I.

## **Centers of Excellence Application**

Approved by the Centers of Excellence Commission January 5, 2010

Requesting Institution or Foundation:  NOTE: Boxes will expand as information is entered.			
Name of Requesting Institution or Foundation: North Dakota State University			
Project Title:	Center for Sensors, Communications and Control		
Amount of Request:	\$ 2,800,000		
Amount of Matching Funds: \$5,600,000			
Number of New Private Sector Jobs to be Created: 72-80+			
List Private Sector Participants: SNAPS Holding Company, Pedigree Technologies, Intelligent InSites, PureChoice			
Campus contact person or principal investigator			
Name: Matt Noah		Title or Position:	Senior Project Manager, Center for Nanoscale Science & Engineering
Mailing Address:	Mailing Address: NDSU Dept. # 4310, PO Box 6050 Fargo, North Dakota 58108-6050		
Telephone Number:	(701)-231-8956 Fax Number: (701)-231-5306		
E-mail Address:	matt.noah@ndsu.edu		
Name of local developer (if any) familiar with project: n/a			

## **Essential Qualifying Factors:**

1. The center must be an institution of higher education under the control of the State Board of Higher Education or a non-profit university-related or college-related foundation of an institution of higher education under the control of the board. All applications must go through the process established by their university or college and

be signed by their institution's president. Each campus may submit up to two applications per round of funding.

- 2. The institution or foundation must be working in partnership with the private sector and create high value private sector employment opportunities.
- 3. Two dollars of matching funds are required for each dollar of state funds. These matching funds cannot be state funds and must be either funds from private sector partners or funds facilitated through the collaboration of the private sector partners with other funding entities. Of the two dollars of matching funds, at least one dollar must be cash, of which at least fifty cents must be from the private sector.
- 4. Funds cannot be used for infrastructure, to supplant funding for current operations or academic instructions, or to pay indirect costs.
- 5. Workforce may not be the primary need addressed by a Center.

## II. Approval by Institution:

The approval and recommendation by the president/dean of the university or college is required to insure the funding request is consistent with the mission and development plans of the institution. Please sign below to indicate your approval and recommendation. (Please type in name, of President/Dean when submitting electronic copies)

426/2010

Signature of President / Dean

2

## **III. Executive Summary** (limited to one page)

The Center is a response to private sector partners who have identified technical expertise at NDSU in the areas of sensors, communications and control. The previous body of work performed, in particular, at the NDSU Center for Nanoscale Science & Engineering (CNSE) has created this opportunity to collaborate with the private sector partners identified herein. The previous body of work includes federal programs in sensor technology and communications. It includes prior work under State Centers of Excellence in electronics and integrated systems.

This new center for sensors, communications and control builds upon and accelerates, for the first time, a cluster of expertise in these functional disciplines. This is a departure from past centers whose mission has been more general, e.g. electronics, systems. Technology clusters are what enabled geographic regions such as "Silicon Valley" to lead the nation/world in semiconductors, and "Medical Alley" to lead the nation/world in medical device development.

Our private sector partners were chosen because of their leading-edge positions in sensor, communications and control markets. Together, we believe jobs and economic activity will be created in North Dakota as a result of this Center. Pedigree Technologies and Intelligent InSites are relatively small companies that have grown from start-up to "emerging" status and have doubled their North Dakota payrolls in the past 12 months. SNAPS Holding Company has grown in North Dakota and evolved in to a global IT business process outsourcing company. SNAPS Holding Company's expertise in communications has led it to a position where acquisition and organic growth will lead it in to new markets that require NDSU expertise. PureChoice is a Minnesota sensing, communications and control company that will grow in North Dakota upon a successful engagement with the new Center of Excellence.