

COOPERATIVE RESEARCH CENTRE FOR SPATIAL INFORMATION

STRATEGIC PLAN 2011

VISION: SPATIAL ENABLING AUSTRALIA AND NEW ZEALAND

The CRCSI will be widely recognised for its high impact, collaborative research that leads to accelerated industry growth, improved social well-being and a more sustainable environment.

CONTEXT WITHIN WHICH WE OPERATE AND OUR RESOURCES

The CRCSI is an unincorporated joint venture set up under the Cooperative Research Centre Program of the Australian Commonwealth Government. The purpose is to build critical mass in research ventures between end-users and researchers tackling clearly articulated, major challenges for the end-users. The term of the CRCSI runs from January 2010 to June 2018. The 100 or so partners of the CRCSI comprising ten 'Essential Participants', seventy small to medium sized companies and twenty 'Other' Participants from the government, private and research sectors have agreed to provide \$160 million (cash and inkind). The spatial information industry is one of the fastest growing in the world.

OUR VALUES

We will be **collaborative** by nature in our relationships, strive for **excellence** in our research, and always aim to be **transformational** in our impact.

WHAT SUCCESS WILL LOOK LIKE

By 2018 the CRCSI will be recognised world-wide for the high impact of our research, especially in the enabling role we played in creating a single, multi-GNSS network in Australia, and adding value to the development of the Australia-New Zealand Spatial Marketplace. A thriving spatial industry will acknowledge the central role of the CRCSI. We will be considered an essential partner for complex SI research collaborations both locally and internationally. Spatial education will be improved as a result of the CRCSI's activities, significantly enhanced by 50 or more new CRCSI PhD's. The transition of the CRCSI from the CRC Program to a permanent entity owned by the Australian Spatial Consortium will be complete.

OUR STRATEGIC OBJECTIVES

1. NATIONAL PRECISE POSITIONING (RESEARCH PROGRAM 1)

Objective 1: To conduct research that solves the signal processing and economic impediments to the creation of a sparse, continental-scale, precise positioning multi-GNSS network operating at 2 cm (x and y) accuracies.

2. AUTOMATED GENERATION OF SPATIAL INFORMATION PRODUCTS (RESEARCH PROGRAM 2)

Objective 2: To develop our research capability to enable ourselves and our partners to become Australia's leading centres for automated processing of information from terrestrial, airborne and satellite platforms and from existing data sources.

3. INFRASTRUCTURE FOR AN AUSTRALIA NEW ZEALAND SPATIAL MARKETPLACE (RESEARCH PROGRAM 3)

Objective 3: To identify and solve the research issues that will enable the operators of the Australia and New Zealand Spatial Marketplace to construct the infrastructure, operate the marketplace and to enable our CRCSI partners to create value-added applications with new technologies.

4. APPLICATIONS (PROGRAM 4)

Objective 4: To include but not be limited to the realisation of high impact use of the CRCSI's research in the following areas: **Agriculture and Natural Resources affected by Climate Change (4.1)** through the creation of a biomass and carbon monitoring system for application on farms at sub-paddock scale on a weekly basis, and through improved environmental monitoring; **Defence (4.2)** by adapting the emerging capabilities of CRCSI's research portfolio; **Energy Utilities (4.3)** to enable remote monitoring of the condition of built assets in near real time; **Health (4.4)** by helping agencies to spatially enable their clinical databases; and **Urban development (4.5)** to build new tools, paradigms and theories including agglomeration economy and greyfield regeneration to support sustainable urban development.

5. EDUCATION (PROGRAM 5)

Objective 5: By 2012 the CRCSI will have a plan to improve the skilled capability of the Australian and New Zealand workforce by working with the education providers. As a priority by 2018 the CRCSI will have invested in at least 50 PhD's with our university partners.

6. INDUSTRY DEVELOPMENT AND SUSTAINABILITY (PROGRAM 6)

Objective 6: Industry development; to establish a program of assistance for our partners, in particular 43pl, that helps them find ways to develop and exploit their IP; and to establish an innovation program for 43pl members in particular and the industry generally that enables them to systematically improve the management of their internal innovation and R&D programs. These programs seek to encourage investment in R&D by spatial businesses.

Objective 7: Commissioned research; is expected to generate an additional \$10M of activity in the CRCSI (from January 2010) tackling complex research needs involving multiple partners from both the public and the private sectors. Initially most of this research will be taken on around the existing core expertise. In time this will grow into new areas of expertise.

COLLABORATION

Strategic collaboration will be sought where it enhances the effectiveness of the CRCSI. In addition to our Australia and New Zealand partners, the CRCSI will be an active partner in the Global Spatial Network for Networks, the alliance of CRC-like entities from around the world. The CRCSI will continue to grow its relationship with CEODE and Wuhan University (China), GEOIDE and TECTERRA (Canada) and with other selected organisations.

RISKS

The strategic risks are: that other research developments domestically and internationally render the CRCSI's research programs obsolete; we fail to retain and nurture a cadre of eminent researchers; we fail to attract an adequate cohort of postgraduate candidates; we lose our reputation as the leading spatial research institution in Australia and New Zealand; we fail to generate sufficient independent funding and support to transition to a self-sustaining entity; we fail to continue to meet the expectations of our partners.

PERFORMANCE INDICATORS

1. A solution for the impediments of multi-GNSS signal processing and economic arguments for a continent-wide, ubiquitous, sparse, precise positioning network.
2. Wide recognition by our partners of the CRCSI's role in helping establish and value-add the Australia and New Zealand Spatial Marketplace .
3. An Educational Program that is judged to be transformational by our partners.
4. Demonstrable progress towards a becoming a self sustaining entity by 2018 and development of a transition plan to the Australian Spatial Consortium that is on schedule.