



United States Department of Justice

WASHINGTON, D.C. 20530

DEPUTY ASSISTANT ATTORNEY GENERAL
TRUST DIVISION

February 8, 1984

Joseph Levine, Esquire
Office of the General Counsel
Department of Commerce
Washington, D.C. 20230

Dear Mr. Levine:

We have reviewed the draft legislation, provided to us in December 1983 and dated October 26, 1983, "to establish a system to promote the use of land remote-sensing satellite data, and for other purposes." We have the following general comments about the competitive implications of the bill.

I. Summary of the Bill

The bill provides for the transfer to the private sector of the responsibility for operating land remote-sensing satellites, a function now performed by the "Landsat" system operated by the National Oceanic and Atmospheric Administration. Title I of the bill states that it is the policy of the United States to commercialize those remote-sensing functions that lend themselves to private sector development. Section 103(b). The Government's right to acquire and to disseminate land remote-sensing data on a non-discriminatory basis must, however, be preserved. Section 103(a).

In general terms, Title II of the bill provides for the Secretary of Commerce to contract with a private party to operate the Government's current Landsat system. Title III contains certain interim provisions designed to assure continued availability of the data through private sector operation of new privately-owned land remote-sensing systems after the "practical demise" of the Landsat system. Title IV sets the conditions under which private operators of future land remote-sensing systems will be licensed. Title V provides

for continued federal research and development. Title VI requires that in all circumstances users are to have non-discriminatory access to the data. Although by its express terms the bill applies only to the land remote-sensing system, and not to the meteorological system, Title VII specifically prohibits sale of the Government's meteorological system.

Specifically, the contract provided for in Title II will be awarded on a competitive basis, and will be for "such limited duration as may be necessary" to fulfill the conditions of the sale of the operational rights. Section 201(c). Any sale of the Landsat data by the contractor must be through an organizationally separate unit that acquires the data on a non-discriminatory basis at non-discriminatory terms. Section 202(b). The Secretary of Commerce shall award the contract on the basis of financial return to the Government, technical competence, ability to satisfy all conditions of the sale, marketing ability, absence of conflicts of interest affecting access to the data, and ability of the contractor to effect a smooth transition from Government to private operation. Section 203(b). Operation thus shall be conducted in a way that will prevent any "competitive advantage to the operator." Section 202(b).

Under Title III, a contract for the purchase of data required by the Government is to be awarded to a private party or parties by an "open competitive process". Section 302(a). The Government is to prepay to the operator a portion of the capital cost of the system, Section 302(b), and to enter a six-year requirements contract, Section 302(c). Surplus Landsat equipment can be used or purchased by the operator, Section 302(d), who may also use other civilian satellites upon immediate reimbursement of related costs. Section 302(e). The United States Government, but not other buyers, will recover a five percent rebate on purchases of data. Section 303(b). Again, there is to be no "competitive advantage" accruing to the operator. Section 303(c).

The licensing provisions in Title IV require the Secretary of Commerce to license qualified private parties, consortia of private parties, and consortia of private and governmental parties wishing to operate their own land remote-sensing systems. Section 401. Licensees must operate any system under the following conditions: (1) operation must preserve and promote United States national security; (2) data must be available to all potential users on a non-discriminatory basis; (3) the system shall be administered by a central entity (in the case of a consortium); and (4) the license shall not protect the holder from "fair competition" from other licensees. Section 402(b).

II. Discussion

As a preliminary matter, we question the threshold determination to commercialize the land remote sensing system. A private firm would choose to operate the system only if it believed it could derive sufficient revenues from buyers of land remote-sensing data to more than offset its costs. Thus, if the initial fixed costs of investing in the system were very high, high prices would have to be paid by data users to make commercialization feasible. Since users pay very little at present for these data, it is not at all clear whether the market would be able to support a private Landsat system absent large continuing government subsidies. 1/ Even assuming, however, that potential users valued Landsat data highly, the system operator could sustain profitable prices only if it could encrypt the data and thereby prevent satellite signal piracy.

The questionable outlook for commercialization is further clouded by Sections 103, 402(b), and 601(a) of the proposed bill, which require that all potential users be granted access on a "non-discriminatory" basis. It may be that only a system of discriminatory pricing -- under which different users are charged different prices according to the value they place on the data, and thus the price they are willing to pay for it -- would yield sufficient revenues to cover costs and make commercialization attractive. 2/ Under such a system revenues derived from customers willing to pay higher prices might substitute for the subsidy now provided by the Government. This suggests that, in order to maximize the likelihood of successful commercialization without a government subsidy, the bill should be modified to omit any requirement that the prices charged for data necessarily be "non-discriminatory."

1/ It is not clear that total demand for remote-sensing data is sufficient for full commercialization of the land remote-sensing system. See Report of the National Oceanic and Atmospheric Administration in Response to P.L. 97-324 (January, 1983); The National Academy of Public Administration, Space Remote Sensing and the Private Sector: An Essay (March, 1983).

2/ For a good description of price discrimination in "decreasing cost" industries, see generally A. Kahn, 1 The Economics of Regulation 123-158 (1970). In order for discriminatory pricing to be effective, the system operator would have to be able to prevent arbitrage -- the resale of data by customers charged a low price to customers charged a high price. Arbitrage might be prevented by enforceable contractual clauses prohibiting such resales.

If foreign policy considerations require that foreign governments' concerns about the availability of data be accommodated, a requirement that foreign governments be given access to these data on equal terms could be added. 3/

We also wish to point out that, assuming the aggregate social benefits of operating Landsat exceed the costs, and that commercialization is feasible, the transfer of the Landsat system from public to private hands may inefficiently restrict the usage of remote-sensing data. Economic welfare is maximized when a good is sold to all buyers willing to pay at least marginal cost -- the cost of supplying one more unit of the good. If the marginal cost of supplying remote-sensing data is extremely low, the socially optimal use of these data is assured by charging a correspondingly low price for them -- as the Government may be doing at present. If, under private ownership, higher prices were charged (to ensure that total revenues covered total operating costs), some current users who value the data at an amount equal to or greater than marginal cost -- but at less than the privately charged price -- would be inefficiently deprived of the data. 4/

In addition, while the proposed bill does not expressly suggest that private Landsat operators should be regulated, it should be noted that its repeated references to "non-discrimination" (see text at p. 3, supra) evoke a statutory

3/ Under such a "most-favored nation" clause, the treatment of foreign government users would not necessarily be linked to the terms afforded domestic purchasers of data. Of course, due to commercialization, foreign governments would be charged higher prices after the demise of Landsat than they presently pay for data -- unless the United States Government explicitly subsidized private sales to foreign states.

If the treatment of foreign private users raised no foreign policy concerns, they could be sold data under the same terms as domestic users. It is, of course, possible that foreign governments might request preferential treatment for politically influential private users. United States Government agreement to such special treatment would, once again, require the payment of federal subsidies to the Landsat operator or operators.

4/ This inefficiency probably would exist to some extent whether the land remote-sensing industry became competitive or monopolistic. If several competitors could profitably serve the market -- as the bill apparently assumes -- competition would somewhat constrain prices (and, incidentally, limit the use of price discrimination). Nevertheless, price probably would not reach the very low level of marginal cost, and some would-be users would be denied access to the data, notwithstanding their willingness to pay an amount equal to or exceeding marginal cost.

term of art that historically has been applied to justify rate of return regulation in areas such as telecommunications. Accordingly, there is some the danger that "non-discrimination" might be cited to support the imposition of rate of return regulation on commercialized satellite systems. Unless provision of satellite data involves a natural monopoly (see n. 4, supra), however, or there is some other "market failure," there is no economic rationale for regulation of land remote sensing at all.

Moreover, even the existence of natural monopoly would not necessarily justify regulation. Rate of return and other forms of natural monopoly regulation are economically justifiable only if regulatory costs outweigh regulatory benefits. 5/ In a

4/ continued

If, instead, the industry became a natural monopoly (because one firm could serve the entire market at lower cost than multiple firms), the extent of the inefficient reduction in output would hinge on the pricing scheme adopted. If the satellite operator were restricted to charging a single monopoly price, many users would be inefficiently deprived of data. If, on the other hand, the monopolist were allowed to price discriminate, and charge different users different prices, inefficient output restriction would be less pronounced. The efficient output level would be achieved, however, only if the monopolist could "perfectly discriminate" -- charge each potential user the exact amount it would be willing to pay for data. Such an outcome would be extremely unlikely.

5/ Regulation is justifiable generally where market failures result in inefficient levels of production of goods and services or no production at all. Some forms of regulation, however, have counter-productive tendencies. Rate base and rate of return regulation reduces incentives for efficiency, and emphasizes service competition at the expense of price competition. Since a "normal" rate of return is guaranteed on service expenditures that are included in a regulated firm's rate base, the regulated company has an incentive to "overinvest" in services, with little regard to cost. In addition, rate regulation consumes significant resources of both the regulated firm in supporting rate requests and the regulating agency in sorting out the large volume of data submitted with these rate requests. A rate regulatory process can also provide a licensee with incentives for inefficiency in its investments and operations, and for rigidity in its rate structures and service offerings. See Joskow & Noll, Regulation in Theory and Practice: An Overview, in G. Fromm (ed.), Studies in Public Regulation 1 (1981); S. Breyer, Regulation and Its Reform 36-59 (1982).

technologically dynamic area such as land remote-sensing, the static nature of regulation may actually cause more damage by retarding innovation than would be caused by allowing a temporary monopolist to set prices without constraints. 6/

We are also troubled about the possibility that the contractor that assumes responsibility for supplying the Government with data during the six-year interim period will be provided, as a result of the contract, with a significant subsidy that will lessen the possibility of competitive entry into the market (assuming no natural monopoly). Section 302 provides that a party or parties contracting for the provision of data to the Government must be capable of providing, at a minimum, the amount of data used by the Government during fiscal year 1983. To encourage such production, Section 302 also provides for the Government to prepay a portion of the capital cost of providing this capability. This prepayment subsidy would be at least partially repaid to the Government through the five percent rebate on the Government's data purchases, but it might not be fully repaid during the contract period. The award of a six-year Government requirements contract likewise gives the contractor a competitive advantage over any potential entrants into the market.

While we recognize the possible need for a subsidy to assure that land sensing data will be available, we are concerned that such a contract may make it impossible, as a practical matter, for any competing systems to be formed. Under such a contract, the subsidized system may be little different, from the point of view of competition, from a Government-owned and operated Landsat system. The contractor's incentives to innovate and to provide better and cheaper services may be significantly dampened due to the protected position it holds by reason of both the subsidy and the Government requirements contract it receives.

In order to minimize the competitive advantage of the initial contractor the term of the contract should be subject to downward negotiation between the Secretary of Commerce and the prospective contractor. We recommend that the statutory

6/ There are currently prospects for competition from foreign (e.g., French and Japanese) launched and operated systems. These systems may not be profit-making enterprises, and may involve significant government subsidies. They may, nevertheless, represent a competitive check on the exercise of monopoly power by a United States firm.

language be amended to provide that the six-year period is an outside limit for the length of the contract. Likewise, five percent should be made the minimum discount to be given to the United States Government. A higher percentage discount would make it more likely that the Government prepayment subsidy would be repaid or substantially reduced by the end of the contract, and less likely that a competitive advantage will continue after the period of operation as an interim system.

Moreover, we believe that the bill should not require the contractor to sell value-added derivative data through a separate subsidiary. 7/ See Section 202(b). A separate subsidiary is justifiable only as a means to prevent a regulated monopolist from using profits in regulated markets to cross-subsidize low cost sales in unregulated markets and thereby disadvantage competitors. The justification for utilizing a separate subsidiary is entirely lacking in the case of the land remote-sensing system, if, as the proposed legislation appears to contemplate, this field is not a natural monopoly and will not be price-regulated.

The foregoing discussion highlights the broad competitive issues raised by the bill. There are also more specific definitional questions raised by the bill as currently drafted. Section 203(b)(5) imposes as a criterion for selection as a provider of land remote-sensing data the "absence of any conflicts-of-interest which could inhibit non-discriminatory access to such data." That language could conceivably be construed to bar the system operator from providing value-added services regardless of whether it is a regulated monopolist. The general requirements for separation of activities in Section 201(b) and non-discriminatory access in Sections 103(a), 402(b), and 601(a) may not be sufficient to preclude such an interpretation of the statute. Second, it is unclear what is meant in Sections 202(b) and 303(c) by the requirement that licensed operators have no "competitive advantage." That language might be read to suggest that value-added services could be barred or limited and to sanction specific licensing conditions not enumerated in the statute. The bill could be clarified by affirmatively stating that any operator should be permitted to provide value-added services.

Additionally, the criterion in Section 402(b)(4) that no license shall protect the holder from "fair competition" should be clarified, so as to fulfill two distinct and important

7/ See attached letter from Wayne D. Collins, Deputy Assistant Attorney General, to Joseph Levine, Department of Commerce, August 25, 1983.

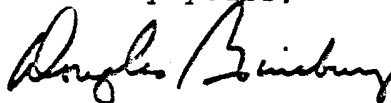
functions. First, specific language should be added to insure against any implicit repeal of the antitrust laws. ^{8/} Second, Section 402(b)(4) should preclude an unduly restrictive licensing process that might exclude potential entrants. The section should specifically provide that the Secretary is not to grant exclusive licenses, or to consider the economic effects of the entry of additional firms into the land remote-sensing business. Thus, replacing the "fair competition" language with a provision clarifying the Secretary's powers, and inserting an antitrust savings clause would more effectively serve the purpose of preserving competition.

Finally, the participation of federal agencies in consortia, even with private parties, raises both substantive and definitional problems. Section 403(b)(3) limits such activities to those that "will not compete with U.S. private sector activities." However, both operational and value-added services of such mixed public and private sector consortia would seem inherently likely to compete with purely private sector activities in the land remote-sensing industry. Moreover, the possibility of mixed consortia may in itself distort the incentives of the private sector to develop land remote-sensing services. Potential private entrants would be deterred if they feared that the participation of federal agencies might entail public subsidies for the consortium with which they would have to compete. This suggests that individual Government agency needs should be met contractually through the private sector alone, not through Government partnership arrangements, so that all potential providers may have the opportunity to compete for any necessary Government subsidies. On balance, permitting Government participation in consortia appears unnecessary and possibly damaging to competition.

^{8/} We would be happy to assist in the drafting of such a provision and the accompanying explanation, which should make clear that the antitrust laws remain fully applicable except insofar as the legislative scheme or essential fairness considerations require a limited exemption. Although we have not settled on final wording, such a provision might provide that "Nothing in this Act shall be deemed to create an exemption or defense to any action under the federal antitrust laws, as defined in Section 1 of the Clayton Act (15 U.S.C. § 12), or the Federal Trade Commission Act (15 U.S.C. §§ 41-58); provided, that a contract awarded in accordance with Section 302 of this Act shall not be deemed to violate such statutes."

As reflected above, we believe, there are substantial competitive and definitional questions raised by the bill as drafted. We would be pleased to consult further with you on possible modifications of the bill, should you so desire.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Douglas H. Ginsburg".

Douglas H. Ginsburg
Deputy Assistant Attorney General
Antitrust Division