

Project #	Agency	Project Title
47-04	Educational Telecommunications Commission	Final DTV Transmitter Conversion Project

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

[Full text of all proposals are posted here: <http://www.nitc.state.ne.us/nitc/documents/fy2007-09/index.html>]

NET has met DTV conversion deadlines established by the FCC and now simulcasts in both legacy analog NTSC and in DTV. Federal regulations demand that analog transmission ceases at the end of the simulcast period in February 2009. This requirement for NET to shut down its analog broadcasts will mean changing or replacing some transmitters, antenna systems, and associated equipment not covered by prior state appropriations.

For each transmission site, NET has selected one of the two current simulcast channels for digital-only broadcast by February of 2009, with the other channel then being abandoned to the FCC. At some sites the final selection will be the present DTV channel, requiring less upfront cost, while most will retain the present analog channel number. Long-term savings will result in the latter cases due to the reduced electrical power needed to broadcast at the lower channel frequencies now associated with analog. In each case, however, capitol costs will be associated with analog shut-down. NET will incur these expenses in FY 2007-2008 and 2008-2009, with the removal of obsolete transmitters and antennas occurring in FY's 2009-2010 and 2010-2011.

NEBRASKA INFORMATION TECHNOLOGY COMMISSION

Project Proposal - Summary Sheet  
Biennial Budget FY2007-2009

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FUNDING SUMMARY

Capitol Expenditure Projects Draft Budgets

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Analog Shutdown		Item	FY06-07	FY07-08	FY08-09	FY09-10	FY10-11	Project Total
KHNE Hastings		Upgrade chnl 29 transmitter to digital				\$120,000		\$120,000
KLNE Lexington		Remove chnl 3 antenna & transmission line					\$50,000	\$50,000
KMNE Bassett		Convert Harris Platinum from NTSC to DTV			\$120,000			
		Chnl 7 DTV filter			\$35,000			
KPNE North Platte		Remove chnl 15 antenna & transmission line					\$50,000	\$50,000
		Convert Harris Platinum from NTSC to DTV			\$120,000			
Culbertson Translator		Chnl 9 DTV filter			\$35,000			
		Remove chnl 16 antenna & transmission line					\$50,000	\$50,000
Max/Benkelman Translator		Translator replacement	\$56,100					
		DTV mask filter	\$3,500					
Wauneta Translator		Translator replacement		\$56,100				
		DTV mask filter		\$3,500				
KRNE Merriman		Digital exciter			\$1,000			
		DTV mask filter			\$3,500			
KTNE Angola		Convert Harris Platinum from NTSC to DTV			\$120,000			
		Chnl 12 DTV filter			\$35,000			
		Detailed tower analysis			\$20,000			
		Top-mount chnl 12 antenna			\$250,000			
		1100 ft of 4 inch transmission line			\$180,000			
		Install antenna & transmission line			\$150,000			
		Remove chnl 17 antenna & transmission line					\$50,000	\$50,000
Chadron Translator		Convert Harris Platinum from NTSC to DTV			\$120,000			
		Chnl 13 DTV filter			\$35,000			
Crawford Translator		Remove chnl 24 antenna & transmission line					\$50,000	\$50,000
		Digital exciter		\$1,000				
Harrison Translator		DTV mask filter		\$3,500				
		Translator replacement		\$15,500				
KUON Lincoln		DTV mask filter		\$3,500				
		Translator replacement		\$15,500				
Beatrice Translator		Convert Harris Platinum from NTSC to DTV			\$120,000			
		Chnl 12 DTV filter			\$35,000			
Blair Translator		Remove chnl 40 antenna & transmission line					\$50,000	\$50,000
		Digital exciter		\$1,000				
Falls City Translator		DTV mask filter		\$3,500				
		Digital exciter		\$1,000				
Pawnee City Translator		DTV mask filter		\$3,500				
		Translator replacement	\$56,100					
KXNE Norfolk		Translator replacement	\$56,100					
		DTV mask filter	\$3,500					
KXNE Norfolk		Tune chnl 16 exciters to chnl 19			\$5,000			
		Chnl 19 DTV filter			\$35,000			

Capitol Expenditure Projects Draft Budgets

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		Item	FY06-07	FY07-08	FY08-09	FY09-10	FY10-11	Project Total
		Upgrade chnl 19 transmitter to digital				\$60,000		
		Remove chnl 16 antenna & transmission line					\$50,000	\$50,000
Decatur Translator		Digital exciter		\$1,000				
		DTV mask filter		\$3,500				
Neligh Translator		Digital exciter		\$1,000				
		DTV mask filter		\$3,500				
Niobrara Translator		Digital exciter		\$1,000				
		DTV mask filter		\$3,500				
Vertigre Translator		Translator replacement		\$15,050				
		DTV mask filter		\$3,500				
KYNE Omaha		Detailed tower analysis				\$20,000		
		Top-mount chnl 17 antenna				\$250,000		
		Antenna installation				\$100,000		
FY Totals			\$ 178,800.00	\$ 147,650	\$ 1,415,000	\$ 550,000	\$ 350,000	\$ 2,641,450
USDA Federal Grant			\$ 178,800.00	\$ 116,150.00				
FY Totals with grant applied				\$ 31,500.00	\$ 1,415,000.00	\$ 550,000.00	\$ 350,000.00	\$ 2,346,500.00

PROJECT SCORE

Section	Reviewer 1	Reviewer 2	Reviewer 3	Mean	Maximum Possible
3: Goals, Objectives, and Projected Outcomes	15	14	14	14.3	15
4: Project Justification / Business Case	25	24	24	24.3	25
5: Technical Impact	20	19	16	18.3	20
6: Preliminary Plan for Implementation	10	9	8	9.0	10
7: Risk Assessment	10	9	6	8.3	10
8: Financial Analysis and Budget	20	17	16	17.7	20
<b>TOTAL</b>				<b>92</b>	<b>100</b>

**REVIEWER COMMENTS**

Section	Strengths	Weaknesses
3: Goals, Objectives, and Projected Outcomes	- Excellent description, all questions answered. Mandated change. - Well defined with specific goals	- A little more detail on the current users of educational services would be useful. How many classrooms/teachers actually use the programs provided by this service. What are the benefits to these users?
4: Project Justification / Business Case	- All very appropriate. - Clearly defined mandate for federal compliance. Tangible benefits for a large section of Nebraska. - Federal Mandate is cited.	
5: Technical Impact	- Again well described - Plan leverages existing investment.	- Since they are getting rid of the analog completely, the customers are being forced to either get a digital TV or a digital tuner for their analog TV. Mandated timeline from the feds does not leave NET any flexibility. -Not all technology items have a life of three years, this is broadly misstated. The NITC does have video and audio standards that may apply to some of the systems being discussed here. No mention of the satellite interconnections to this distribution system and that truly is a single point of failure.
6: Preliminary Plan for Implementation	- Implementation plan is clear and addresses federal mandates. - Appropriate planning is listed for this project.	
7: Risk Assessment	- Great description of risks.	- If FCC would change any mandates or extend them a second time that could affect the project. - No discussion of satellite interconnections and potential risk from that aspect of the project. Finding qualified radio engineering staff will be a risk going forward.
8: Financial Analysis and Budget	- The possibility of getting matching federal funds.	- This reviewer could not tell if all funds being requested were from the General Fund or the NebSat Cash Fund.

**TECHNICAL PANEL COMMENTS**

Technical Panel Checklist				Technical Panel Comment
	Yes	No	UNK	
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 this project be categorized as a "mandate".

**NITC COMMENTS**

- Mandate (Required by law, regulation, or other authority.)