



GOVERNMENT OF SAMOA

SAMOA SECOND INFRASTRUCTURE AND ASSET MANAGEMENT
PROJECT (SIAM II)

COMPONENT 5.01: LAND ADMINISTRATION AND SURVEY

SPATIAL INFORMATION AGENCY
Policy Paper on Spatial Information Sharing

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Policy Paper¹

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1 BACKGROUND

A very major part of Samoa's economic development and standard of living is dependent on land related activities. In addition to basic agriculture and food production there is forestry, transport and tourism. Most of Government of Samoa's (GoS) goals in these areas are reliant on the application of accurate and consistent spatial information – much of which is either now, or will be, held in one form or another in the databases of the various agencies. Thus, spatial information is a vital commodity to an increasing range of government functions. Its importance is often understated, but the absence of accurate, timely and accessible spatial information has a significant impact on government performance in all spheres of responsibility.

The GoS has indicated its intention to establish an agency² with oversight of the policy and regulatory framework needed to ensure that these databases are up to date and accessible so that spatial information is shared for the national good. This signals the following overarching policy statement which is recommended for immediate adoption by the GoS:

- *It is the policy of the Government of Samoa to continually facilitate open access to spatial information resources to improve management and development of the Nation and to discourage costly duplication of data collection, maintenance and application system (GIS) development.*

To give effect to this, further key policies need to be developed. In the beginning, these primarily revolve around the subjects of (i) information sharing and (ii) data custodianship. For the purposes of this discussion the former is considered to inherently include the need to develop policy guidelines concerning pricing/charging for data. Further policies, such as marketing of spatial information in both public and private sectors are important, but are not considered priority at this time in the embryonic information industry of Samoa.

2 INTRODUCTION

2.1 Need for policy

The effective application of GIS tools requires the ability to integrate spatial data. However, this in turn requires that the sources of data must be identifiable and accessible.

The GoS recognises the growing activity in the development and application of GIS in Samoa. There is concern that the introduction of these systems without the proper mechanisms for effective sharing of information will not deliver the full benefit to Samoa. A clear policy framework is needed to:

- eliminate unnecessary duplication in the collection and maintenance of spatial information;
- manage information on behalf of the community;
- provide a firm spatial data infrastructure for Samoa;
- assist in development of spatial information products;
- facilitate the collection of core data sets.

²The Spatial Information Agency (SIA) – See Position Paper : Technical Assistance Report No. 10

2.2 Scope of paper

It has been proposed that a national Spatial Information Agency (SIA) be formed to undertake the key policy formulation and implementation role in Samoa. The Agency will essentially be composed of the existing Technical Services Division of the Ministry of Natural Resources, Environment and Meteorology (MNREM).

This paper is meant to provide guidelines in the definition of policy which supports data sharing. It will establish the underlying concepts and will recommend the arrangements for the most effective exploitation of the GoS spatial information resources. The paper will cover the principles to be applied in policy development and, where appropriate, it describes the roles of agencies concerned.

2.3 Policy review

It will be a function of the SIA to foster the development of policy concerning spatial information; to recommend the adoption of policy to cabinet and to oversee the implementation of the policy in Samoa.

Policy should be reviewed periodically to ensure that Samoa remains abreast of international developments and to maintain relevance in a rapidly changing spatial information market.

3 POLICY

3.1 SHARING OF SPATIAL INFORMATION POLICY

POLICY:

- *Spatial information is a national asset, owned on behalf of the people by the GoS. In order to maximise the benefit of Samoa's assets it is the policy of the GoS that spatial information will be shared amongst agencies with due regard to the protection of privacy and confidentiality and subject to the prevailing policy on pricing of information.*

3.1.1 Introduction

The need to expand the concept of information sharing is emerging through the GIS Users Group.³ This is mainly for sharing between government agencies. A policy position should now be developed by the GoS to set mechanisms for broad sharing and to clarify the conditions which apply to the use of shared data.

The overarching goal of GoS policy is to maximise the use of its spatial information assets for the national good. Inherent in this goal is the principle that barriers to access to information for legitimate use in the pursuit of national goals should be as low as possible. Pricing of information presents itself as potentially one of the more significant barriers.

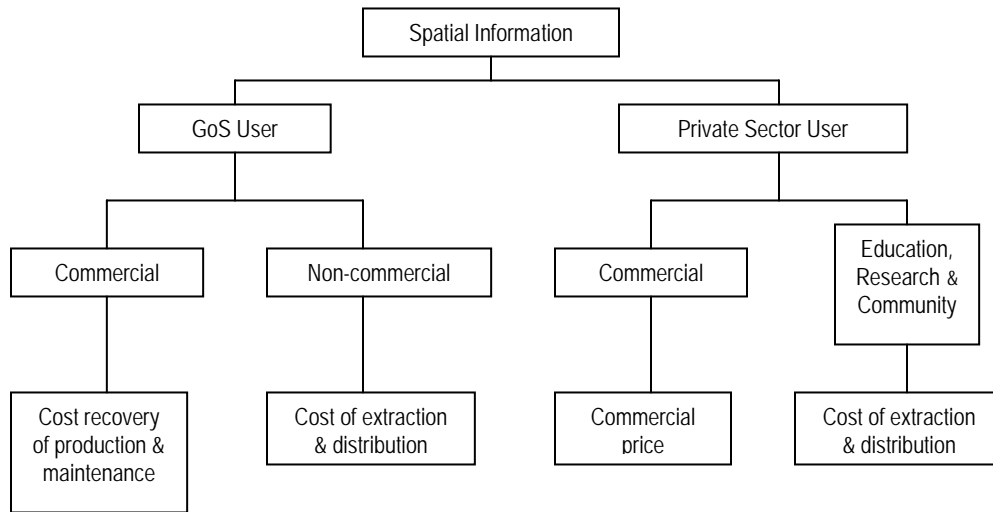
It could be argued that the costs of gathering the core spatial information assets of Samoa have been met from taxes as part of a community service obligation. While this may be the case it is nevertheless considered that access to information should not be based on a policy where there is no cost to user. Apart from anything else, use of an asset which is free encourages over-consumption and adds to the capacity difficulties facing the custodians of spatial information in maintaining supply.

³ See Spatial Information Agency Position Paper – Technical Assistance Report No.10. and GIS User Group - Minutes of Meetings 1,2 & 3

Spatial information is produced by a variety of agencies; for a variety of users; for a variety of applications under a variety of circumstances. It is recognised that the circumstances of production and distribution of spatial datasets varies considerably between GoS agencies. Because of these differences the application of one single policy for pricing will not achieve the goal of maximising community benefits.

The following tree diagram⁴ is an attempt to summarise the combinations which occur in sharing of information and the potential pricing outcomes for each. The terms used are defined in the following section.

Options Diagram:



3.1.2 Policy implementation guidelines

The following general principles should be applied when implementing the GOS policy on the sharing of spatial information between GoS Agencies and other users:

1. **Trusteeship:** Agencies do not own, but are the trustees of information held on behalf of the GoS. The emphasis is on cooperation through sharing rather than competition between agencies.
2. **Privacy:** Agencies cannot share information which infringes on individual privacy and confidentiality, national security or any other prohibited information.
3. **Copyright:** Maps and related spatial data are covered under Part 1 - Section 3 (1) (k) of the Copyright Act 1998. Under Section 17(4) the GoS claims the copyright when maps and related spatial data are produced by employees of the GoS. However, intellectual property is a complex area and IP is not always clear cut when spatial information is derived from a multitude of sources and integrated for specific use. Also, in the case of commissioned work (eg aerial photography) the commissioning contract should specify the GoS ownership of the original material.

⁴ Based on WALIS – www.walis.wa.gov.au

4. **Agreements:** A Deed of Agreement⁵ may be the appropriate instrument to set out the terms and conditions under which the spatial information may be used - without transferring ownership of the information – and the liability (if any) of the GoS. Agreements should be made to protect:
 - a. the government's interest in the spatial Information asset
 - b. the privacy and confidentiality of the spatial information;
 - c. the government from any liability for the misuse of information
 - d. the information from misuse after it is transferred;

5. **Use.** At the discretion of the CEO, the supplier agency may enter into a license or other appropriate agreement for the sharing of information. The agreement will provide a non-exclusive license to use GoS information for a particular purpose and specify, amongst other things, adherence to the SIAB Policy on metadata, the rights of the licensee to copy and to sell or otherwise distribute the information to another party. The spatial information may be shared for (a) Commercial or (b) Non-commercial use and agreements and licenses will reflect accordingly;
 - a. **Commercial Use:** Includes any use of information that is undertaken for the purpose of trade and for generating revenue, income or profits. Arrangements between GoS agencies or between an agency and the private sector to share information for commercial purposes must be by deed of agreement. The deed must address as a minimum the following:
 - Details of the metadata of the information being shared;
 - Parameters of allowable use, privacy and confidentiality and any other GoS sensitivity;
 - Terms charges and conditions – with penalties for misuse;
 - Extent of GoS liability in any modified or integrated spatial information product;
 - Conditions under which licensee may or may not provide copy information to a third party;
 In respect of a purchaser who is permitted to sell the information to one or more third parties, the following must also be included in the licence:
 - Payment schedule including royalties;
 - Transfer of any liability for data quality etc from GoS to the licensee – especially if it is intended to modify, value add or integrate the spatial information.
 - b. **Non-commercial use;**
 - Transfers to non GoS agencies, educational institutions, community groups, or private individuals for non- commercial use must also be on the basis of a deed of agreement as above;
 - Transfers between GoS agencies for non-commercial use may be based on an exchange of letters between CEOs of the respective agencies.

6. **Partnership:** An agreement in which a user agency may partner with a supplier agency to provide the technical skills and equipment to undertake data conversion. This is useful where an agency is a passive user and does not have in-house capacity to integrate the data into information which is needed for their purposes.

7. **Flexibility:** The CEO of each agency should have flexibility in entering sharing arrangements and determining prices to suit circumstances. For example information may be exchanged on a

⁵ See Attachment 1 for an example of a Deed of Agreement, recently used for supply of Spatial Information by MNREM.

- goodwill basis or some standing *quid pro quo* arrangements. The pricing guidelines should not preclude such arrangements where they provide for efficiency and achievement of the overall policy goals of the GoS.
8. **Cost of extraction & distribution:** These are based on the average cost of transferring the information as determined by the CEO. These could include computer processing, materials staff costs and some overheads. It does not include cost of data collection or maintenance
 9. **Cost recovery of production and maintenance:** The regular provision of spatial datasets to a GoS agency for commercial uses should be based on a price that recovers the cost of extraction and distribution plus a proportionate share of the capital cost of collection of the data and maintenance of the dataset.
 10. **Commercial price:** The price negotiated between the supplier agency and purchaser which provides for charging of royalties or other suitable compensation where the information is supplied for commercial use and where the GoS is entitled to a revenue return on the investment made in acquiring the spatial information.

3.2 CUSTODIANSHIP⁶ POLICY

POLICY:

- *The responsibility for all spatial information cannot belong to one agency. It is the policy of GoS that spatial information is best managed by the individual agencies with the greatest need to collect and maintain data which is essential for the achievement of a mandated responsibility. These agencies are in the best position to advise on the currency, completeness and limitations of their data bases.*

3.2.1 Introduction

The concept of custodianship is to assign to an agency exclusive rights and responsibilities for the collection of spatial information and to manage that information on behalf of Government of Samoa. The aim is to assure access to the information through a recognised and accountable point of contact. What follows covers:

- Principles applied to custodianship policy development
- Custodian role
- User role,
- Criteria for assigning custodianship.

3.2.2 Policy implementation guidelines

The general guidelines⁷ in defining and implementation of the custodian role include:

⁶ The alternate term "Stewardship" is preferred in some jurisdictions.

⁷ Reference:

WALIS – Western Australian Land Information System www.walis.wa.gov.au

ANZLIC – Australia New Zealand Land Information Council. www.anzlic.org.au

- (i) **Authoritative source:** By acting as the authoritative source of information the custodian becomes the preferred supplier. This overcomes the reliability and accuracy issues which very often are the result when allegedly identical information is held separately by several agencies. Implied here is the responsibility for ensuring *metadata* is recorded as required to enable a user to make a determination of the fitness for purpose.
- (ii) **Standard setting:** As custodian an agency agrees to set standards for the collection, classification, accuracy and quality of its information.
- (iii) **Access:** As the authoritative source the custodian agrees to maintain access and sharing of the information to the level and in the manner required by users and dictated by the policy of the GoS..
- (iv) **Accountability:** The responsibility of custodianship includes a commitment to be fully accountable for the integrity of information.

3.2.3 Responsibility of Custodian

(1) **General:** Agencies designated as custodians of a spatial information resource are responsible and accountable for the following:

- (i) Consulting with information users and stakeholders in the development of appropriate standards for information under their custody;
- (ii) Proposing standards to the SIA for the management of information under their custody;
- (iii) Maintaining the quality - currency, accuracy and completeness - of information under their custody;
- (iv) Ensuring information is accessible and readily available for government and other community users;
- (v) Safeguarding government interest through the use of information and to protect privacy and confidentiality;

(2) **Metadata:** Custodians will declare, through the mechanisms determined by the SIA, the status of the spatial information under their control. Without limiting any detailed metadata policy this should include:

- (i) Detailed information concerning data collection methods, integration and analysis techniques which may have been applied to various components of the source data;
- (ii) Information about the accuracy of source datasets, processing history and archival procedures used to manage the information;
- (iii) Information as appropriate about geodetic datums, map projections, scales and a data dictionary to facilitate transfer of data to user agency;
- (iv) Description of the content, quality and geographic extent of datasets;

3.2.4 Responsibility of User

In order to achieve the underlying objective of custodianship it is important that users have responsibilities commensurate with those of the custodian agency. These include:

- (i) Providing advice to the custodian of any errors or omissions in the information requested and received;
- (ii) Providing advice to custodians, well in advance, of any future need for their information to assist the custodian in preparing and planning;
- (iii) User agencies should not sell or release supplied information to a third party except it is covered by an agreement in the approved form;
- (iv) User agencies must cite the source when using information in any way.

Subject to the above, the user agency may use the information internally as it wishes. However, in the spirit (if not the letter) of the GoS policy on spatial information, a user should inform a custodian of any changes or improvements made to the information so that the upgraded information may be widely available.

3.2.5 Assignment of custodian

It is envisioned that the responsibility for assigning and reviewing custodianship will be exercised by the SIA. As a general rule, information custodianship should be assigned to an agency, rather than a division or unit of an agency, and exercised through the office of the CEO.

The general, but not exclusive, criteria which should be considered are that the custodian agency should:

- have a major, if not sole, responsibility for the collection, production and maintenance of the spatial information;
- have the greatest operational need for the spatial information;
- be competent to collect and maintain the information and undertake the custodianship role and accountabilities;
- require the highest integrity of the information.

4 CONCLUSION

The purpose of this paper has been to discuss basic policy that recognises the importance of spatial information to the development of the nation and the importance of facilitating access to the information within GoS agencies. The policy paper should be considered in conjunction with the report on the Spatial Information Agency for Samoa which is proposed to be established under appropriate legislation⁸.

An overarching policy statement is proposed – with supporting policy and guidelines to assist in policy implementation. These are:

- *It is the policy of the Government of Samoa to continually facilitate open access to spatial information resources to improve management and development of the Nation and to discourage costly duplication of data collection, maintenance and application system (GIS) development.*
- *It is the policy of GoS that spatial information is best managed by the individual agencies with the greatest need to collect and maintain data which is essential for the achievement of a mandated responsibility. These agencies are in the best position to advice on the currency, completeness and limitations of their data bases.*

⁸ See Spatial Information Act (draft) – Technical Assistance Report No. 14

- *Spatial information is a national asset, owned on behalf of the people by the GoS. In order to maximise the benefit of Samoa's assets it is the policy of the GoS that spatial information will be shared amongst agencies with due regard to the protection of privacy and confidentiality and subject to the prevailing policy on pricing of information.*

It is recommended that the adoption of these key policies will provide a useful foundation for the Spatial Information Agency to build the efficient and effective spatial information infrastructure desired by the Government of Samoa.

5 ATTACHMENT 1 - DEED



Government of Samoa

DEED OF AGREEMENT

THIS AGREEMENT made this day of2004

BETWEEN THE GOVERNMENT OF THE INDEPENDENT STATE OF SAMOA

acting by and through **THE CEO OF THE MINISTRY OF NATURAL RESOURCES AND ENVIRONMENT** as delegated by the Minister of Natural Resources & Environment pursuant to section 3(2) of the *Lands, Surveys and Environment Act 1989*, (“the Vendor”) of the one part

AND

.....
..... (“the Purchaser”) of the other part

AND WHEREAS the Vendor is the owner of the Data which is more particularly described in Schedule “A” attached hereto

AND WHEREAS the Vendor is desirous of selling the Data to the Purchaser and the Purchaser is desirous of acquiring the Data for its use.

NOW IT IS THEREFORE AGREED as between the Vendor and Purchaser hereto as follows:

DEFINITIONS AND INTERPRETATIONS

1. In this Contract, unless the context otherwise requires the following expressions have the following meanings:

“*Agreement*” means this agreement and the schedules and annexure attached to it;

“*the Data*” means all or any part thereof of mapping products of Samoa in both hardcopy and digital form, specified in the Schedule “A” attached to this agreement

“*Geographical Information Systems (GIS) Digital Copies*” forms part of the Data and includes but is not limited to raster data, vectorized data and digitizing works.

“*Intellectual Property Rights*” includes copyright, trademark, design or other proprietary rights.

PRICE

2. The individual items forming the data and the prices of these items are as specified in the Schedule annexed to this Agreement payable in Samoan tala and are inclusive of Value Added Goods and Services Tax (VAGST).
4. The total amount payable by the Purchaser to the Vendor for the data purchased as listed in Schedule “B” is
5. The costs of compact disks and floppy disks, labour costs for all digitizing works and data installation are excluded from the price of the data.

DATA NOT TO BE RE-SOLD

6. Vendor sells the data to the Purchaser on the condition that the Purchaser shall not by way of trade or otherwise, re-sell, hire out or otherwise circulate the data without the Vendor’s prior written consent and without a similar condition including this condition imposed on the subsequent purchaser.

NO REPRODUCTION OF DATA

7. The Purchaser shall ensure that the data shall be not be copied, reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying or otherwise, without the prior written consent of the Vendor;

HOWEVER the Purchaser may use the data to produce hard copy products for operational and backup purposes in the course of its ordinary business or for other non-commercial use which then all copies made of the data are subject to the provisions of this Contract.

INTELLECTUAL PROPERTY RIGHTS

8. All intellectual property rights which subsist in the data and relating to the data shall remain with the Vendor.
9. The Contractor must at all times indemnify the Vendor, its officers, employees and agents, from and against all loss, damage, costs (including legal costs and expenses), compensation and expenses arising out of the infringement or alleged infringement of any intellectual property, by reason of the Contractor’s breach of clause 6 and or 7 herein.

GOVERNING LAW

10. This Agreement shall be governed by and construed in accordance with the laws for the time being in force in the Independent State of Samoa.

IN WITNESS WHEREOF the parties have executed and delivered this Agreement as of the day and year first written.

SIGNED by **TU'U'U IETI TAULEALO, C.E.O**)
OF MINISTRY OF NATURAL RESOURCES & ENVIRONMENT for and)
on behalf of the Government of the Independent State of) **C.E.O**
Samoa as delegated by the Minister of Lands pursuant to)
section 3(2) of the *Lands, Surveys and Environment Act 1989*)
in the presence of:-)

.....
LEOO POLUTEA, Principal Mapping Officer

SIGNED on behalf of the **PURCHASER** by)
))
.....)

.....
(Print full Name)

in the presence of:-
.....
.....

SCHEDULE “A”
MAPPING DATA

A. **HARDCOPY DATA**

COST in Tala
inclusive of VAGST

B. **GIS DIGITAL DATA** (all digital data will be supplied on GIS MapInfo and Arc View Software)

Raster Data

Vectorised Data

Digitizing Works

SCHEDULE “B”

DATA PURCHASED BY THE PURCHASER

Item	Price per Item	Quantity	Total Price
Total Price			