

Survey and Mapping Office
Consultancy Report – Consultancy Study of Costing and Pricing of the
Survey Services and Mapping Products of Survey and Mapping Offices

EXECUTIVE SUMMARY

We set out a brief Executive Summary of the strengths and weaknesses identified from our market research and from the discussions held over the period of the Costing and Pricing Study with the senior management and staff of SMO. We then state the recommended mission and aims of SMO over the next five years and the actions to be taken to achieve these aims.

SMO's Strengths

- recognised as the central authority for land surveys and all types of mapping in Hong Kong;
- a good reputation for high technical competence;
- risks underwritten by Government in the national interest;
- almost a monopolistic position in the Hong Kong market place, which is believed to be too small to attract serious competition;
- well established links and relationships with key users;
- current product and service range meets the great majority of customer needs;
- SMO's databases represent a valuable national intellectual property asset.

SMO's Weaknesses

- low profile and identity in the market place, with poor awareness of SMO activities, products and services;
- perceived as bureaucratic, commercially immature, inflexible and a high priced supplier;
- limited marketing, sales and commercial skills, knowledge and experience, and no pro-active selling;
- does not operate as a single, coherent corporate entity and has a fragmented approach to product and market development;
- lacks co-ordination of management data to provide information on costs, sales and key performance indicators (except at strategic and DSO levels), leading to ineffective control;
- multi-layered management structure, over-manned and inefficient in some areas, and no cost control;
- poor customer support services and communications, and seen as giving

- poor delivery service to customers;
- digital products considered not to be up-to-date and of inadequate quality;
- as Office within Lands Department not able to determine own policies or retain revenue for investment and development;
- has a rationale for pricing both digital data and paper products which is no longer understood by SMO or the market.

The following statements of ‘mission’ and ‘key business development aims’ arise from the above analysis of strengths and weaknesses. Under each of the ‘aims’ set out in italics below, we have indicated the recommended actions to be taken.

The overall purpose or ‘mission’ of the Survey and Mapping Office (SMO) is perceived as being:

To meet the land surveying and mapping needs of all sections of the Hong Kong SAR community in a cost-effective, high quality and timely manner.

More specifically, SMO’s key business development aims over the five year time-span of the business strategy are set out below:

- *To achieve recognition throughout the community and the Government that it is the authority, centre of excellence and prime source of supply for, land boundary survey, mapping and geospatial information within the SAR.*
- *To promote the development of the GIS (Geographic Information Systems) market in Hong Kong and so increase the penetration and utilisation of its digital mapping products.*

To achieve these first two aims we have recommended a Promotion Strategy designed to raise SMO’s profile and to educate, inform and persuade its customers to buy. The strategy calls for a centralised professional function which will be responsible for the production of promotional literature, press releases, catalogues, CD-ROM etc., and dissemination of its messages via its sales outlets, seminars, media events, the Internet, exhibitions and conferences. In addition we recommend partnership arrangements with Value-Added-Resellers (VARs) and other intermediaries.

- *To improve the quality, variety, up-to-dateness and utility of digital data, graphical maps and plans available to the Hong Kong community, in accordance with customer requirements.*
- *To take the lead in the development, management and exploitation of an integrated Hong Kong Geographic Information System, incorporating data*

from both the public and the private sectors.

To address the above two aims we have proposed a product development strategy which includes: updating of SMO's ArcInfo system to ensure Year 2000 compliance; enhanced facilities to improve data quality, delivery and content; consideration of the introduction of on-line links to VARs and major customers; establishment of common data exchange standards as an initial step to achieving an integrated SAR geographic information system; resolution of non-technical issues for GIS development; use of client server architecture; and formation of joint ventures/partnerships to supplement internal resources.

- *To introduce more effective sales, distribution, promotion and customer support arrangements, which will improve delivery and buying convenience and will encourage increased customer take-up of SMO's products and services.*

This aim is addressed in the Sales and Distribution strategy for which we propose the development of a mixed direct and indirect (external to SMO) sales and distribution network. This includes a VAR network to attack the non-technical business market; booksellers to exploit the demand from the general public; and more convenient and effective ordering, buying, delivery and customer support arrangements. A key recommendation is to appoint professionally trained and experienced marketing and sales personnel.

- *To introduce simpler, more rational pricing and copyright policies, structures and levels, which will support the range of business development aims and targets.*

This aim is addressed in the Pricing and Licencing strategy which recommends “charging” all customers, with full copyright enforcement. However, we recognise that SMO cannot unilaterally adopt a hard charging policy with government customers. If use of an Operating Services Account is not possible, then SMO must at least inform all its customers of the value of the products and services being provided via ‘dummy’ invoicing. Real and notional sales values should then be combined to show notional cost recoveries against costs.

We have recommended more rationally structured market-based pricing based on sound market intelligence and regular review.

As a tool to support pricing and product mix decisions, we have developed a comprehensive cost model of SMO’s cost centres, databases, product families and product costs.

- *To re-position SMO within Government so as to demonstrate accountability and to facilitate realisation of its key business aims.*

Following a wide consideration of options we have recommended that SMO should be separated from Lands Department and set up as a Stand-Alone Department. This move recognises both that it is a fundamentally different type of business from Lands and that it is itself of strategic importance to the SAR. It will also provide SMO with a higher market profile and greater autonomy and accountability. We have rejected a trading fund option on the basis that this would require significantly greater culture change within SMO, whose management and staff are not in any way prepared for such a status change at this time. We, nevertheless, believe that the trading fund option should be considered as a long term objective.

- *To identify and implement efficiency improvements on a continuing basis, in order both to meet cost targets and to release additional resources for business development.*

Using a task force approach and critical examination techniques we have identified a wide range of efficiency improvements in all sections of the SMO, including Headquarters, District Survey and Project Offices, and in the Land Information Centre. We have recommended that SMO should continue to operate these task forces, which are now equipped with the methodology to examine any area of activity and identify other development opportunities for improving, efficiency, effectiveness and economy. These teams should be headed by senior managers to demonstrate full commitment. We have recommended the setting of targets to reduce costs after a 2 year period of consolidation by say 5% per annum in real terms for the remaining period of the Business Plan. This 5% however is not based on any finite calculation but an agreed target to aim for. Demonstration of the ability to control costs, improve efficiency and fund investment from

internal savings will put SMO in a much stronger position to bid for capital expenditure, and ultimately move to trading fund status.

- *To introduce management information systems which will enable business performance to be monitored and controlled effectively against the targets and objectives set.*

SMO staff collect a lot of data, but there is no central co-ordination to convert this data into information to help managers make effective business decisions. This co-ordination should be the responsibility of a management accountant/information manager. A new post should be created within SMO. Building on the performance measures at strategic level, and the performance indicators at DSO level, key performance indicators should be developed at all levels within SMO. A structure and examples have been provided, together with an implementation development programme.

- *To develop an organisation and introduce human resource development programmes which will support the achievement of business aims, facilitate change and foster a customer and employee caring organisation.*

The recommendations on staffing in other strategies have been brought together to provide a complete view of the human resource implications. We have also discussed the human resource issues which need to be addressed, including: staff rotation policy, training, culture change and change management, and improved staff communications to address the serious labour relations issues.

All the above elements have been brought together to form a coherent market-led business strategy.