

IT Project Proposal Report - Detail
Agency: 047 - EDUCATIONAL TELECOMMUNICATIONS COMM
Budget Cycle: 2013-2015 Biennium **Version: AF - AGENCY FINAL REQUEST**

IT Project : Radio Transmission Replacement

General Section

Contact Name : Michael Winkle	E-mail : mwinkle@netad.unl.edu	Agency Priority : 2
Address : 1800 North 33rd St	Telephone : 402-472-3611	NITC Priority :
City : Lincoln		NITC Score :
State : Nebraska	Zip : 68503	

Expenditures

IT Project Costs	Total	Prior Exp	FY12 Appr/Reappr	FY14 Request	FY15 Request	Future Add
Contractual Services						
Design	0	0	0	0	0	0
Programming	0	0	0	0	0	0
Project Management	0	0	0	0	0	0
Data Conversion	0	0	0	0	0	0
Other	75,000	0	0	37,500	37,500	0
Subtotal Contractual Services	75,000	0	0	37,500	37,500	0
Telecommunications						
Data	0	0	0	0	0	0
Video	0	0	0	0	0	0
Voice	0	0	0	0	0	0
Wireless	0	0	0	0	0	0
Subtotal Telecommunications	0	0	0	0	0	0
Training						
Technical Staff	0	0	0	0	0	0
End-user Staff	0	0	0	0	0	0
Subtotal Training	0	0	0	0	0	0

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Expenditures

IT Project Costs	Total	Prior Exp	FY12 Appr/Reappr	FY14 Request	FY15 Request	Future Add
Other Operating Costs						
Personnel Cost	0	0	0	0	0	0
Supplies & Materials	0	0	0	0	0	0
Travel	0	0	0	0	0	0
Other	0	0	0	0	0	0
Subtotal Other Operating Costs	0	0	0	0	0	0
Capital Expenditures						
Hardware	160,000	0	0	92,500	67,500	0
Software	0	0	0	0	0	0
Network	90,000	0	0	45,000	45,000	0
Other	0	0	0	0	0	0
Subtotal Capital Expenditures	250,000	0	0	137,500	112,500	0
TOTAL PROJECT COST	325,000	0	0	175,000	150,000	0

Funding

Fund Type	Total	Prior Exp	FY12 Appr/Reappr	FY14 Request	FY15 Request	Future Add
General Fund	325,000	0	0	175,000	150,000	0
Cash Fund	0	0	0	0	0	0
Federal Fund	0	0	0	0	0	0
Revolving Fund	0	0	0	0	0	0
Other Fund	0	0	0	0	0	0
TOTAL FUNDING	325,000	0	0	175,000	150,000	0
VARIANCE	0	0	0	0	0	0

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IT Project: Radio Transmission Replacement

EXECUTIVE SUMMARY:

See attached NITC form.

Attachments:

Worksheet in H 14-15 Biennial Budget NITC report Radio Transmission.xls

GOALS, OBJECTIVES, AND OUTCOMES (15 PTS):

See attached NITC form.

PROJECT JUSTIFICATION / BUSINESS CASE (25 PTS):

See attached NITC form.

TECHNICAL IMPACT (20 PTS):

See attached NITC form.

PRELIMINARY PLAN FOR IMPLEMENTATION (10 PTS):

See attached NITC form.

RISK ASSESSMENT (10 PTS):

See attached NITC form.

FINANCIAL ANALYSIS AND BUDGET (20 PTS):

See attached NITC form.

Attachments:

Radio FM cost estimate .xls

Nebraska Information Technology Commission

Project Proposal Form

Funding Requests for Information Technology Projects

FY2013-2015 Biennial Budget

IMPORTANT NOTE: Project proposals should only be submitted by entering the information into the Nebraska Budget Request and Reporting System (NBRRS). The information requested in this Microsoft Word version of the form should be entered in the NBRRS in the "IT Project Proposal" section. The tabs in the "IT Project Proposal" section coincide with sections contained in this Microsoft Word version of the form. Information may be cut-and-pasted from this form or directly entered into the NBRRS. **ALSO NOTE** that for each IT Project Proposal created in the NBRRS, the submitting agency must prepare an "IT Issue" in the NBRRS to request funding for the project.

Project Title	Radio Transmission
Agency/Entity	NETC (Nebraska Educational Telecommunications Commission)

**Project Proposal Form
FY2013-2015 Biennial Budget Requests**

Notes about this form:

1. **USE.** The Nebraska Information Technology Commission (“NITC”) is required by statute to “make recommendations on technology investments to the Governor and the Legislature, including a prioritized list of projects, reviewed by the technical panel...” Neb. Rev. Stat. §86-516(8). “Governmental entities, state agencies, and noneducation political subdivisions shall submit all projects which use any combination of general funds, federal funds, or cash funds for information technology purposes to the process established by sections 86-512 to 86-524. The commission may adopt policies that establish the format and minimum requirements for project submissions.” Neb. Rev. Stat. §86-516(5). In order to perform this review, the NITC and DAS Budget Division require agencies/entities to complete this form when requesting funding for technology projects.
2. **WHICH TECHNOLOGY BUDGET REQUESTS REQUIRE A PROJECT PROPOSAL FORM?** See the document entitled [NITC 1-202](http://nitc.ne.gov/standards/) “Project Review Process” available at <http://nitc.ne.gov/standards/>. Attachment A to that document establishes the minimum requirements for project submission.
3. **COMPLETING THE FORM IN THE NEBRASKA BUDGET REQUEST AND REPORTING SYSTEM (NBRRS).** Project proposals should only be submitted by entering the information into the NBRRS. The information requested in this Microsoft Word version of the form should be entered in the NBRRS in the “IT Project Proposal” section. The tabs in the “IT Project Proposal” section coincide with sections contained in this Microsoft Word version of the form. Information may be cut-and-pasted from this form or directly entered into the NBRRS. **ALSO NOTE** that for each “IT Project Proposal” created in the NBRRS, the submitting agency must prepare an “IT Issue” in the NBRRS to request funding for the project.
4. **QUESTIONS.** Contact the Office of the CIO/NITC at (402) 471-7984 or ocio.nitc@nebraska.gov

Section 1: General Information

Project Title	Radio Transmission Replacement Project
Agency (or entity)	NETC (Nebraska Educational Telecommunications Commission)

Contact Information for this Project:

Name	Stacey A. Decker
Address	1800 N 33rd
City, State, Zip	Lincoln, NE
Telephone	402-472-9333
E-mail Address	sdecker@netnebraska.org

Section 2: Executive Summary

Provide a one or two paragraph summary of the proposed project. This summary will be used in other externally distributed documents and should therefore clearly and succinctly describe the project and the information technology required.

The replacement of aging FM translators K227AC (Culbertson 92.7 FM), K224CH (Max 93.3 FM), K208CB (Harrison 89.5 FM), K219CE (Fall City 91.7 FM) and FM Antenna and Feed Lines at KHNE FM (Hastings/Grand Island 89.1 FM) and KXNE FM (Norfolk 89.3 FM). These replacements would be done to reduce rising maintenance costs and to reduce downtime. The NET Radio system is the State Primary and State Relay for the Nebraska Emergency Alert System (EAS).

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Section 3: Goals, Objectives, and Projected Outcomes (15 Points)

1. Describe the project, including:
 - Specific goals and objectives;
 - Expected beneficiaries of the project; and
 - Expected outcomes.

The goal is to replace 20+ year old FM Translators, FM Antennas and Feed Lines with more reliable and efficient equipment. The NET Radio listeners, Nebraska commercial broadcasters and Nebraska residents relying on “over the air” Emergency Alerts will benefit from this project. The replacement of the 20+ year old FM translators, FM antennas and feed lines will increase reliability and reduce operating costs.

2. Describe the measurement and assessment methods that will verify that the project outcomes have been achieved.

The measurement and assessment methods will be monitoring and feedback from NET Radio listeners, Nebraska commercial broadcasters that use NET Radio as their primary EAS monitoring station. The project should positively impact the NET operating budget which by reducing annual maintenance costs.

3. Describe the project’s relationship to your agency comprehensive information technology plan. This project is being done to maximize the efficiencies of the radio system NET has the obligation of managing on behalf of the State of Nebraska.

Section 4: Project Justification / Business Case (25 Points)

4. Provide the project justification in terms of tangible benefits (i.e. economic return on investment) and/or intangible benefits (e.g. additional services for customers).

The current FM Translators at K227AC (Culbertson 92.7 FM), K224CH (Max 93.3 FM), K208CB (Harrison 89.5 FM), K219CE (Fall City 91.7 FM) have become unreliable and costly to maintain. The FM antennas and feed lines at KHNE FM and KXNE FM have recently required additional attention and cost. All the equipment requested replaces inventory that is 20+ years old. Purchasing and installing new hardware will greatly increase reliability, efficiency and reduce maintenance cost.

5. Describe other solutions that were evaluated, including their strengths and weaknesses, and why they were rejected. Explain the implications of doing nothing and why this option is not acceptable. The nature of this project allows few solutions other than replacement of equipment or termination of services in the affected areas. By doing nothing the broadcast areas will have interruptions in service performance for NET Radio and the State Primary and State Relay of the Nebraska (EAS).
6. If the project is the result of a state or federal mandate, please specify the mandate being addressed. This Project is in compliance with the Nebraska Emergency Management Agency’s (NEMA) Nebraska EAS Plan, Section 3 stating “The NE SP/SR Network is comprised of all Nebraska Educational Telecommunications (NET) radio transmitters, plus KVNO radio in Omaha.”

**Project Proposal Form
FY2013-2015 Biennial Budget Requests**

Section 5: Technical Impact (20 Points)

7. Describe how the project enhances, changes or replaces present technology systems, or implements a new technology system. Describe the technical elements of the project, including hardware, software, and communications requirements. Describe the strengths and weaknesses of the proposed solution.

The project will replace a 20+ year technology with more efficient and reliable equipment. The new equipment has shown to be more efficient and reliable. NET has completed a multi-year project replacing all of the main FM Transmitters, and have documented a substantial reduction in maintenance costs while increasing reliability. The replacement of the FM Antennas and Feed Lines will complete the upgrade to the statewide system, maintain current coverage, reduce power requirements and increase reliability.

8. Address the following issues with respect to the proposed technology:

- Describe the reliability, security and scalability (future needs for growth or adaptation) of the technology.

The replacement equipment will use the most recent technology and should take these systems into the next decade.

- Address conformity with applicable NITC technical standards and guidelines (available at <http://nitc.ne.gov/standards/>) and generally accepted industry standards.

The replacement equipment is considered Industry Replacement Standard for this type of system.

- Address the compatibility with existing institutional and/or statewide infrastructure.

These systems are completely compatible with existing power and physical construction of NET's towers and buildings.

Section 6: Preliminary Plan for Implementation (10 Points)

9. Describe the preliminary plans for implementing the project. Identify project sponsor(s) and examine stakeholder acceptance. Describe the project team, including their roles, responsibilities, and experience.

NET is planning to purchase, install and operate the FM translators, FM antennas and feed lines. NET is the project sponsor. NET Radio listeners, Nebraska commercial broadcasters that use NET Radio as their Primary EAS monitoring station are the stakeholders.

NET will enter into contract with a qualified insured tower maintenance contractor to install the FM Antennas and Feed Lines.

NET will act as the project manager for this project.

10. List the major milestones and/or deliverables and provide a timeline for completing each.

The major deliverable for this project is the removal of the old system and replacement of the new system. The time frame for this work is eight (8) days per FM Antenna and Feed Line and two (2) days per FM Translator from receipt of system and getting the tower crew on site. Complete installation would be completed in late summer of 2014.

11. Describe the training and staff development requirements.

No additional training or staff development is required. Operations will be seamless to present day workflow.

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12. Describe the ongoing support requirements.

No additional support is required, other than routine operational maintenance.

Section 7: Risk Assessment (10 Points)

13. Describe possible barriers and risks related to the project and the relative importance of each. The FM Translators and FM Feed Lines need to be replaced soon or NET Radio Listeners, Nebraska Commercial Broadcasters and Nebraska residence relying on “over the air” Emergency Alerts will experience additional downtime and diminished reception.

14. Identify strategies which have been developed to minimize risks.

This purchase will be made under the State Purchasing Guidelines to minimize risk. Any assistance with contractual parties will have bonded and insurance requirements to assure protection to the State of Nebraska.

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Section 8: Financial Analysis and Budget (20 Points)

15. Financial Information

The “Financial” information tab in the Nebraska Budget Request and Reporting System (NBRRS) is used to enter the financial information for this project (NOTE: For each IT Project Proposal created in the NBRRS, the submitting agency must prepare an “IT Issue” in the NBRRS to request funding for the project.)



Worksheet in H
14-15 Biennial Budget

FM Radio Transmission Replacement Project

Item	Description	Vendor	Quantity	Estimated Cost	Extended Cost	
Nautel VS 300-N	300 Watt FM Transmitter	RF Specialties	4	\$ 5,000.00	\$ 20,000.00	K227AC, K224CH
BW Broadcast RBRX1 FM	FM Receiver	SCMA	4	\$ 2,500.00	\$ 10,000.00	K208CB, K219CE
				Sub total	\$ 30,000.00	
3 1/8" Hard Line	Feed Line	Dielectric	1	\$ 45,000.00	\$ 45,000.00	KHNE
SPX FM DCR-C10	FM Antenna	Dielectric	1	\$ 65,000.00	\$ 65,000.00	
Labor	Tower Crew	SFT	1	\$ 37,500.00	\$ 37,500.00	
				Sub total	\$ 147,500.00	
FY 2014 Total					\$ 177,500.00	
3 1/8" Hard Line	Feed Line	Dielectric	1	\$ 45,000.00	\$ 45,000.00	KXNE
SPX FM DCR-C10	FM Antenna	Dielectric	1	\$ 65,000.00	\$ 65,000.00	
Labor	Tower Crew	SFT	1	\$ 37,500.00	\$ 37,500.00	
FY 2015 Total					\$ 147,500.00	
Total Project					\$ 325,000.00	