1. **Goal**

To increase substantially basic research, applied development, and training on the OU Norman Campus (and Norman Campus programs at OU-Tulsa), and in collaboration with the Health Sciences Center Campus as appropriate, in areas related to national defense, security and intelligence (DSI).

2. **Strategy**

Establish a Strategic Initiative in Defense, Security and Intelligence (DSI) Research to open new spaces of opportunity for researchers; establish appropriate administrative frameworks that support business processes and personnel on certain types of applied research and development contracts that are not presently being pursued; provide new modes of support to researchers seeking to operate in the DSI space; drive institutional change in how faculty and University leaders engage among themselves, with industry and with government agencies; and more effectively translate research outcomes into practicable solutions for society.

3. **Characteristics**

The DSI Initiative shares many characteristics of the previous four (Radar, Integrative Life Sciences, Applied Social Research, K20 Education and Community Renewal) but also differs from them in a very important way. Whereas the previous four followed the traditional model of faculty pursuing lines of inquiry driven mostly by personal interest and funded by agencies with which OU already is strongly engaged, the DSI Initiative emphasizes unlocking the significant unrealized potential resident within existing faculty across numerous disciplines via engagement with agencies and companies for which OU does not presently receive significant support, but for which significant support exists – and doing so by adding processes, structures, and assistance mechanisms to facilitate new types of activities.

4. **Disciplines Involved**

At first glance, the phrase “defense, security and intelligence research” appears at best to represent a narrow spectrum of science and engineering problems for a select few individuals having high security clearance, and at worst anathema to personal intellectual curiosity as the fundamental tenant of research and creative activity. In reality, neither is true. DSI encompasses a broad array of both basic and applied research and development challenges, ranging from new modalities for energy generation and efficiency to public health, human behavior, the characterization and prediction of the natural environment, and the evolution of societies toward particular views based upon education, technology, mobility, economic status, and communication in written, oral, and visual forms. In short, virtually every discipline on the Norman Campus (including OU-Tulsa programs) can be involved.

5. **Differences Between DSI Research and Traditional Basic Inquiry-Driven Scholarship**

Obtaining R&D funding from so-called mission agencies (e.g., DOD, DOE, NASA), particularly DOD, requires an approach entirely different from that used to pursue support from “basic research” agencies for which OU faculty are most familiar (e.g., NSF, NIH). First, such funding is built upon one-on-one relationships between researchers and program officers. Second, mission agencies, again especially DOD, seek researchers to meet specific programmatic needs and typically are not interested in unrelated ideas, however intellectually exciting they might be. Third, institutional reputation and “presence on the scene” are key factors in DSI funding success. In addition to researchers having a strong presence in archive publications, which is foundational to research success in any venue, researchers and their institutions must be ever present at key DSI conferences and trade shows. Researchers and their institutions must have meaningful partnerships with major corporations, which can speak effectively on behalf of the institution and help facilitate new opportunities. Additional differences can be found in the complete write-up on the DSI Initiative.

6. **Initial Components of the Initiative**

The DSI Initiative involves a number of specific initial actions and components, many of which already have begun.

- Identify and vigorously pursue a few areas of DSI engagement, giving consideration to the availability and interest of appropriate personnel to both lead and perform the work.
- Conduct strategic visits by faculty and other researchers to agency programs and selected private companies, and target specific OU researchers to attend key national conferences.
- Establish a Center for Applied Research and Development (CARD) to administratively house applied R&D staff researchers, to efficiently and economically accommodate the sorts of business processes required of some government contracts, and to help promote OU DSI activities to external interests.
• Hire an individual to lead a new office of DSI Programs within the Office of the Vice President for Research.
• Engage an external consulting firm in Washington, DC (competitively chosen to be a joint activity between Patton Boggs, LLC and Hyjek & Fix) to assist with all aspects of the DSI Initiative.
• Begin a structured assessment of DSI R&D capabilities across campus and match them with DSI programs in the Federal government and potential partnership opportunities in private industry.

7. Expected Benefits

The new Strategic Initiative in Defense, Security and Intelligence (DSI) Research is intended to move OU into an area of research and development where it has long been deficient, and do so without forsaking tenets of inquiry-driven investigation that have been and must remain the hallmark of the academic research enterprise. Expected benefits include:

• Creation of a much broader opportunity space for faculty research and development, particularly in areas of application, significant growth in the number of non-faculty researchers, and engagement by all researchers in a much more coordinated, systematic fashion;
• Increased breadth in research opportunities, basic and especially applied, for our students at both the graduate and undergraduate levels, and exposure to new ideas and approaches via mentoring by new non-faculty researchers;
• Increased stature for the University as a comprehensive research institution, with a greater degree of recognition in key areas of national concern and deeper, broader engagements with private industry;
• More effective translation of basic research outcomes into operational technologies and services for society, especially in areas of national interest, as well as new modalities of engagement with private industry, as exemplified by CARD;
• More effective alignment between OU’s R&D portfolio and that of the Federal government, going well beyond agencies for which OU has traditionally received the bulk of its funding (e.g., NSF, NIH);
• Considerable progression in OU’s administrative frameworks and business processes, leading not only to greater funding opportunities but also to options for driving necessary change in other areas;
• Increasing the value of OU to the State by expanding OU’s R&D portfolio and positioning it to take a leadership role in important priority areas such as aerospace engineering, alternative fuels, and biotechnology;
• Moving OU in directions that will increase the opportunity and probability of success in establishing a meaningful presence by another Federal agency.

8. Relationship to Aspire 2020

The DSI Initiative addresses one of the most important components of Aspire 2020, namely, improving OU’s engagement in areas of research where it traditionally has been weak, especially with respect to the Department of Defense. Success in the DSI Initiative will have collateral impacts on OU’s research competitiveness as well, another Aspire 2020 objective, bringing new resources to the table in seeking traditional NSF and NIH grant funding and also expanding OU’s involvement with other mission agencies such as NASA, DOE, EPA and USDA.