32	26	14
3580 Outlays from balances	0	0	0
3590 Outlays from new authority	32	26	14

**Object Classification (in millions of dollars)**

	2004 actual	2005 est.	2006 est.
11.11 Personnel compensation: Full-time permanent	1	1	1
12.52 Other services	31	25	13
14.10 Grants, subsidies, and contributions	610	1,274	0
99.99 Total new obligations	<u>642</u>	<u>1,300</u>	<u>14</u>

**Personnel Summary**

1001 Total compensable workyears: Full-time equivalent emp/c	9	12	12
--	---	----	----

**SPECTRUM AUCTION DIRECT LOAN FINANCING ACCOUNT**

As required by the Federal Credit Reform Act of 1990, this non-budgetary account records all cash flows to and from the Government resulting from direct loans obligated in 1992 and beyond (including modifications of direct loans that resulted from obligations in any year). The amounts in this account are a means of financing and are not included in the budget totals.

<b>Program and Financing (in millions of dollars)</b>		2004 actual	2005 est.	2006 est.
<b>Operating Expenses:</b>				
00.01	Direct Loans	0	0	0
00.02	Interest Paid to Treasury	343	269	157
00.91	Direct Program by Activities - Subtotal (1 level)	<u>343</u>	<u>269</u>	<u>157</u>
08.02	Downward subsidy reestimate	2	22	0
08.04	Interest on downward reestimate	1	15	0
08.91	Direct Program by Activities - Subtotal (1 level)	<u>3</u>	<u>37</u>	<u>0</u>
10.00	Total new obligations	<u>346</u>	<u>306</u>	<u>157</u>
<b>Budgetary resources available for obligation:</b>				
21.40	Unobligated balance carried forward, start of year	46	60	0
22.00	New financing authority (gross)	360	246	157
23.90	Total budgetary resources available for obligation	<u>406</u>	<u>306</u>	<u>157</u>
23.95	Total new obligations	-346	-306	-157
24.40	Unobligated balance carried forward, end of year	60	0	0
<b>New budget authority (gross), detail:</b>				
<b>Mandatory:</b>				
67.10	Authority to borrow:	3	37	0
Offsetting collections				
69.00	Offsetting collections	1,484	1,872	2,368

**Program and Financing (in millions of dollars)**

	2004 actual	2005 est.	2006 est.
69.47 Portion applied to repay debt	-1,127	-1,663	-2,211
69.90 Spending authority from offsetting collections (total mandatory)	357	209	157
70.00 Total new financing authority (gross)	<u>360</u>	<u>246</u>	<u>157</u>
<b>Change in obligated balances:</b>			
73.10 Total new obligations	346	306	157
73.20 Total financing disbursements (gross)	-346	-306	-157
<b>Outlays (gross), detail:</b>			
87.00 Total financing disbursements (gross)	346	306	157
<b>Offsets:</b>			
Against gross budget authority and outlays:			
Offsetting collections (cash) from:			
88.00 Program account: total revised subsidy	610	1,274	0
88.25 Interest on uninvested funds	52	65	0
Non-Federal sources:			
88.40 Interest received on loans	46	8	4
88.40 Principal received on loans	62	61	54
88.40 Recoveries	714	464	2,310
88.40 Non-Federal sources	0	0	0
88.90 Total offsetting collections (cash)	<u>1,484</u>	<u>1,872</u>	<u>2,368</u>
<b>Net budget authority and outlays:</b>			
89.00 Financing authority	-1,124	-1,626	-2,211
90.00 Financing disbursements	-1,138	-1,566	-2,211

**Status of Direct Loans (in millions of dollars)**

	2004 actual	2005 est.	2006 est.
<b>Cumulative balance of direct loans outstanding:</b>			
1210 Outstanding, start of year	5,112	4,314	3,855
1231 Disbursements: Direct loan disbursements	0	0	0
1251 Repayments: Repayments and prepayments	-62	-61	-54
1263 Write-offs for default: Direct loans	-50	0	-3,422
1264 Other adjustments, net(adjust to princ recoveries)	-686	-398	0
1290 Outstanding, end of year	<u>4,314</u>	<u>3,855</u>	<u>379</u>
6300 Net financing disbursements	0	-1,566	-2,211
<b>Federal Credit Data - Baseline (Y)</b>			
	2003 actual	2004 actual	2005 est.
6300 Net financing disbursements	0	-360	-1,566
			-2,211

**Balance Sheet (in millions of dollars)**

	2003 actual	2004 actual	2005 est.	2006 est.
<b>ASSETS:</b>				
1101 Federal assets: Fund balance with Treasury	46	60	0	0
Net value of assets related to post-1991 direct loan receivable:				
1401 Direct loans receivable, gross	5,112	4,314	0	0
1402 Interest receivable	285	2,210	0	0
1405 Allowance for subsidy cost (-)	-968	-3,832	0	0
1499 Net present value of assets related to direct loans	<u>4,429</u>	<u>2,692</u>	<u>0</u>	<u>0</u>
1901 Other Federal assets: Other assets	599	1,233	0	0
<b>1999 Total assets</b>	<u>5,074</u>	<u>3,985</u>	<u>0</u>	<u>0</u>
<b>LIABILITIES:</b>				
Federal liabilities				
2103 Resources payable to Treasury	5,065	3,941	0	0
2105 Other (liability to prog. acct.)	2	36	0	0
2105 Other Debt	7	8	0	0
<b>2999 Total liabilities</b>	<u>5,074</u>	<u>3,985</u>	<u>0</u>	<u>0</u>
4999 Total liabilities and net position	<u>5,074</u>	<u>3,985</u>	<u>0</u>	<u>0</u>



CHAIRMAN

Federal Communications Commission

Washington, D.C.

July 27, 2004

The Honorable Susan M. Collins  
Chairwoman  
Committee on Governmental Affairs  
United States Senate  
340 Dirksen Senate Office Building  
Washington, D.C. 20510

Dear Chairwoman Collins:

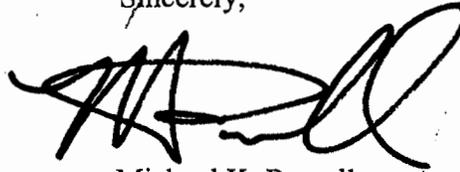
On May 28, 2004, the U.S. General Accounting Office ("GAO") submitted a report entitled Spectrum Management: Better Knowledge Needed to Take Advantage of Technologies That May Improve Spectrum Efficiency (GAO-04-666). This letter and its enclosure are to inform you of the actions the Commission has taken, and will continue to take, on the recommendations made by the GAO.

The report sets out three recommendations for joint consideration by the Administrator of the Department of Commerce's National Telecommunications and Information Administration ("NTIA") and the Chairman of the Federal Communications Commission. The Commission recommendations focus on flexibility in the spectrum allocation system, knowledge about spectrum use and new and emerging technologies, and models and methodologies to assess new and emerging spectrum-efficient technologies. Under Titles I and II of the Communications Act, as amended ("Act"), both the Commission and NTIA have spectrum management responsibilities. The Commission is charged, among other things, with adopting policies for non-Federal Government spectrum use that make wireless communication services available to all Americans, that provide for national defense, and that promote the safety of life and property. The Act specifically provides that the Commission license non-Federal Government radio stations. By contrast, radio stations owned and operated by the Federal Government obtain their frequency designations from the President, or his designee – NTIA. The Commission has worked, and will continue to work, with NTIA within this statutory regime to explore approaches for facilitating the use of new spectrum-efficient technologies to permit non-Federal Government users to employ spectrum formally allocated to Federal Government use, as well as Federal Government users to employ spectrum formally allocated to non-Federal Government use.

We value GAO's analysis as a way to build upon our existing work and cooperative efforts already underway with the NTIA. I commend the GAO for its hard work in helping to develop ideas for improving U.S. spectrum management policies in a manner that ensures that the radio resource will be used effectively for the benefit of the American people. I support any

effort to continue to improve our policies in this area, and will work with our colleagues at NTIA to assess how best to incorporate the report's findings and recommendations in our future work.

Sincerely,

A handwritten signature in black ink, appearing to read "M. Powell", with a large, stylized flourish at the end.

Michael K. Powell

Enclosure

cc: Office of Management and Budget

Managing Director  
Acquisition and Sourcing Management  
U.S. General Accounting Office

**GAO Report 04-666- "Spectrum Management: Better Knowledge Needed to Take Advantage of Technologies That May Improve Spectrum Efficiency."**

**GAO Recommendation 1: Assess and determine the feasibility of redefining the spectrum allocation system to build in greater flexibility where appropriate to facilitate emerging technologies.**

**FCC Response:** In fulfilling its responsibilities under the Act, the Commission has undertaken various groundbreaking steps to encourage the use of new, more spectrum-efficient technologies. As the GAO report recognizes, in 2002 the Commission established a Spectrum Policy Task Force ("SPTF") staffed by senior agency personnel to identify outmoded procedures and policies, and evaluate changes in spectrum policy that could increase the public benefits derived from the use of the radiofrequency ("RF") spectrum. The SPTF's work resulted in a report published in November 2002 setting out many new recommendations for spectrum policy reform. In the ensuing months, the Commission has opened several proceedings that evaluate ways to build more flexibility into the spectrum allocation system to facilitate emerging spectrum-efficient technologies.

The allocation system provides spectrum bands for services, and an authorization mechanism to permit particular systems to operate in those bands. To better facilitate emerging technologies, we continue to evaluate ways to build flexibility into the regulatory and technical components of the allocation system. The Commission has taken steps to move away, where possible, from the "command and control model" for spectrum allocations used for several decades. The command and control model rigidly defines the technical parameters for use of particular spectrum. One new approach to spectrum allocations is to allow new services to utilize already assigned spectrum. Under this approach, for example, in reliance on the availability of new spectrum-efficient technologies, the Commission has allowed a terrestrial Multichannel Video Data Distribution Service ("MVDDS") to share the 12.2 – 12.7 GHz spectrum band with incumbent Direct Broadcast Satellite ("DBS") services. As another example, because of the spectrum-efficient nature of Digital TV and digital Broadcast Auxiliary Service ("BAS") technologies, the Commission is in the process of reclaiming nearly 140 MHz of broadcast spectrum which the Commission can reallocate to other services. Under another Commission proposal, spectrum users operating low power, unlicensed devices would have the flexibility to operate in "white spaces" in the TV frequency bands where certain channels are unused in a given geographic area. Another approach the Commission is considering is to facilitate the use of "smart radio" features by licensees to enable more opportunities for part-time leasing of spectrum. Under this "secondary markets" approach, licensed users of the spectrum would have additional flexibility to lease underutilized spectrum to additional users.

As the GAO report notes, the concept of "interference temperature" is another approach that could encourage the development of new and emerging technologies. "Cognitive" or "smart" radios would sense frequency usage in a particular location and the radio then would utilize the "gray spaces" in the band only to the extent possible without exceeding the interference temperature limit prescribed for that band.

Under each of these more flexible approaches to the allocation system, emerging technologies potentially could use spectrum that would otherwise lie fallow. The regulatory approaches described above are at various stages of development within the Commission and NTIA. Since the issuance of the SPTF Report, the Commission has adopted Notices of Proposed Rulemaking on unlicensed operation in the TV broadcast bands,<sup>1</sup> cognitive radios generally,<sup>2</sup> and the “interference temperature” concept,<sup>3</sup> and continues to work with NTIA on the concepts that may affect mutual use of the spectrum.

**GAO Recommendation 2: Develop and implement plans to gain a more thorough and on-going understanding of the current spectrum environment.**

**FCC Response:** All frequency bands within the useable radio spectrum have been allocated, and most have licensees operating in them. Nevertheless, the RF environment is quite dynamic. The state of the RF environment changes as a function of frequency band, geographic location, and time. The dynamic nature of the RF environment makes it difficult to capture the true state of a given frequency band for all geographic locations at any particular time. It is clear, however, that significant spectrum bands are not being fully utilized for significant periods of time. Based on informal occupancy studies conducted by the SPTF, we know that there is spectrum that is not used, or is underutilized, and that could be more efficiently used if new spectrum-efficient technologies were deployed. The Commission has been aggressively adopting and considering changes to its rules that encourage more efficient spectrum use. “Software-defined radios” and “cognitive radios,” for instance, are technologies that hold great promise in this regard. Currently, we have several ongoing rulemakings that address where these new technologies may be employed.

As one example, the Commission adopted rules that allow the more efficient use of spectrum in the 5 GHz band by unlicensed devices with cognitive features. These devices sense their environment in real time and use frequencies that are not in use. The Commission is also seeking comment on a proposal that would allow radios with certain cognitive features to use currently unused or underutilized spectrum in rural areas in the 3650-3700 MHz band.<sup>4</sup> Building smart radios and networks is an effective way to use spectrum more efficiently absent an exhaustive understanding of the temporal changes in the RF environment.

---

<sup>1</sup> Unlicensed Operation in the TV Broadcast Bands, ET Docket No. 04-186, *Notice of Proposed Rulemaking*, 19 FCC Rcd 10,018 (May 25, 2004).

<sup>2</sup> Facilitating Opportunities for Flexible, Efficient, and Reliable Spectrum Use Employing Cognitive Radio Technologies, ET Docket 03-108, *Notice of Proposed Rulemaking and Order*, 18 FCC Rcd 26,859 (December 30, 2003).

<sup>3</sup> Establishment of an Interference Temperature Metric to Quantify and Manage Interference and to Expand Available Unlicensed Operation in Certain Fixed, Mobile and Satellite Frequency Bands, ET Docket No. 03-237, *Notice of Inquiry and Notice of Proposed Rulemaking*, 18 FCC Rcd 25,309 (November 28, 2003).

<sup>4</sup> Unlicensed Operation in the Band 3650 – 3700 MHz, ET Docket No. 04-151, *Notice of Proposed Rulemaking*, 19 FCC Rcd 7545 (April 23, 2004).

**GAO Recommendation 3: Strengthen efforts to develop jointly accepted models and methodologies to assess the impact of new technologies on overall spectrum use and increase opportunities to permit testing of those technologies.**

**FCC Response:** As noted previously, because all of the useable radio spectrum is allocated and most of it is licensed, it is often very challenging to provide for new and novel services. To do so requires striking a balance between incumbents and new entrants protecting incumbent licensees from interference while providing incentives and opportunities to deploy new technologies and services. With this as an underlying goal, we have provided for new technologies such as Multichannel Video Distribution and Data Service, and reclaimed broadcast and BAS spectrum for other new services, including public safety. In shared Federal Government and non-Federal Government spectrum, we will continue to work with NTIA to develop jointly accepted models and methodologies to assess the impact of new technologies. Increased coordination between the Commission and NTIA can only expedite the consideration and approval of new spectrum-efficient technologies. If the emerging technology proposes to operate in spectrum used by Federal Government users, such as for ultra-wideband (“UWB”) or broadband over power line (“BPL”), then it is appropriate for the Commission and the NTIA to develop these models and methodologies jointly.

The GAO report recognizes that the Commission has worked closely with NTIA in the Commission’s consideration and reform of its rules to allow the use of UWB unlicensed devices. UWB devices are able to use sophisticated processing capabilities to provide communications at very low power across wide swaths of spectrum without causing interference to current spectrum licensees – Federal Government and non-Federal Government – that are authorized to use those spectrum bands at much higher power levels. The Commission and NTIA are working in similar fashion to develop rules to implement BPL technology. The collaborative effort does not end after the Commission releases rules for an emerging technology. The Commission continues to work with NTIA and share data on tests and measurements conducted in our Lab, and the Commission continues to work with industry, manufacturers, and users to monitor the development of new equipment. It is then that we can assess the effectiveness of our rules and make any necessary refinements to our rules and underlying methodologies.



CHAIRMAN

Federal Communications Commission

Washington, D.C.

July 27, 2004

The Honorable Tom Davis  
Chairman  
Committee on Governmental Reform  
U.S. House of Representatives  
2157 Rayburn House Office Building  
Washington, D.C. 20515

Dear Chairman Davis:

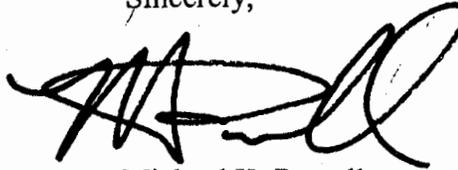
On May 28, 2004, the U.S. General Accounting Office ("GAO") submitted a report entitled Spectrum Management: Better Knowledge Needed to Take Advantage of Technologies That May Improve Spectrum Efficiency (GAO-04-666). This letter and its enclosure are to inform you of the actions the Commission has taken, and will continue to take, on the recommendations made by the GAO.

The report sets out three recommendations for joint consideration by the Administrator of the Department of Commerce's National Telecommunications and Information Administration ("NTIA") and the Chairman of the Federal Communications Commission. The Commission recommendations focus on flexibility in the spectrum allocation system, knowledge about spectrum use and new and emerging technologies, and models and methodologies to assess new and emerging spectrum-efficient technologies. Under Titles I and II of the Communications Act, as amended ("Act"), both the Commission and NTIA have spectrum management responsibilities. The Commission is charged, among other things, with adopting policies for non-Federal Government spectrum use that make wireless communication services available to all Americans, that provide for national defense, and that promote the safety of life and property. The Act specifically provides that the Commission license non-Federal Government radio stations. By contrast, radio stations owned and operated by the Federal Government obtain their frequency designations from the President, or his designee – NTIA. The Commission has worked, and will continue to work, with NTIA within this statutory regime to explore approaches for facilitating the use of new spectrum-efficient technologies to permit non-Federal Government users to employ spectrum formally allocated to Federal Government use, as well as Federal Government users to employ spectrum formally allocated to non-Federal Government use.

We value GAO's analysis as a way to build upon our existing work and cooperative efforts already underway with the NTIA. I commend the GAO for its hard work in helping to develop ideas for improving U.S. spectrum management policies in a manner that ensures that the radio resource will be used effectively for the benefit of the American people. I support any

effort to continue to improve our policies in this area, and will work with our colleagues at NTIA to assess how best to incorporate the report's findings and recommendations in our future work.

Sincerely,

A handwritten signature in black ink, appearing to read 'M. Powell', with a large, stylized flourish at the end.

Michael K. Powell

Enclosure

cc: Office of Management and Budget

Managing Director  
Acquisition and Sourcing Management  
U.S. General Accounting Office



CHAIRMAN

Federal Communications Commission

Washington, D.C.

July 27, 2004

The Honorable Joseph I. Lieberman  
Ranking Member  
Committee on Governmental Affairs  
United States Senate  
340 Dirksen Senate Office Building  
Washington, D.C. 20510

Dear Congressman Lieberman:

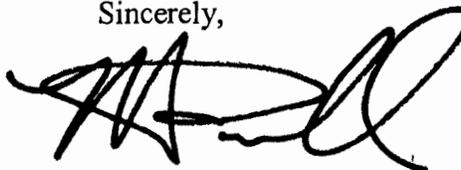
On May 28, 2004, the U.S. General Accounting Office ("GAO") submitted a report entitled Spectrum Management: Better Knowledge Needed to Take Advantage of Technologies That May Improve Spectrum Efficiency (GAO-04-666). This letter and its enclosure are to inform you of the actions the Commission has taken, and will continue to take, on the recommendations made by the GAO.

The report sets out three recommendations for joint consideration by the Administrator of the Department of Commerce's National Telecommunications and Information Administration ("NTIA") and the Chairman of the Federal Communications Commission. The Commission recommendations focus on flexibility in the spectrum allocation system, knowledge about spectrum use and new and emerging technologies, and models and methodologies to assess new and emerging spectrum-efficient technologies. Under Titles I and II of the Communications Act, as amended ("Act"), both the Commission and NTIA have spectrum management responsibilities. The Commission is charged, among other things, with adopting policies for non-Federal Government spectrum use that make wireless communication services available to all Americans, that provide for national defense, and that promote the safety of life and property. The Act specifically provides that the Commission license non-Federal Government radio stations. By contrast, radio stations owned and operated by the Federal Government obtain their frequency designations from the President, or his designee – NTIA. The Commission has worked, and will continue to work, with NTIA within this statutory regime to explore approaches for facilitating the use of new spectrum-efficient technologies to permit non-Federal Government users to employ spectrum formally allocated to Federal Government use, as well as Federal Government users to employ spectrum formally allocated to non-Federal Government use.

We value GAO's analysis as a way to build upon our existing work and cooperative efforts already underway with the NTIA. I commend the GAO for its hard work in helping to develop ideas for improving U.S. spectrum management policies in a manner that ensures that the radio resource will be used effectively for the benefit of the American people. I support any

effort to continue to improve our policies in this area, and will work with our colleagues at NTIA to assess how best to incorporate the report's findings and recommendations in our future work.

Sincerely,

A handwritten signature in black ink, appearing to read "M. Powell", with a large, stylized flourish at the end.

Michael K. Powell

Enclosure

cc: Office of Management and Budget

Managing Director  
Acquisition and Sourcing Management  
U.S. General Accounting Office



CHAIRMAN

Federal Communications Commission

Washington, D.C.

July 27, 2004

The Honorable Henry A. Waxman  
Ranking Member  
Committee on Governmental Reform  
U. S. House of Representatives  
B-350A Rayburn House Office Building  
Washington, D.C. 20515

Dear Congressman Waxman:

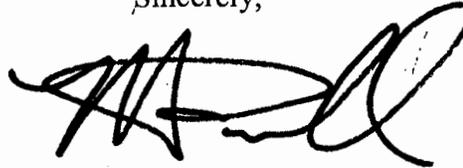
On May 28, 2004, the U.S. General Accounting Office ("GAO") submitted a report entitled Spectrum Management: Better Knowledge Needed to Take Advantage of Technologies That May Improve Spectrum Efficiency (GAO-04-666). This letter and its enclosure are to inform you of the actions the Commission has taken, and will continue to take, on the recommendations made by the GAO.

The report sets out three recommendations for joint consideration by the Administrator of the Department of Commerce's National Telecommunications and Information Administration ("NTIA") and the Chairman of the Federal Communications Commission. The Commission recommendations focus on flexibility in the spectrum allocation system, knowledge about spectrum use and new and emerging technologies, and models and methodologies to assess new and emerging spectrum-efficient technologies. Under Titles I and II of the Communications Act, as amended ("Act"), both the Commission and NTIA have spectrum management responsibilities. The Commission is charged, among other things, with adopting policies for non-Federal Government spectrum use that make wireless communication services available to all Americans, that provide for national defense, and that promote the safety of life and property. The Act specifically provides that the Commission license non-Federal Government radio stations. By contrast, radio stations owned and operated by the Federal Government obtain their frequency designations from the President, or his designee – NTIA. The Commission has worked, and will continue to work, with NTIA within this statutory regime to explore approaches for facilitating the use of new spectrum-efficient technologies to permit non-Federal Government users to employ spectrum formally allocated to Federal Government use, as well as Federal Government users to employ spectrum formally allocated to non-Federal Government use.

We value GAO's analysis as a way to build upon our existing work and cooperative efforts already underway with the NTIA. I commend the GAO for its hard work in helping to develop ideas for improving U.S. spectrum management policies in a manner that ensures that the radio resource will be used effectively for the benefit of the American people. I support any

effort to continue to improve our policies in this area, and will work with our colleagues at NTIA to assess how best to incorporate the report's findings and recommendations in our future work.

Sincerely,

A handwritten signature in black ink, appearing to read 'M. Powell', with a large, stylized flourish at the end.

Michael K. Powell

Enclosure

cc: Office of Management and Budget

Managing Director  
Acquisition and Sourcing Management  
U.S. General Accounting Office