

**NEBRASKA INFORMATION TECHNOLOGY COMMISSION**

Project Proposal - Summary Sheet  
Biennial Budget FY2011-2013

Project #47-01  
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Project #	Agency	Project Title
47-01	NET	Satellite Replacement Project

**SUMMARY OF REQUEST (Executive Summary from the Proposal)**

[Full text of all proposals are posted here: <http://nitc.ne.gov/nitc/documents/fy2011-13/index.html>]

NET's current satellite lease that supports the broadcast service interconnection between the NET origination center in Lincoln and the State-owned and licensed transmitters and translators will expire in January 2012. Per Legislative approval and appropriation, the NETC commissioned a study conducted by Skjei Telecom to analyze current NET television, radio and educational distribution requirements, to investigate available distribution methods (e.g. satellite, fiber optic, and microwave), and to recommend a distribution system for the years 2012 thru 2022.

Four alternative primary means of distributing the NET programming in the 2012 - 2022 timeframe were investigated:

1. Satellite Transmission (as at present)
2. Fiber optic digital terrestrial distribution
3. Microwave transmission
4. Hybrid Network Nebraska fiber plus "last mile" microwave

The lowest cost alternative meeting NET's requirements is the fiber optic alternative. Therefore, the Nebraska Educational Telecommunications Commission is making a capital request of \$3,912,100 over the State of Nebraska's next five biennium budgets to support ten years of interconnection requirements:

Item:	FY2012	FY2013	FY2014	Next 7 Yrs
Satellite Lease	\$218,000	\$523,200	\$523,200	0
Fiber Lease	0	0	\$148,200	\$2,074,800
Non-recurring capital costs	0	\$150,000	\$274,700	0
Total	\$218,000	\$673,200	\$946,100	\$2,074,800

This would save approximately \$404 K over the next best option over the 10 year life of the project.

**FUNDING SUMMARY**

	Total	Prior Exp	FY11 Appr/Reappr	FY12 Request	FY13 Request	Future Add Request
<b>Capital Expenditures</b>						
Hardware	\$0					
Software	\$0					
Network	\$0					
Other	\$3,912,100			218,000	673,200	3,020,900
<b>Total</b>	<b>\$3,912,100</b>	<b>\$0</b>	<b>\$0</b>	<b>\$218,000</b>	<b>\$673,200</b>	<b>\$3,020,900</b>
<b>Total Request</b>	<b>\$3,912,100</b>	<b>\$0</b>	<b>\$0</b>	<b>\$218,000</b>	<b>\$673,200</b>	<b>\$3,020,900</b>

**PROJECT SCORE**

Section	Reviewer 1	Reviewer 2	Reviewer 3	Mean	Maximum Possible
Goals, Objectives, and Projected Outcomes	15	13	12	13.3	15
Project Justification / Business Case	25	21	20	22.0	25
Technical Impact	20	11	18	16.3	20
Preliminary Plan for Implementation	9	8	9	8.7	10
Risk Assessment	10	8	8	8.7	10
Financial Analysis and Budget	20	15	18	17.7	20
<b>TOTAL</b>				<b>87</b>	<b>100</b>

**REVIEWER COMMENTS**

Section	Strengths	Weaknesses
Goals, Objectives, and Projected Outcomes	<ul style="list-style-type: none"> <li>- Since the goals of the project are to continue existing service the scope of the project is clear are the beneficiaries and deliverables.</li> <li>- The goal of this proposal is clearly stated. First, they want to maximize efficiency of the television and radio broadcast spectrum and second to take full advantage of the network Nebraska partnership. Is also clear that statewide broadcast is a statutory requirement.</li> <li>- The project was clearly defined in the Skjei Telecomm report with very specific goals and objectives.</li> </ul>	
Project Justification / Business Case	<ul style="list-style-type: none"> <li>- The proposal outlines alternatives and recommends the most cost-effective and efficient method to achieve project goals. Reduced cost points to the realization of efficiencies achieved by using Network Nebraska for the transport rather than more costly alternatives. All taxpayers benefit from the primary deliverable, television/radio service, and lower costs ensure service without additional tax burden.</li> <li>- It's good to see that NET wants to transform its satellite delivery to more of a fiber delivery over the next four years. But it is also good to see that the lowest-cost alternative is the fiber optic one.</li> <li>- Costs were clearly identified</li> </ul>	<ul style="list-style-type: none"> <li>- When they address the cost savings by switching to fiber delivery. They say it "should" result in reduced maintenance costs. I'm a little concerned with the term should.</li> </ul>
Technical Impact	<ul style="list-style-type: none"> <li>- The proposed solution, as noted previously, conforms with NITC/OCIO network efforts. The proposal adequately considers cost-savings alongside risk and the impact to sites that will lose access to services. The proposal includes training/professional development and a transition strategy.</li> <li>- The technical issues appear to have been thought out. The technical issues associated with this change appear doable and the technical capacity of the existing Network Nebraska infrastructure will be sufficient. NET indicates they will meet all NITC technical standards.</li> <li>- Technical impact is appropriate and points out compatibility with the existing infrastructure of Network Nebraska.</li> </ul>	<ul style="list-style-type: none"> <li>- I think we will need to conduct a technical analysis of what this may or may not do to the existing Network Nebraska infrastructure. If there is any degradation of service to existing customers or if there is a need for additional bandwidth that will need to be addressed.</li> </ul>
Preliminary Plan for Implementation	<ul style="list-style-type: none"> <li>- A clear timeline is provided along with recognition of the need for staff training. While the specific project team members aren't indicated, it is clear that thought has been given to personnel that will participate and lead the project.</li> <li>- They have a fairly good outline of the major milestones associated with this multiyear project.</li> <li>- The steps are well defined and supported by current business practices.</li> </ul>	<ul style="list-style-type: none"> <li>- The ongoing maintenance costs projected at 10% may be lower than expected as the current industry standard for such equipment is 18% - 20% annually.</li> <li>- The plan does seem very preliminary and I'm not sure everything has been addressed at this point</li> <li>- Staff is not identified by position - although that may be intentional at this point. Training may be under estimated.</li> </ul>
Risk Assessment	<ul style="list-style-type: none"> <li>- An important consideration in assessing risk is clarity around service level expectations. NET has vast experience in the delivery of radio/television and knows well what resources are required to mitigate risk. The consideration of an "over the air" repeater strategy for resilience demonstrates an understanding of the risks endemic to the proposed delivery method.</li> <li>- NET has identified some of the risks that may occur when the full transition to fiber takes place.</li> <li>- Risk is acknowledged and appears to have a mitigation plan.</li> </ul>	<ul style="list-style-type: none"> <li>- I'm not sure if NET has identified all of the risks. I'm especially concerned if the fiber transition does not take place, what's the fallback position?</li> </ul>

Section	Strengths	Weaknesses
Financial Analysis and Budget	<ul style="list-style-type: none"> <li>- Cost of proposed delivery method as well as alternatives is clear. The selected transport offers the greatest cost avoidance while incurring acceptable risk.</li> <li>- I do think there's a pretty good estimates, given the stage of the project.</li> </ul>	<ul style="list-style-type: none"> <li>- Given the lack of specificity in the plan as it now exists, I don't think we can be sure that all of the potential costs have been identified.</li> </ul>

**TECHNICAL PANEL COMMENTS**

Technical Panel Checklist				Technical Panel Comment
	Yes	No	Unknown	
1. The project is technically feasible?	✓			
2. The proposed technology is appropriate for the project?	✓			
3. The technical elements can be accomplished within the proposed timeframe and budget?	✓			

**STATE GOVERNMENT COUNCIL COMMENTS**

The State Government Council recommends that this project be categorized as a Tier 1 project.

**NITC COMMENTS**

- Tier 1 (Highly Recommended. Mission critical project for the agency and/or the state.)