Analysis

**Item 40: Department of Geology and Mineral Industries**

**Information Technology Remediation Plan**

**Analysts:** John Terpening and Sean McSpaden

**Request:** Acknowledge receipt of a report on the progress of the tactical IT remediation plan jointly developed with the Office of the State Chief Information Officer (OSCIO), as directed by the Legislature; and allocate $713,907 from the Emergency Fund and increase the Other Funds expenditure limitation by $67,547 in the Mined Land Regulation and Reclamation program to implement recommendations from the plan.

**Recommendation:** Acknowledge receipt of the report, allocate $554,808 from the Emergency Fund for the Geologic Survey and Services program, authorize the establishment of two Information Technology positions (1.00 FTE), and increase the Other Funds expenditure limitation by $64,754 for the Mined Land Reclamation and Regulation program, to implement the IT remediation plan recommendations.

**Analysis:** Attached to SB 5512 (2015), the budget bill for the Department of Geology and Mineral Industries (DOGAMI), was a budget note requiring DOGAMI to work with the OSCIO to conduct an assessment of the IT related operations within the Department. The assessment was completed as directed and submitted as a report to the Legislature during the 2016 session. Following that report, DOGAMI was directed to partner with the OSCIO to jointly develop a tactical IT remediation plan, based off the completed IT assessment, and report to the May meeting of the Emergency Board, including any requests for additional resources to carry out the plan.

The tactical plan includes requests for resources to address the following areas identified in the IT assessment: establishing offsite backups of all data in accordance with state standards; transition of the agency’s core IT infrastructure to OSCIO Enterprise Technology Services (ETS) shared services; immediate lifecycle replacement of desktop and laptop hardware that is at least five years old; funds for contracted IT services and software licensing costs; and establishment of two permanent IT positions to assist in the transition of IT services and to provide sustainable day-to-day IT operations management support.

The Legislative Fiscal Office (LFO) recommendation has reduced the amount from the original request to reflect funding already included in the existing agency budget for IT related costs. The LFO recommendation includes $180,308 General Fund for IT hosted services through OSCIO ETS. This includes server hosting, storage and backups, email, and LAN and WAN services. These costs are ongoing and should be included in the agency’s 2017-19 base budget. The agency, however, is directed to work with OSCIO to further evaluate opportunities to leverage the use of OSCIO enterprise GIS server infrastructure and software, and to share costs for data storage with other agencies that have a need to access DOGAMI geospatial data, including LIDAR. The rollup cost estimate for these services will be contingent on the data storage and usage rates established by ETS and approved by the Legislature during the 2017 session.
The LFO recommendation includes $161,442 General Fund for the lifecycle replacement of outdated desktop and laptop hardware. Of this amount, $125,038 is a one-time cost, as the agency is expected to implement a more staggered approach to lifecycle replacement of desktop and laptop hardware going forward.

The recommendation includes $34,373 General Fund for additional software licenses and $13,500 General Fund for contracted IT services to assist with some programming and development costs. These costs are one-time and should phase-out, however, the agency is directed to further evaluate its software licensing and IT contracting needs going forward and may elect to include additional funding for these purposes in a Policy Option Package in the 2017-19 budget request.

The recommendation includes two positions, one limited duration full-time ISS 8 position (0.50 FTE) and one permanent full-time ISS 5 position (0.50 FTE), totaling $165,185 General Fund. The ISS 5 position, totaling $87,650 fulfills the agency’s need for an on-site IT support position and will be included in the 2017-19 base budget. The expected rollup costs for this position in 2017-19 is $159,193 General Fund. The ISS 8 position is recommended as limited duration due to its role in assisting with the transition of IT services to ETS and the future strategic IT planning for the agency. This role is projected to take about three years. As such, the agency is expected to request this position be included in a Policy Option Package in the 2017-19 budget request, at which time the 2017 Legislature may discuss the permanency of the need for the position and its appropriate classification going forward.

Finally, the LFO recommendation includes an increase of $64,754 Other Funds expenditure limitation for the Mined Land Reclamation and Regulation program’s share of these IT related costs. The rollup estimate for these costs in 2017-19 is $133,702 Other Funds.

The Legislative Fiscal Office recommends acknowledging receipt of a report on the tactical IT remediation plan, allocating $554,808 from the Emergency Fund to the Geologic Survey and Services program, authorizing the establishment of two positions (1.00 FTE), and increasing the Other Funds expenditure limitation by $64,754 for the Mined Land Reclamation and Regulation program, to implement the IT remediation plan recommendations.
Request:  Report on work done to address the Information Technology Assessment conducted by the Office of the State Chief Information Officer (OSCIO) as directed by a Budget Note in Senate Bill 5512 (2015) by the Department of Geology and Mineral Industries (DOGAMI).

Allocate $713,907 reserved in the State Emergency Fund for the Geologic Survey and Services Program to comply with the recommendations of the OSCIO.

Increase Other Funds expenditure limitation by $67,547 for the Mineral Land Regulation and Reclamation Program to comply with the recommendations of the OSCIO.

Establish one new, permanent full-time ISS 5 position (0.54 full-time equivalent); and one new, permanent full-time ISS 8 position (0.54 full-time equivalent).

Recommendation:  Acknowledge receipt of report.  Approve the request with the following modifications:

Allocate $557,441 reserved in the State Emergency Fund for the Geologic Survey and Services Program to comply with the recommendations of the OSCIO. One-time costs of $14,730 for set up; and $125,038 for IT Hardware should phase out.

Increase Other Funds expenditure limitation by $65,046 for the Mineral Land Regulation and Reclamation Program to comply with the recommendations of the OSCIO. One-time costs of $5,200 for set up; and $3,111 for IT Hardware, should phase-in.

Approve the request for two positions, contingent on a complete review of classification and representation by the Human Resource Services Division, and make the ISS 8 position a limited duration position and direct the agency to request a continuation of the position in a policy option package in their 2017-19 Agency Request Budget.

Discussion:
Background
The 2015 Legislature requested that OSCIO complete an assessment of DOGAMI’s information technology operations and business organization and report on that assessment during the 2016 Legislative Session.  The report identified crucial gaps in DOGAMI’s technology model and identified key concerns which included:

- Risk of loss of data and data breaches for all data storage devices
- Lack of physical security for all data storage devices
- Noncompliance with state-wide IT security policies and procedures

OSCIO made recommendations that addressed the key concerns and recommended the agency develop a plan and budget and request funding to implement the plan in the 2017-19 biennium.  DOGAMI was in agreement with OSCIO recommendations but wanted to address immediate risk concerns as quickly as possible and indicated that to legislative committees during the 2016 Legislative Session.
The Interim Joint Ways and Means Natural Resources Subcommittee and the Joint Legislative Committee on Information Management and Technology (JLCIMT) accepted the Legislative Fiscal Office’s recommendation that DOGAMI and OSCIO develop and present a DOGAMI tactical IT remediation plan to the JLCIMT and the Emergency Board in May 2016, including any request for additional resources to carry out the plan. The agency will also develop a plan and supporting budget request for long-term issues in the agency’s 2017-19 biennial budget request.

Emergency Board Request

DOGAMI is requesting funding to carry out an immediate plan that addresses the area of greatest risk which is loss of data, and data breaches; and moves the agency onto the standard shared services platform for information technology.

The agency is requesting General Fund for the Geology Survey and Services Program (GSS) and Other Fund expenditure limitation for the Mineral Land Regulation and Reclamation Program (MLRR) for the following items:

<table>
<thead>
<tr>
<th>Request*</th>
<th>GSS</th>
<th>MLRR</th>
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<tbody>
<tr>
<td>One-time setup costs, and annual hosted services fees for ETS services</td>
<td>$188,535</td>
<td>$31,460</td>
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<tr>
<td></td>
<td>$180,308</td>
<td>$31,460</td>
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<tr>
<td>Two permanent FTE positions to manage the transition to shared services and provide IT management and operations to the agency going forward.</td>
<td>$195,318</td>
<td>$21,702</td>
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<td>$167,818</td>
<td>$21,702</td>
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<tr>
<td>Lifecycle replacement of aging computer hardware to replace all or part of the PCs’ that are at least five years old.</td>
<td>$175,753</td>
<td>$3,470</td>
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<td></td>
<td>$161,442</td>
<td>$3,470</td>
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<tr>
<td>Contracted IT services to fill on-demand needs for specialized technology skills in the development of the data sharing program.</td>
<td>$13,500</td>
<td>$1,500</td>
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<td>$13,500</td>
<td>$1,500</td>
</tr>
<tr>
<td>Software licensing required for the agency on an annual or semi-annual basis.</td>
<td>$140,801</td>
<td>$9,415</td>
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<td>$34,373</td>
<td>$6,915</td>
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<td>TOTAL</td>
<td>$713,907</td>
<td>$67,547</td>
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<td>REVISED TOTAL</td>
<td>$557,441</td>
<td>$65,047</td>
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*Original request in black; revised request in bold

The request covers costs for 13 months, June 2016 through June 2017. CFO has worked with the agency since the submission of their request to identify additional existing resources in their 2015-17 biennial budget that should be re-directed to the proposed changes in the agency’s information technology structure. CFO recommends the General Fund request be reduced by $156,465 and the Other Fund limitation request be reduced by $2,502 to reflect the identifiable information technology funding in their current budget. This is an estimate, since DOGAMI
continues to be hampered by prior business practices which have made it very difficult to determine the agency’s actual expenditures in prior biennia.

The agency has indicated one-time costs for set up; in addition, the agency is requesting funding for lifecycle replacement of ageing computer hardware. DOGAMI has many outdated computers, but once replaced there will be minor on-going cost for a routine replacement cycle. For GSS $125,038 should be identified as one-time costs.

In preparation for the 2017-19 biennial budget the agency and DAS Chief Financial Office will be reviewing DOGAMI’s current service level budget to identify appropriate account line shifts. In addition, one-time costs identified in the agency request would phase out and ongoing costs would increase as appropriate.

The agency has allocated the cost of these IT changes between its divisions in a variety of ways depending on the service being provided. The alternatives include, actual usage (network and voice services); actual needs of the program (workstation and printers); and a percentage split that reflects the pre-eminent IT requirements of the GSS program.

The agency has requested two full-time, permanent positions. One is an ISS 5 which would be the IT support staff within the agency to assist in the transition and also provide ongoing, and on-site support for staff. The second position is an ISS 8 who will lead the transition and provide management of the agency’s IT operations going forward. The estimated cost for these two positions in the 2017-19 biennium is $400,652.

The ISS 8 position is needed during the agency’s transition to a more stable platform and to design and implement a data hosting and migration plan for the LIDAR data. At a minimum, the agency anticipates the transition could take three years and potentially longer. The agency could also use the position to improve its data sharing capacity to address the needs of external entities to use DOGAMI’s data. Finally, DOGAMI is part of the State Geospatial Data Sharing Workgroup which is directed to comprehensively study the current practices, issues, barriers, and concerns regarding geospatial data sharing and to also identify possible solutions to the barriers that prevent data sharing among Oregon public bodies. The goal of the work group is to draft suggested language for a legislative concept for JLCIMT introduction in the 2017 Legislative Session.

The recommendation to make the ISS 8 position limited duration reflects that the agency is unsure whether it will continue to have the significant IT needs it has now, indefinitely into the future. Solutions could be implemented by the end of the next biennium or the Data Sharing Workgroup may develop a plan that could incorporate this position or could make this position unnecessary. It will also provide an opportunity to examine the revenue sources supporting the position, and whether the position should be funded in part with Other Funds or Federal Fund revenue. Making the position limited duration requires it be actively managed to address the changing needs of the agency.

**Legal Reference:**
Allocation of $557,441 from the State Emergency Fund to supplement the appropriation made by chapter 657, section 1, Oregon Laws 2015, for the Department of Geology and Mineral Industries, Geologic Survey and Services Program for the 2015-17 biennium.
Increase the Other Funds expenditure limitation established by chapter 657, section 2(2), Oregon Laws 2015, for the Department of Geology and Mineral Industries, Mineral Land Regulation and Reclamation Program, by $65,046 for the 2015-17 biennium.
April 25, 2016

The Honorable Senator Peter Courtney, Co-Chair
The Honorable Representative Tina Kotek, Co-Chair
State Emergency Board
900 Court Street NE
H-178 State Capitol
Salem, OR 97301-4048

Dear Co-Chairs:

**Nature of the Request**

The Oregon Department of Geology and Mineral Industries (DOGAMI) respectfully requests permission to appear before the May 2016 Emergency Board for the purpose of:

1. Reporting on its work in responding to and acting in accordance with the Information Technology (IT) Assessment conducted by the Office of the State Chief Information Officer (OSCIO) per the SB 5512 (2015) budget note.
2. Requesting $713,907 in General Fund allotment increase for the Geological Survey and Services Program and $67,547 in Other Fund budget limitation increase for the Mineral Land Regulation and Reclamation Program to comply with the recommendations of the OSCIO IT Assessment.

**Agency Action**

As part of SB 5512 (2015) budget note, DOGAMI was directed to work with the OSCIO to conduct a comprehensive assessment of the agency’s information technology related operations. A report on this comprehensive assessment was submitted to the Legislative Fiscal Office in January 2016 and jointly presented by DOGAMI and the OSCIO to the Joint Legislative Committee on Information Management and Technology and to the Joint Legislative Ways and Means Subcommittee on Natural Resources during the 2016 legislative session.

DOGAMI and the OSCIO have developed a budget and roadmap for implementing the key recommendations of the IT Assessment. Those recommendations included:

1. DOGAMI must divest itself of the burden of maintaining a “server room” in its offices at the Portland State Office Building and move all possible IT infrastructure operations into the State’s shared services platform.
2. DOGAMI must recruit sufficient full-time IT staff to manage the move into the shared services platform and to provide sustainable IT operations management in the future.
3. DOGAMI must review its IT procurement and budgeting processes in order to properly track its support needs and spending.
4. DOGAMI must develop a sustainable plan for maintaining the large Lidar data that are used by many Oregon state agencies and outside entities and represent the largest part of the agency’s IT footprint.
5. DOGAMI must present a budget to the May 2016 Emergency Board for the purposes of implementing the above recommendations.

DOGAMI has taken the following steps towards implementing those recommendations:
1. DOGAMI has worked with the personnel resources that the OSCIO and Enterprise Technology Solutions (ETS) have provided in order to build a comprehensive budget that aligns with services ETS provides. DOGAMI’s future IT plan utilizes those services to the fullest extent possible.
2. The assistance provided by the OSCIO staff on job rotation has helped the agency build structure and proper categories in its accounting and procurement for IT.
3. DOGAMI has worked closely with ETS on a data hosting and migration plan for the agency’s Lidar data and continues to explore promising avenues with regard to potential data sharing models. DOGAMI is also participating in the State Geospatial Data Sharing Workgroup which the Legislature has convened.

**Action Requested**

DOGAMI respectfully requests that the Emergency Board:

1. Allocate $713,907 in General Funds to the Geological Survey and Services Program (GS&S) in order to support the recommended improvements in the agency’s IT systems and to establish a sustainable IT budget. These costs include:
   a. $14,732 in one-time setup costs, and $173,803 in annual hosted services fees for ETS services.
   b. $195,318 for its share of two permanent FTE positions to manage the transition to shared services and provide IT management and operations to the agency going forward.
   c. $175,753 for the lifecycle replacement of aging computer hardware to replace 70% of GS&S PCs’ that are at least five years old.
   d. $13,500 for contracted IT services to fill on-demand needs for specialized technology skills in the development of the data sharing program.
   e. $140,801 for software licensing required for the agency on an annual or semi-annual basis.
2. Increase the Mineral Lands Regulation and Reclamation Program’s (MLRR) Other Fund budget limitation by $67,547 for the purpose of this program’s direct costs plus its share of the DOGAMI agency-wide IT systems. These costs include:
   a. $5,200 in one time setup costs and $26,260 in annual hosted services fees for ETS services.
   b. $21,702 for its share of two permanent FTE positions to manage the transition to shared services and provide IT management and operations to the agency going forward.
   c. $3,470 for the lifecycle replacement of MLRR PC’s that are at least five years old.
   d. $1,500 for MLRR’s share of contracted IT services to fill on-demand needs for specialized technology skills for the development of the data sharing program.
   e. $9,415 for software licensing required for the agency on an annual or semi-annual basis.

Thank you for your time and consideration.

Respectfully,

Brad J. Avy, Director
Department of Geology and Mineral Industries

cc: Alex Pettit, State Chief Information Officer
    Darrel Landrum, Office of the Chief Information Officer
    Cathy Connolly, Office of the Chief Financial Officer
    John Terpening, Legislative Fiscal Office
    Sean McSpaden, Legislative Fiscal Office