2nd INTERNATIONAL WORKSHOP: TOWARDS THE DEVELOPMENT OF AN R&D CLUSTER IN OKINAWA Executive Summary

Date: March 29-30, 2012

Organizer: OIST Graduate University

Cooperation: Okinawa Prefectural Government

Participants: Representatives from local industry, academia and government sectors as well as entrepreneurs and experts in Japan and abroad. 40 in total (19 from Okinawa, 14 from mainland

Japan, 7 from overseas)

Theme: 1) Strategies to Attract, Retain and Develop Human Capital

2) Financial and Business Resources to Promote Entrepreneurship

3) International and National Networking and Physical Infrastructure Planning

Workshop Results

- Various players including industry, investors, universities and governments should take a role in cluster development. In particular, the existence of an outstanding basic research institution is an essential element. <u>However, any</u> <u>one entity acting alone or in isolation is insufficient to build and sustain</u> the cluster.
- Okinawa should establish a new autonomous organization that is responsible for planning, coordinating, implementing and monitoring programs related to R&D cluster development.

(Recommended Specifications)

- 1. <u>Autonomous operation</u>: It is an independent and non-profit legal entity that is not owned by any government, university, or other organization. Funding to operate and conduct the activities of the organization is multi-sourced.
- 2. <u>Clear purpose and vision</u>: Aiming to build a global brand for Okinawa as a hub of Asia and a gateway connecting Japan to the world.
- 3. <u>Governance with local and international representation</u>: It is governed by a Board comprised of representatives of local stakeholder organizations as well as global leaders in entrepreneurship etc.
- 4. Highly expert personnel to deal with diverse agenda
- 5. Flexible and results-oriented implementation

(Timeframe for the Establishment)

With cooperation of relevant stakeholders in industry, academia and government, *a task force (e.g. Preparation Committee) should be formed in the first half of FY2012*, with the aim of *launching the organization within FY2013*.

Okinawa should take <u>a holistic approach</u> to develop the entrepreneurial environment by <u>implementing diverse projects in parallel</u>. At the workshop, <u>45 action items in 7 areas</u> were recommended as programs that impact over the short or long-term. Major items are as follows:

1. Education

- Create strong STEM programs in high schools in collaboration with universities (unique Super Science High School-like programs for Okinawan schools).
- Encourage Okinawan students to participate in global science, technology, and engineering competitions.
- Create a partnership among Okinawa institutions of higher education on the topic of Okinawa development.

2. Recruitment

 Create high-quality international childcare, primary and secondary schools for local and foreign children. Implement support programs for foreign families, such as those to identify and create job opportunities for spouses and to provide emergency information in English.

3. Promotion of Entrepreneurship

- Publicize the success stories of entrepreneurship training programs in Okinawa, such as the IT Frogs Project.
- Create an Okinawa Entrepreneurial Boot-camp.
- Create an Okinawa Youth Entrepreneurship Association to support the training and education of students on the topic of entrepreneurship.

4. Business Resources

- Identify a niche market where Okinawa can be globally competitive and direct resources on building capacity in this sector.
- Create an Open Resource Center, focused on a particular field or industry, to enhance innovation, and accelerate product development.

5. Financial Resources

- Create university/college-based venture funds.
- Create education and mentoring opportunities for future directors of venture funds in Okinawa by identifying experienced global venture capitalists to develop programs and provide mentoring.

6. Networking

- Attract and develop world-class, issue-based conferences to draw diverse, international groups to visit Okinawa.
- Plug into the "Uchinanchu" (Okinawan) Global Network to promote Okinawa to the world: Identify and cultivate connections with supporters of Okinawa in mainland Japan and abroad with specialized skills and expertise.

7. Infrastructure

- Create a "Transfer Zone" in the OIST future zone that bridges OIST-to-industry and industry-to-OIST via incubation and technology transfer.
- Continue efforts to open the market for low cost carriers to compete to service Okinawa's access to and from regions in Asia: Explore measures to encourage direct access to destinations in the U.S., Europe, and Asia (e.g. Singapore).