

**MINUTES
of the
FIRST MEETING
of the
SCIENCE, TECHNOLOGY AND TELECOMMUNICATIONS COMMITTEE**

**June 19, 2012
Santa Fe**

The first meeting of the Science, Technology and Telecommunications Committee was called to order by Senator Timothy M. Keller, chair, at 10:05 a.m. on Tuesday, June 19, 2012, in Room 322 of the State Capitol in Santa Fe.

Present

Sen. Timothy M. Keller, Chair
Rep. Roberto "Bobby" J. Gonzales, Vice Chair
Sen. Phil A. Griego
Rep. Jim W. Hall
Sen. Linda M. Lopez
Rep. Debbie A. Rodella
Rep. Nick L. Salazar
Rep. James E. Smith
Rep. Luciano "Lucky" Varela

Absent

Rep. Cathrynn N. Brown
Sen. William F. Burt
Sen. Dede Feldman
Rep. Conrad D. James
Sen. Steven P. Neville

Advisory Members

Sen. Carlos R. Cisneros
Sen. Richard C. Martinez
Rep. Danice Picraux
Rep. Jane E. Powdrell-Culbert

Rep. Ray Begaye
Rep. Ben Lujan
Sen. William H. Payne
Sen. John M. Sapien
Rep. Don L. Tripp
Rep. Richard D. Vigil

Staff

Gordon Meeks, Legislative Council Service (LCS)
Ralph Vincent, LCS
Jeret Fleetwood, LCS
Elizabeth Shaw, LCS

Guests

The guest list is in the original meeting file.

Handouts

All handouts and other written testimony are in the original meeting file.

Tuesday, June 19

Senator Keller began the meeting by having members of the committee and staff introduce themselves.

Department of Information Technology (DOIT) Update

Darryl Ackley, secretary, DOIT, provided the committee with an update regarding the DOIT, beginning with an overview and the DOIT's various duties and functions.

Secretary Ackley also discussed stabilization and operation of the SHARE system, noting the disaster recovery work and hardware reworking are proceeding on the system. He pointed out that reworking the system's hardware would provide sufficient room for system testing.

Secretary Ackley then discussed the DOIT's mainframe computer, explaining that although it will be repartitioned, agencies will continue to use it. He also noted that the platform on which the mainframe operates will be upgraded in the near future. Secretary Ackley did acknowledge that some state agencies have opted not to remain on the mainframe. He also noted that the DOIT plans to perform triage on the existing ONGARD system while work is performed on transferring operations to the upgraded platform, after which that system should be fine.

Secretary Ackley also touched on the progress of upgrading analog communications towers to digital microwave ones; narrowband land mobile radio reprogramming; upgrades to the state's core phone services; and revisions to the department's billing system and policies.

Questions and comments by the committee included:

- the Information Technology Commission's inactive status, although the governor's administration is working to get the commission appointed and working as quickly as possible;
- the status of upgrades to the SHARE system;
- the assistance provided to the State Land Office for the ONGARD system;
- that off-site backup of some systems, including ONGARD, is at a facility in New Jersey;
- the status of the state supercomputer, including the possibility of relocating or selling it;
- additional functions available through SHARE updates;
- the ONGARD system accounting for about \$1.3 billion in income for the state;
- the lack of bandwidth availability throughout much of rural New Mexico; and
- the implementation of changes to the Sunshine Portal that allow for increased access to information.

Sandia National Laboratories (SNL) Research Highlights

Dr. Julia Phillips, Science, Technology and Engineering Innovations and Partnerships Division, SNL, provided the committee with testimony regarding SNL. She began by reviewing

SNL's core national security mission and its strong research programs.

Dr. Phillips went on to discuss the technology transfer tools that help SNL move technology from the laboratory to the private sector. She explained that some of the technology transfer tools include:

- license agreements;
- cooperative research and development agreements;
- funds-in agreements;
- technology development centers; and
- local and regional partnerships.

Dr. Phillips provided the committee with examples of projects that have utilized each type of technology transfer tool. She also provided the committee with a map listing by county the various local and regional partnerships, pointing out that \$29.8 million worth of assistance has been provided to small New Mexico businesses since 2000.

Questions and comments from the committee included:

- SNL's partnerships with public schools on a number of projects, including family math and science nights, the New Mexico Hydrogen Fuels Challenge and the Department of Energy Science Bowl;
- business incubation and technology transfer processes employed by SNL;
- intellectual property agreements and profit agreements that are typically negotiated for each technology transfer project;
- the diversity of the SNL work force, including male-to-female employee ratios;
- the ability of SNL to perform post-wildfire flood modeling for communities affected by large and severe wildfires;
- the assistance that the legislature can offer to help SNL, particularly with regard to small business development and technology transfer, including small business tax credits, capital outlay and infrastructure improvements and assistance with the "valley of death" that businesses face before they can secure venture capital or angel investor funding; and
- issues regarding retention of companies that find some success in New Mexico but nevertheless move elsewhere.

Work Plan

Mr. Meeks, provided the committee with suggested work plan topics and meeting dates.

Public Comment

Several members of the audience suggested topics about which the committee could receive testimony.

Los Alamos National Laboratory (LANL) Research Highlights

Dr. Duncan McBranch, LANL, provided the committee with testimony regarding the laboratory's changing mission and work force issues.

Dr. McBranch began by discussing LANL's plutonium issues. He explained that construction of a proposed facility dedicated to plutonium and advanced metal research has been deferred for the immediate future and that the laboratory is developing a plan for moving forward.

Dr. McBranch went on to discuss LANL's nuclear security mission, which he characterized as still very strong. He explained that LANL's global security mission is still closely tied to nuclear security and that research conducted by the laboratory had recently developed advanced radiography technology that uses background radiation, rather than traditional, larger sources, to detect and pinpoint radiation sources. Dr. McBranch noted that use of this type of radiography could significantly shorten the expected cleanup time of the Fukushima nuclear reactor that was seriously damaged by an earthquake and tsunami in Japan.

Dr. McBranch also discussed LANL's involvement in nuclear fuel repository issues; energy demand growth and its impact on infrastructure; and biofuel development.

Dr. McBranch went on to discuss LANL work force and budget issues. He noted that 557 laboratory employees have chosen to retire through the voluntary separation program initiated by the laboratory. Dr. McBranch also indicated that another 60 contractors will be cut from the laboratory's budget, adding to the already significant economic impact faced by the LANL community. He also discussed the budget for the upcoming fiscal year, noting that while funding looks steady, there is no way to be certain.

Dr. McBranch then discussed facility upgrades at LANL, noting that some older buildings are still in use by the laboratory.

Questions and comments by the committee included:

- the number and amount of small business assistance loans issued by the laboratory;
- the process of technology transfer, from invention to commercialization, employed by LANL;
- the patent process for technology transfer;
- funding provided by LANL for the small business consortium;
- the potential impact of significant federal budget cuts on New Mexico's national laboratories;
- the funding source for LANL's Venture Acceleration Fund;
- an analysis of the LANL work force; and
- the University of New Mexico as the largest source of technical degrees for LANL employees.

Seed Funding

Michelle Hoeft and Greg Edwards of HD3 provided the committee with testimony regarding the early stages of seed funding of start-up businesses. Ms. Hoeft explained that the business accelerator represents the current mode of start-up business development. She noted that while the approach is similar to that of business incubators, it differs in its emphasis on mentoring scientists to be business savvy and its three-stage system of choosing businesses to help. Ms. Hoeft went on to provide the committee with an overview of the business accelerator process, beginning with the application process and on through a 12-week "camp" where selected applicants make presentations to potential investors. She also pointed out that selected applicants are provided with a stipend to help them prepare to make their presentations to potential investors, which, she explained, is a critical step in the accelerator approach because it provides start-ups with much-needed funding before investors provide additional money. Ms. Hoeft also noted that the 12-week camp also provides investors the opportunity to offer advice to start-ups.

Mr. Edwards echoed Ms. Hoeft's remarks, adding that HD3 is a pipeline developer in that it feeds companies into the venture capital pipeline. He pointed out that HD3 is the only such accelerator in New Mexico. Mr. Edwards also explained that there are very few funds in New Mexico that offer gap funding, which comes between the time a start-up begins and the time it receives venture capital funding. He also emphasized that New Mexico has a significant resource in its research and development assets, but that potential needs to be better harnessed.

Questions and comments from the committee included:

- how potential businesses discover HD3;
- that applicants range from individuals to small companies; and
- how it would be helpful to have some type of mechanism similar to the one in Texas that would help pay people at HD3.

Technology Tax Incentives

Richard Anklam, president and executive director, New Mexico Tax Research Institute (NMTRI), provided the committee with testimony regarding New Mexico's tax policy, particularly as it relates to new business development. He began with an outline of the NMTRI's principles of good tax policy, which emphasize adequacy, efficiency, equity, simplicity, comprehensiveness and accountability. Mr. Anklam went on to explain that New Mexico imposes a fairly high burden on new business development, comparing the state's various taxes to those of nearby states. He also noted that New Mexico tax policy toward development of technology-related business is very piecemeal and that while the state's corporate income tax has remained largely unchanged for decades, its gross receipts taxes have seen explosive growth in narrow deductions and erosion of the retail base.

Mr. Anklam went on to discuss tax pyramiding, which he explained occurs when a general tax, such as New Mexico's gross receipts tax, is charged on things like business-to-business sales and becomes embedded as part of the cost of the ultimate goods or services. He

offered several examples of this.

Next, Mr. Anklam discussed New Mexico's use of tax incentives, which he explained tend to be a little more broadly based than narrowly focused gross receipts tax legislation. He indicated that New Mexico is more reliant on incentives than other states to be competitive because the incentives reduce the otherwise high effective tax rate imposed by the general tax structure.

Mr. Anklam went on to note that it is difficult to use targeted tax credits to make New Mexico's taxes more competitive with other states, pointing out that firms considering new investments in New Mexico must navigate through a complex and uncertain tax credit and incentive system to understand the cost of doing business in the state. He also indicated that the state and local business tax system is almost certainly impeding economic growth and that without any incentives, New Mexico is simply not competitive with other states.

Mr. Anklam concluded by noting that while New Mexico's tax policy worked well in the 1960s, the world has changed. He suggested that the state's overall tax structure should be thoughtfully reviewed and perhaps incrementally reformed.

Questions and comments from the committee included:

- the large size of the complete list of tax incentives that New Mexico offers;
- the effect of the single sales factor;
- how some pyramiding relief was offered by a bill passed during the 2012 session, but the bill also contained other tax policy changes; and
- the fact that companies do exist in New Mexico that use most, if not all, of the technology-related gross receipts tax incentives.

There being no further business, the committee adjourned at 3:30 p.m.