

# FOSS Software Development Projects under the USP-APDIP Microgrants Scheme

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# Background

- **Background**
- Submissions
- POS System
- TikiMaps
- 2-dimensional flows
- Fijian Spell-Checker
- Micro-Payment system
- On-line examination

- partnership between the University of the South Pacific and APDIP / IOSN
- competitive grants scheme
- 20 grants provided for software development projects (each US\$ 900)
- projects need to release their software as Free/Open Source Software (FOSS)
- completely new development or enhancement
- may not require proprietary software to build or employ

# Submissions

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1. Develop a Point of Sale (POS) System for the retail environment in the Pacific Islands, by Avon-Solutions, Vanuatu
2. Development of TikiMaps inside TikiWiki.org Content Management System, by SOPAC
3. An adaptive mass conservative streamline tracking software for two-dimensional flows, by I. Hussein and Z. Li, USP
4. Fijian Spell Checker for OpenOffice, by W. Blanke and P. Geraghty, USP

# Submissions cont.

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5. Development of a web based on-line examination system using a combination of free and open source software for a secondary school in Fiji Islands, by P. Narayan, USP.
6. Developing a Component-based NetPay Micro-payment System, S. Chandra, USP.

# POS System

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**objective** POS system suitable for use in a retail environment in the Pacific Islands

**expected outcomes** allow owner of small, family-run shops to better manage stocks and sales

**beneficiaries** small businesses in a retail environment

**committee suggestions** details provided were insufficient, proposal needs to be revised to include clearer objectives, methodologies and outcomes of the project

**awarded** awaiting return of signed contract

# TikiMaps

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**objective** develop new features for TikiMaps

**expected outcomes** to be described

**beneficiaries** to be described

**project description** hire students to develop

new features in TikiMaps – 2 objectives:

1. make TikiMaps competitive with commercial packages

2. local open source capacity building

**committee suggestions** details provided were

insufficient, proposal needs to clarify

objectives, methodologies and outcomes

**awarded** awaiting return of signed contract

# 2-dimensional flows

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**objective** implement an adaptive, mass conservative streamline tracking software for 2-d flows

**expected outcomes** FOSS implementation

**beneficiaries** Fluid engineers

**project description** implement FOSS based on a recent research result achieved by one team member, Dr. Zhenquan Li

**committee suggestions** too narrow in its aim. Suitable as a strictly academically oriented research

**awarded** awaiting return of signed contract

# Fijian Spell-Checker

**objective** create OpenOffice spelling dictionary for  
Fijian

**expected outcomes** strengthen the use of Fijian in print

## **beneficiaries**

- newspapers, religious groups, governments, or educational institutions
- students learning Fijian
- the Fijian language

**project description** convert existing Fijian dictionary by

**committee suggestions** also consider other spell  
checkers

**awarded completed**

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# Micro-Payment system

**objective** implement NetPay micro-payment system

**expected outcomes** implementation of Broker and Vendor systems

**beneficiaries** e-commerce in low-cost products & services

**project description** provides component-based implementation of an off-line micro-payment model. Customers buy e-coins from broker, store them and pay by passing this information to vendor.

**awarded** signed contract received

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# On-line examination

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- **On-line examination**

**objective** create on-line examination system for Rishikul Sanatan College

**expected outcomes** operational on-line examination system, increased involvement of staff and students in IT

**beneficiaries** teachers, students, schools

**project description**

**committee suggestions** project must either build on existing FOSS e-learning software or provide compelling reason for not doing so

**awarded** awaiting return of signed contract