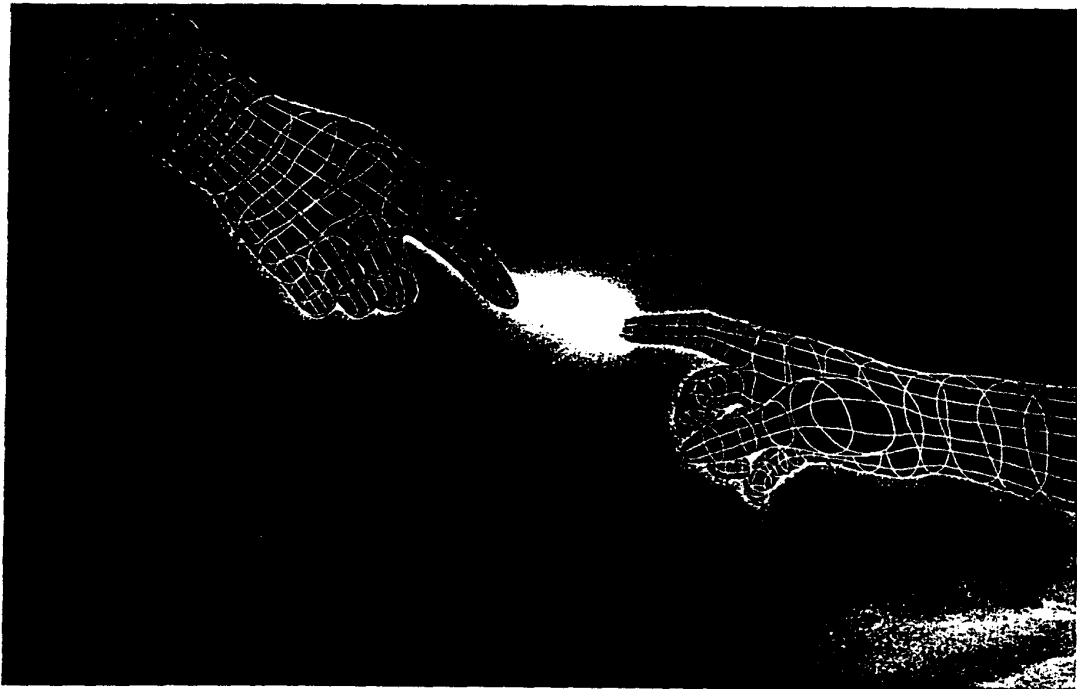


FINAL REPORT / EXECUTIVE SUMMARY

**CONSULTANCY ADVICE TO THE GOVERNMENT OF THE
HONG KONG SPECIAL ADMINISTRATIVE REGION ON THE
FEASIBILITY OF CORPORATISATION OF THE SURVEY AND
MAPPING OFFICE OF LANDS DEPARTMENT**



**BUSINESS AND SERVICES PROMOTION UNIT
THE GOVERNMENT OF THE HONG KONG SPECIAL
ADMINISTRATIVE REGION**



**Ordnance
Survey**

EXECUTIVE SUMMARY

This twelve-week study on the possible corporatisation of the Survey and Mapping Office (SMO) of Lands Department was commissioned by the Business and Services Promotion Unit was undertaken by P-E Handley-Walker (HK) Ltd in conjunction with Ordnance Survey International of the UK.

The SMO is the central authority for land surveys and all types of mapping in Hong Kong. The Government considers that with modern survey technology the SMO has the potential to operate in a more business-like environment, in order to develop more and better services to its customers.

The traditional vote funded method of departmental operation has served Hong Kong well in the past. However, depending on circumstances, there may be a need to change the way some public services are provided. Corporatisation is one of the means to achieve this.

We were able to adopt an approach to the study, which built upon our previous consultancy experience in SMO. We then followed a feasibility study review process, which provided a component framework for the consideration and bringing together of all the strategic, organisation, human resources, marketing, financial and efficiency issues, in support or rejection of the case for corporatisation.

During the study six key business opportunities have been identified with SMO management, as follows:

- Establishment of a Centralised Spatial Data Agency for the management of metadata and the sharing of spatial data in HKSAR.
- Establishment of an Electronic Position Fixing Infrastructure to provide Dynamic Position Fixing Infrastructure in Urban Areas.
- Establishment of an Electronic Commerce System for the Sales of Spatial Information and Services.
- Extension of the Land Survey Ordinance.
- Provision of Geographic Information Systems Consultancy Services by SMO
- Systematic Land Boundary Survey (SLBS) of all DD Lots in the New Territories.

In addition, eleven other smaller business opportunities were identified. The growth potential of existing products and services, and the new business opportunities identified, were assessed. We took into account past trends, the detailed market research undertaken in our 1997 study in SMO and new market soundings from Government user departments, utility companies, and private sector clients. Ten-year sales targets were then discussed and agreed with SMO, BSPU and the Steering Committee.

During the study discussions were held with SMO on pricing policy. A dramatic reduction in the prices for digital products had already been agreed with Finance Bureau before the study began. These new prices became effective on 1 October 1999. This decision, together with a product policy decision, which eliminated SMO's highest Digital Data revenue earner in the private sector from the same date, had a significant impact on the ability to recover mapping costs. We recognise that such decisions may be justified on the basis that digital data is a national resource to which potential users should have access at reasonable prices. However, future pricing policy will be of considerable importance if SMO moves to corporate status and has to make more commercial decisions.

In examining the way forward for SMO we considered what were the core and non-core activities; the services to be provided by and to SMO; the treatment of staff currently seconded to other departments; the impact of new business opportunities; the additional functions required to transform SMO into a commercially oriented corporation; the potential efficiency gains or other benefits achievable; and the options for the activities to be transferred.

We then envisaged a Survey and Mapping Corporation (SMC), which comprises:

- The SMO organisation as it now stands providing the professional and technical expertise for the existing core and non-core operations and the business opportunities.
- A new function to cover strategic and commercial activities to develop, promote and control the many business opportunities which will arise over the next ten years of the projection period.

A Framework for a Financial Plan for a new corporate body has been developed by projecting the revenues and capital and recurrent costs over a ten-year period in a financial model. The high level estimate of costs and benefits required as an output from the study are provided in an Operating Statement. The other outputs from the model include a Balance Sheet, which provides details of asset movements and funding, and a Cash Flow Forecast, which shows the impact of under/over recovery and other items in the cash balances.

There are sound reasons, many benefits and much support for proceeding with a full-scale ten-year programme for the Systematic Land Boundary Survey (SLBS) of DD Lots in the New Territories. The inclusion of this programme either in full or at a reduced level would provide additional workload thereby enabling further productivity and efficiency gains to be achieved at current establishment levels, and would provide a firm financial foundation for the Corporation. However, we have excluded this programme from the Base Case for Corporatisation of the SMO, as policy support has not yet been secured and there is still doubt as to whether funding for the project (HK\$600m per year for the full survey) will be approved by Government. Throughout this report we describe the effects of including this SLBS work in addition to the Base Case and also include financial statements and back-up information in the Appendices. We also include details and show the effects of a second scenario for undertaking a reduced SLBS of DD Lots in the New Territories programme costing HK\$200 million per year.

In summary, the Base Case Scenario:

- Retains all current SMO activities
- Uses all existing buildings and facilities
- Takes all current staff on existing conditions
- Assumes no staff redundancy
- Is based on current pricing policy
- Includes 20% on-cost on Services (but not on products) to Government, purely to the cover overhead costs of those services
- It excludes the Systematic Survey of DD lots in the New Territories, as Government commitment to this project has not yet been secured, and,
- Assumes an equity injection, from the transfer of property to SMO, of HK\$550m on start-up.

The Base Case Scenario projections show that SMO will make an operating deficit of some HK\$83m in year one. This would reduce to about HK\$3m in year four and thereafter produce

surpluses, increasing from about HK\$26m to HK\$224m in year ten. Surpluses over the ten year period of HK\$583m produce an annual average return on net assets of 12.1%. Efficiency benefits from corporatisation over ten years amount to HK\$333m. On this basis, setting up a corporation there would be net benefits to Government of HK\$948m over the ten year period when taking into account payments for bought-in services, and projected profits tax and dividends.

If the SMC proceeds with the full Systematic Survey, then it could make operating surpluses in each of the ten years of the projections ranging from HK\$68m in year 1 to HK\$365m in year 10. Cost Recovery would range from 105.8% in year 1 to 130.5% in year 10 and efficiency benefits from corporatisation over 10 years would increase to HK\$493m. By setting up a corporation there would be net benefits to Government of HK\$1,573m over the ten year period. Thus the financial analysis on this scenario reveals that SMC would be financially viable to operate as a corporation.

In our view the above results will only be achieved if SMO moves to corporate status and is led positively as a commercial organisation. They will not be attained in an SMO where there is no real imperative or culture to make significant economies.

We have also examined the non-financial criteria for determining the feasibility of corporatisation. We believe that such a change of status would enhance SMO's market position, result in improvements in efficiency and service quality, and improve its ability to develop significant business opportunities within SMO and with the private sector.

We conclude, therefore, that although operating unprofitably in the first four years, feasibility is proven (with or without including the Systematic Survey), and we recommend that SMO should be transformed into a corporation.

The new SMC will need Government investment as share capital of around HK\$550m. This can be introduced by appropriating the values of SMO assets at year one. In addition, loans of some HK\$160m will be needed over the first 2 years, but this can be repaid in years 4 to 7.

No one should underestimate the extent of culture change required to transform SMO from a bureaucratic government office into a commercially oriented corporation. A number of Trading Funds in Hong Kong have made this transition successfully. It would be sensible to tap in to their experience.

Great importance must be attached to staff participation in the transformation process. The aim must be to seek staff support and understanding in implementing any changes affecting their jobs.

A transformation of this nature and scope will demand leadership from a champion, who will act as the prime agent of change. That leader must be supported by people possessing the necessary commercial skills in business development, marketing, finance, service level agreement administration and contract management.

We recommend a structure for the new SMC, which comprises Operations, and Strategic and Commercial Divisions. The governing body will be a Board of Directors, appointed by Government, and consisting of business leaders, experts in the activities of SMC and relevant government officials. The Chief Executive Officer (CEO), to be appointed by the Board, will be a full-time appointee.

The Operations Division will be headed by a Land Surveyor responsible for the production and efficiency of cadastral survey and mapping. The Strategic and Commercial Division would be the direct responsibility of the CEO, who will direct and drive the business strategy and the transformation to a commercial business.

It is clear from our own investigations and the views of SMO's customers and suppliers, as recorded in the report that there are advantages and disadvantages of corporatisation and inherent risks.

We have examined these risks areas and recommended the actions required for avoidance or mitigation of these under the headings:

- Setting of clear objectives for change.
- Recognising the nature and complexity of the culture change required.
- Preparing SMO for change and the management of that change.
- Addressing staff concerns.
- Managing customer expectations.
- Skills required by the new Corporation.
- Achievement of Sales Targets.
- Controlling Costs and Benefits Targets.
- Controlling major Bought-Out Services.

All of these issues are important, but the financial issues are particularly significant because they affect overall viability. Business development and the efficiency of operating can be monitored and appropriate action taken if objectives are not being achieved. However, the achievement of sales is most important and more difficult to predict. A view can be taken on the acceptability of revenues from Government Departments, but sales revenue from the private sector will rely heavily on developing the right products, pricing and having the right commercial awareness and capability. Revenues to the Corporation from Government sources are considered to be predictable and firm after approval of the principles. For the Private Sector, we have considered the financial implications of not achieving sales targets. If private sector sales revenues are reduced by 10%, the overall surplus over the ten years reduces from HK\$583m (average of 12.1% annual return on net assets) to HK\$454m (average of 9.5% annual return on net assets). At a 20% reduction in private sector sales, the overall surplus over the ten year period reduces to HK\$326m and produces an average of 6.7% annual return on net assets. Achievement of sales targets is therefore critical to the success of the Corporation.

In the final stage of the report we discuss the key issues to be addressed in transforming SMO into SMC. These issues include: legal procedures; staff consultation; need for management development; need to introduce quality management systems; need for Service Level Agreements and National Interest Mapping Service Agreements (NIMSAs); the importance of manpower and other resource planning; and the need for financial and commercial systems development.

A High Level Implementation Plan is presented in the report covering a recommended eighteen- month implementation phase.

Bill Cox
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