

F

OPERATIONAL LANDSAT REMOTE SENSING SYSTEM DEVELOPMENT

Daniel J. Cotter (Acting Director - User Affairs Office - NOAA
Washington, DC)

A few weeks ago, President Reagan's new budget was announced and this has upset our plans. For FY 1982, the Landsat Development Program was \$ 123.7 million dollars. On Tuesday, 10 March 1981, it became \$ 2.1 million dollars. We have not adjusted to all of that very well yet.

These budget cuts have taken place and my purpose here this morning is to outline how we expect to contend with these changes. It is also to emphasize that the most important implication of President Reagan's budget for the people in this room and people concerned with remote sensing, particularly the Landsat program. The budget for FY 82 provides an administrations commitment to the continuity of Landsat data through 1988. We must also bear in mind that the Presidential Directive of 1979 that looked forward to and directed the implementation of an operational land system, also called for the transfer of that system to the private sector, where the private sector entities become the owners and operators of that system sometime during the 1980's.

Under President Carter's budget outline, we had until 1992 to accomplish those purposes. Under President Reagan's outline, we have until 1987 or 1988 to have the private sector committed to continuing the system. So it is a change in time, in one respect, and in scale, because some of the resources that we anticipated that would allow us to do this job next year and subsequent years, have been withdrawn, at least for the moment.

NASA is funded to complete and to launch Landsat D & B and in addition, funded to implement the new MSS data processing and pre-processing system to be put on line at Goddard Space Flight Center sometime next year.

The EROS Data Center at Sioux Falls experienced essentially no budget impact. Under the budget guidelines, they are committed to supporting user activities and user needs in the Landsat D era. As far as NOAA/NESS are concerned, we are funded for bringing the system into operation. We are funded to continue the system management and for the operation and maintenance of the ground/space system. We are also funded to establish a relationship with the EROS Data Center under conditions yet defined. This money will allow NOAA to interface and service with the users.

NOAA does not have a lavish budget to complete all of this. As most other federal agencies, NOAA is taking a significant personnel cutback. The minimum implication is that NOAA/NESS will have to really strain to do the assigned tasks under the new budget and personnel cuts that now exist. The NASA/NOAA budget for Landsat activities in FY 82, contains \$ 2.1 million dollars. \$ 1.4 million is to continue the present management and coordination activities that we have been involved in. The remaining 700,000 dollars is for transfer to the EROS Data Center so that it can upgrade the MSS Data Processing System to accommodate the D series of spacecraft data.

One of the primary tasks that NOAA has been working on and preparing for, involves the transfer of the operational system operational management to private sector ownership. Someone asked if the private sector is ready and willing to become active in this. I attended a meeting a week ago with 25 people from the private sector. The question was asked, is anyone here making money through providing Landsat data services? One gentleman raised his hand and the other 24 went over and borrowed money from him. But they are interested.

The conditions of transfer over to private ownership have yet to be determined. Congress has not got into it yet. If I were the private sector, I would be hesitant too. But the outlook is that the system can only continue in the 80's if the private sector is involved, and if the private sector markets the products properly.

We at NOAA are preparing and have proposed legislation for congressional consideration or enactment to establish conditions under which this private sector ownership transfer will take place. The details have not been fully resolved by the administration and will be argued out in the halls of congress. We do anticipate that proposals for private sector transfer will be reviewed. As soon as that takes place, NOAA will be in touch with private sector entities to discuss the subtleties and ramifications of this suggested legislation. We intend to obtain their opinion and feedback, so that when hearings take place late spring, we at NOAA will speak on behalf of the private sector.

The private sector will testify before congress. It is a very complex area. Hearing and discussion will play an important role. Beyond FY 82, the NOAA budget projections call for \$ 30 million a year to continue with management activities we are now engaged in. To operate and maintain the system, to continue user services that will be effected out of the EROS Data Center.

It should be noted that we have no money for capital investment, and at this moment we have no money projected for investing in an operational TM data handling system. (TM operational system will await NASA investigation and developments and the design and pre-processing data handling system.) We are confident that once the work on TM has been completed, we can make a good case to come up with an operational system sometime in the latter part of the 1980's.

A few times this morning, prices of data have been mentioned. I am sure that anyone who has been in contact with the EROS Data Center, is well aware that due to inflation, it is going to raise the price of the data products. So look for a data price increase.

NOAA, as proposed manager of the operational system, is working out a scheme that will impose price increases spaced over the years of system operation. The size and details are not fully known yet. We have been directed to recover the costs of operations and maintenance of the system through the sale of data products and services for the years that we operate it.

At the present time, data sale income from Landsat data sales is about six million dollars per year, and our anticipated cost in operating and maintaining the system is about \$ 30 million dollars a year. Right now we are considering in general terms to gradually step up to 5 times the data price.

We do not know what we will do concerning specific products and levels of increase will be a specific rate or price. Only by having an attractive pricing structure, and discovering that the pricing structure works, will the private sector be attracted to invest in the system. As mentioned, the National Ocean Satellite System has been deferred. The budget for environmental satellites for NOAA/NESS remains essentially unchanged, compared to previous years and projections for future years. We do not expect any major difficulties in operating our environmental satellites. We are losing some people, however, so we may be a little less responsive to the users.

For the past 18 months or so, NOAA has been actively anticipating and working toward the day when we become manager of the operational land satellite system. One device to make us more cognizant of data users needs that we had projected, was the development and establishment of an Advisory Committee.

We are in the process of establishing an Advisory Committee and seek nominations for people to sit on it with us. That will reflect in the federal register probably within the next two weeks. It was mailed last Friday to the publishers at the register. If you make any candidates for this committee - non federal people, knowledgeable of various aspects of the uses and needs of remote sensing - I would be happy to hear about it.

Finally, I would like to mention that on Thursday, through the courtesy of Ames Research Center, NOAA will have the opportunity to talk with you for a full day. David Johnson, NOAA's Assistant Administrator for satellites will be available. We will ask you to participate with us on Thursday, through working groups centered around state and local government interests, university and training interests, as well as commercial interest, and tell us what you would like NOAA to do for you as we approach this operational date.