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H. R. 5155

To establish a system to promote the use of land remote-sensing satellite data,
and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

MARCH 15, 1984

Mr. FUQUA (for himself, Mr. WINN, Mr. SCHEUER, Mr. VOLKMER, Mr. LUJAN, Mr. MCGRATH, Mr. NELSON of Florida, Mr. WALKER, Mr. RALPH M. HALL, Mr. CARNEY, Mr. DYMALLY, Mr. CHANDLER, Mr. ANDREWS of Texas, Mr. BATEMAN, Mr. MACKAY, Mr. LEWIS of Florida, Mr. GREGG, Mr. SKEEN, Mr. AKAKA, Mr. LOWERY of California, Mr. TORRICELLI, Mr. DURBIN, Mr. SENSENBRENNER, and Mr. BOEHLERT) introduced the following bill; which was referred to the Committee on Science and Technology

A BILL

To establish a system to promote the use of land remote-sensing
satellite data, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*
3 That this Act may be cited as the "Land Remote-Sensing
4 Commercialization Act of 1984".

5 TITLE I—DECLARATION OF FINDINGS,
6 PURPOSES, AND POLICIES

7 FINDINGS

8 SEC. 101. The Congress finds and declares that—

1 (1) the continuous civilian collection and utiliza-
2 tion of land remote-sensing data from space is of major
3 benefit in managing the Earth's natural resources and
4 in planning or conducting many other activities of eco-
5 nomic importance;

6 (2) the national interest of the United States lies
7 in maintaining international leadership in civil remote-
8 sensing and in broadly promoting the beneficial use of
9 remote-sensing data;

10 (3) land remote-sensing by the Government or pri-
11 vate parties of the United States affects international
12 commitments and policies and national security con-
13 cerns of the United States;

14 (4) the broadest and most beneficial use of land
15 remote-sensing data is likely to result from maintaining
16 a policy of nondiscriminatory access to data;

17 (5) use of land remote-sensing data has been in-
18 hibited by slow market development and by the lack of
19 assurance of data continuity;

20 (6) the private sector, and in particular the
21 "value-added" industry, is best suited to develop land
22 remote-sensing data markets;

23 (7) vigorous, competitive, market-driven private
24 sector involvement in land remote-sensing can lead to

1 rapid realization of the potential benefits of that tech-
2 nology;

3 (8) to utilize fully the strengths of the private
4 sector, any process of commercialization of land
5 remote-sensing should involve the maximum practica-
6 ble competition and the minimum (both in duration and
7 amount) practicable Government subsidy;

8 (9) at the present time, it is unclear that the pri-
9 vate sector alone will develop a total land remote-sens-
10 ing system because of the high risk and large capital
11 expenditures involved;

12 (10) cooperation between the Federal Government
13 and the private sector can help assure both data con-
14 tinuity and United States leadership;

15 (11) the time is now appropriate to initiate such
16 cooperation with phased transition to a fully commer-
17 cial system;

18 (12) cooperation between Government and the
19 private sector in civil land remote-sensing should be
20 structured so as to minimize Government direction and
21 regulation and maximize private sector involvement;

22 (13) nevertheless, certain Government oversight
23 must be maintained to assure that private sector activi-
24 ties are in the national interest and that the interna-

1 tional commitments and policies of the United States
2 are honored; and

3 (14) there is no compelling reason to commercial-
4 ize meteorological satellites at this time.

5 PURPOSES

6 SEC. 102. It is therefore the purpose of this Act—

7 (1) to guide the United States Government in pro-
8 moting full, prompt, and proper involvement of the pri-
9 vate sector in civil land remote-sensing from space;

10 (2) to maintain the United States leading position
11 in civil remote-sensing, preserve its national security,
12 and fulfill its international obligations;

13 (3) to prescribe conditions for assuring continuity
14 of civil land remote-sensing data while protecting
15 public and private nondiscriminatory access to these
16 data;

17 (4) to minimize the duration and amount of any
18 further Federal investment that might be necessary to
19 achieve full commercialization of civil land remote-
20 sensing; and

21 (5) to prohibit commercialization of meteorological
22 satellites at this time.

1 POLICIES

2 SEC. 103. (a) It shall be the policy of the United States
3 to preserve its right to acquire and disseminate digital
4 remote-sensing data.

5 (b) It shall be the policy of the United States that civil-
6 ian digital remote-sensing data be made available to all po-
7 tential users on a nondiscriminatory basis.

8 (c) It shall be the policy of the United States both to
9 commercialize those space remote-sensing functions that
10 properly lend themselves to private sector operation and to
11 avoid competition by the Government with such commercial
12 operations, while continuing to preserve our national secu-
13 rity, to honor our international obligations, and to retain in
14 the Government those remote-sensing functions that are es-
15 sentially of a public service nature.

16 DEFINITIONS

17 SEC. 104. For purposes of this Act:

18 (1) The term "digital remote-sensing data" means
19 the unprocessed and minimally processed signals col-
20 lected from civil remote-sensing space systems or origi-
21 nal film products collected from such systems. Such
22 minimal processing shall be limited to rectification of
23 instrumental distortions, registration with respect to
24 features on the Earth, and calibration of spectral re-
25 sponse. Such term does not include conclusions, manip-

1 ulations, or calculations derived from such signals or
2 combination of the signals with other data or informa-
3 tion. Unless otherwise limited, digital remote-sensing
4 data includes land and ocean sensed data.

5 (2) The term "Secretary" means the Secretary of
6 Commerce.

7 (3)(A) The term "on a nondiscriminatory basis"
8 means without preference, bias, or any other special
9 arrangement regarding delivery, format, financing, or
10 technical considerations which would favor one buyer
11 or class of buyers over another.

12 (B) The sale of data is made on a nondiscrimina-
13 tory basis only if (i) any offer to sell or deliver data is
14 published in advance in such manner as will ensure
15 that the offer is equally available to all prospective
16 buyers; (ii) the system operator has not established or
17 changed any price, policy, procedure, or other term or
18 condition in a manner which gives one buyer or class
19 of buyer de facto favored access to data; and (iii) in a
20 case where a system operator offers volume discounts,
21 such discounts are no greater than the demonstrable
22 reductions in the cost of such sales. The sale of data
23 on a nondiscriminatory basis does not preclude the
24 system operator offering discounts other than volume

1 discounts to the extent that such discounts are not in-
2 consistent with any other provision of this paragraph.

3 (C) The sale of data on a nondiscriminatory basis
4 does not require (i) that a system operator disclose
5 names of buyers or their purchases; (ii) that a system
6 operator maintain all, or any particular subset of, data
7 in a working inventory; or (iii) that a system operator
8 expend equal effort in developing all segments of a
9 market.

10 (4) The term "Landsat system" means Landsat 1,
11 2, 3, 4, and 5, and related ground equipment, systems,
12 and facilities, and any successor civil land remote-sens-
13 ing satellites operated by the United States Govern-
14 ment prior to the commencement of the six-year period
15 described in section 302(b)(2).

16 (5) The term "system operator" means a contrac-
17 tor under title II or a license holder under title IV.

18 TITLE II—CONTRACT FOR EXISTING LAND

19 REMOTE-SENSING SATELLITE SYSTEM

20 CONTRACT REQUIREMENTS

21 SEC. 201. (a) In accordance with the requirements of
22 this Act, the Secretary shall, subject to the availability of
23 appropriations therefor, contract with a United States private
24 sector party (as defined by the Secretary) to market digital
25 remote-sensing data generated by the Landsat system. If the

1 Secretary determines that competition for such contract will
2 promote the policies and purposes of this Act, the Secretary
3 may accept proposals for such contract which include the op-
4 eration by such United States private sector party of (1) the
5 space component of the Landsat system, (2) the related
6 ground equipment, systems, and facilities, or (3) both such
7 space component and such related equipment, systems, and
8 facilities.

9 (b) A contract awarded under subsection (a) shall be
10 awarded, after competition, in accordance with the conditions
11 of section 203. Such contract may be reawarded competi-
12 tively after the practical demise of the space segment of the
13 Landsat system, as determined by the Secretary.

14 (c) Any contract authorized by subsection (a)—

15 (1) shall not permit the transfer to any contractor
16 of title to any part or all of the Landsat system; and

17 (2) may specify that the contractor use, and, at
18 his own expense, maintain, repair, or modify elements
19 of the Landsat system as the contractor finds necessary
20 for commercial operations.

21 (d) If, as a result of the competitive process required by
22 subsection (b), the Secretary receives no proposal which he
23 finds acceptable under the conditions of this Act, the Secre-
24 tary shall so certify and fully report his findings to the Con-
25 gress. Thirty days after so certifying and reporting, the Sec-

1 retary may reopen the competition. If no acceptable propos-
2 als are received after such subsequent competition, or if the
3 Secretary decides not to reopen the competition, the Secre-
4 tary shall so certify and fully report his findings to the Con-
5 gress. In the event that no acceptable proposal is received,
6 the Secretary shall continue to operate the Landsat system
7 and to market data from such system.

8 (e) In defining "United States private sector party" for
9 purposes of subsection (a), the Secretary may take into ac-
10 count the citizenship of key personnel, location of assets, for-
11 eign ownership, control, and influence, and other such
12 factors.

13 **SALE OF DATA**

14 **SEC. 202. (a)** The United States Government shall
15 retain title to any and all data generated by the Landsat
16 system. However, after the date of the commencement of the
17 contract described in section 201(a), the contractor shall be
18 entitled to revenues from sales of copies of data from the
19 Landsat system, subject to the conditions specified in sections
20 601 and 602 of this Act.

21 (b) The contractor may continue to market data previ-
22 ously generated by the Landsat system after the demise of
23 the space segment of that system.

1 CONDITIONS OF COMPETITION FOR CONTRACT

2 SEC. 203. (a) The Secretary of Commerce shall, as part
3 of his advertisement for the competition for the contract au-
4 thorized by section 201, identify and publish the international
5 obligations, national security concerns (with appropriate pro-
6 tection of sensitive information), domestic legal consider-
7 ations, and any other standards or conditions which a private
8 contractor shall be required to meet.

9 (b) In selecting a contractor under this title, the Secre-
10 tary shall consider—

11 (1) ability to market aggressively digital remote-
12 sensing data;

13 (2) the best overall financial return to the Govern-
14 ment, including the potential savings to the Govern-
15 ment;

16 (3) ability to meet the obligations, concerns,
17 standards, and conditions identified under subsection
18 (a);

19 (4) technical competence, including the ability to
20 assure continuity and timeliness of data from the Land-
21 sat system;

22 (5) absence of any conflicts of interest which could
23 inhibit nondiscriminatory access to such data;

24 (6) ability to effect a smooth transition with the
25 contractor selected under title III of this Act; and

1 (7) such other factors as he deems appropriate.

2 FOREIGN GROUND STATIONS

3 SEC. 204. (a) The contract under this title shall provide
4 that the contractor shall act as the agent of the Secretary by
5 continuing to supply digital remote-sensing data to foreign
6 ground stations for the life, and according to their terms, of
7 those agreements between the United States Government
8 and such foreign ground stations that are in force on the date
9 of the commencement of the contract.

10 (b) Upon the expiration of such agreements, or in the
11 case of foreign ground stations that have no agreement with
12 the United States on the date of commencement of the con-
13 tract, the contract shall provide—

14 (1) that digital remote-sensing data from the
15 Landsat system shall be made available to foreign
16 ground stations only by the contractor; and

17 (2) that such data shall be made available on a
18 nondiscriminatory basis.

19 TITLE III—PROVISION OF DATA CONTINUITY
20 DURING TRANSITION PERIOD

21 PURPOSES AND DEFINITIONS

22 SEC. 301. (a) It is the purpose of this title—

23 (1) to provide, in an orderly manner and with
24 minimal risk, for a transition between Government op-

1 eration and private, commercial operation of civil land
2 remote-sensing space systems; and

3 (2) to provide for the continuity of MSS data for
4 six years after the practical demise of the space seg-
5 ment of the Landsat system.

6 (b) For purposes of this title—

7 (1) the term “Multi-Spectral Scanner” means the
8 instrument referred to by that name and carried on the
9 Landsat 4 and Landsat 5 satellites; and

10 (2) the term “MSS data” means digital remote
11 sensing data which, from the point of view of a data
12 user, are—

13 (A) functionally equivalent to data from the
14 Multi-Spectral Scanner; and

15 (B) compatible with data and with equipment
16 used to receive and process data from such
17 Scanner.

18 CONTRACT FOR DATA AVAILABILITY AND CONTINUITY

19 SEC. 302. (a) Subject to the availability of appropriate
20 actions therefor and to the licensing conditions established
21 under title IV, the Secretary shall, after competition, con-
22 tract with a United States private sector party (as defined by
23 the Secretary pursuant to section 201) for the provision by
24 such party of the capability of generating data of a quality
25 least equal to the quality of MSS data and of selling an

1 delivering such data to the Federal Government. The capa-
2 bility shall include, at a minimum, the capability to generate
3 and deliver MSS data at the annual volume of Federal usage
4 during fiscal year 1983, as determined by the Secretary. The
5 capability may be provided by the contractor using whatever
6 technologies the contractor may select. In addition, the con-
7 tractor may make available data of a higher quality or of a
8 different type than MSS data.

9 (b) The contract authorized by subsection (a)—

10 (1) shall be entered into as soon as practicable, al-
11 lowing for the competitive procurement process;

12 (2) shall, in accordance with criteria determined
13 and published by the Secretary, reasonably assure the
14 provision of the capability described in subsection (a)
15 for a period of six years, beginning as soon as practica-
16 ble in order to minimize any interruption of data
17 availability;

18 (3) shall terminate one year after the expiration of
19 the six-year period described in paragraph (2);

20 (4) may, subject to section 305 of the Federal
21 Property and Administrative Services Act of 1949 (41
22 U.S.C. 255), provide for a payment by the Secretary
23 to cover a portion of the capital cost of providing such
24 capability, which may be paid in installments (A) based
25 on progress prior to the beginning of the six-year

1 period described in paragraph (2), and (B) the sum c
2 which shall be less than the total cost of procuring th
3 system required to assure the capability for six years

4 (5) shall provide that sale of digital remote-sens
5 ing data shall be in accordance with the provisions c
6 section 303 of this title;

7 (6) shall not provide for any guaranteed data pu
8 chases by the Federal Government; and

9 (7) may provide that the contractor utilize, on
10 space-available basis, civilian Government satellites &
11 platforms for a civil remote-sensing satellite system
12 if—

13 (A) the contractor immediately reimburse
14 the Government for all related costs incurred wi
15 respect to such utilization, including a reasonab
16 and proportionate share of fixed, spacecraft, da
17 transmission, and launch costs; and

18 (B) such utilization would not interfere wi
19 or otherwise in any way compromise the intend
20 civilian Government missions, as determined
21 the agency responsible for the civilian satellite.

22 (c) The contract authorized by subsection (a) shall
23 awarded on the basis of—

24 (1) the cost to the Government of the payme
25 under subsection (b)(4);

1 (2) the reliability, technical competence, and fi-
2 nancial condition of the contractor;

3 (3) the contractor's ability to develop the remote-
4 sensing data market;

5 (4) the contractor's ability to supplement basic ca-
6 pabilities specified in section 302(a) by adding remote-
7 sensing capabilities (at the contractor's expense and
8 consistent with national security concerns) which main-
9 tain United States leadership in remote-sensing;

10 (5) the contractor's ability to meet the conditions
11 for obtaining a license under title IV;

12 (6) the contractor's ability to provide digital
13 remote-sensing data on a timely and reliable basis;

14 (7) the contractor's ability to effect a smooth tran-
15 sition with any contractor selected under title II;

16 (8) the royalty or profit- or revenue-sharing ar-
17 rangement, or other such financial consideration offered
18 to the Federal Government; and

19 (9) such other factors as the Secretary deems ap-
20 propriate.

21 (d) If, as a result of the competitive process required by
22 subsection (a), the Secretary receives no proposal which he
23 finds acceptable under the conditions of this Act, the Secre-
24 tary shall so certify and fully report his findings to the Con-
25 gress. Thirty days after so certifying and reporting, the Sec-

1 retary may reopen the competition. If no acceptable propos-
2 als are received after such subsequent competition, or if the
3 Secretary decides not to reopen the competition, the Secre-
4 tary shall so certify and fully report his findings to the Con-
5 gress. Ninety days after so certifying and reporting, the Sec-
6 retary is authorized to assure MSS data continuity by pro-
7 curement and operation by the Federal Government of the
8 necessary systems, subject to the availability of appropri-
9 ations therefor. Such procurement and operation may include
10 generation of data of a higher quality than MSS data.

11

SALE OF DATA

12 SEC. 303. (a) The contractor selected under section 302
13 shall sell data in accordance with the provisions of sections
14 601 and 602 of this Act.

15 (b) Any sale of digital remote-sensing data by the con-
16 tractor to Federal agencies shall be on a nondiscriminatory
17 basis, with the additional condition that at least 5 per centum
18 of the price of each such sale shall be rebated to the Govern-
19 ment (and thereby reduce the total net cost to the Govern-
20 ment) as a royalty payment to the United States Treasury.
21 Such royalty payments shall be required during the life of the
22 contract authorized in section 302, or until such time as the
23 cumulative total of such royalty payments equals the value of
24 any payment made to the contractor by the Government