CENTRE OF EXCELLENCE FOR NATIONAL SECURITY
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CENS INSIGHT

A Review of Global Open Source Intelligence

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The Centre of Excellence for National Security is a constituent unit of RSIS. Its mission is to develop intellectual capital on selected national security issues, providing useful perspectives for policy makers and the wider national security community. As part of this mission, CENS produces a monthly report (Faint Signals Monitor) that focuses on analysing "faint" signals from potentially high impact issues that are not on the "radar screen" of most other agencies and institutions. CENS also produces INSIGHT on an occasional basis to bring focus and clarity to select issues and concerns of national security.

A Cross Referenced Matrix on Budget Models

In this issue, three differing budget models adopted by Israel, Australia and America are being examined. The risk-based and cost-sharing models appear to be the main budgetary approaches adopted by the Australian and American land transport sectors. The exception is Israel where open-source data on its overall defence spending is available. Nonetheless, the following report outlines the key learning pointers that each model offers to Singapore's land transport security budget policies.

Israel: Budget-Driven

Strengths

a. This model ensures that any defence solutions considered or implemented does not exhaust available State resources or tap into funds set aside for the protection of other critical sectors.

b. This approach concentrates on what is feasible and practical within limited resources. It sets the boundaries between security options that are needed critically to boost defence lines/deterrence efforts and those that are merely desirable alternatives.

Weaknesses

a. There is a risk that the budget spread might be too broad and "thin" to cover evenly the basic security needs of each critical public sector. The resultant budget might not be proportionate or enough to deal with the actual risk faced by, for instance, the land transport sector.

b. In Israel's case, Giora Eiland has described the Israeli defence budget to be "a product of a clash of giants [between] the Ministry of Finance and the Ministry of Defence". This suggests that the budget process is highly political and runs the risk of ministries overly-inflating their budget forecast or "exaggerating" the threats faced, to boost their chances of gaining a bigger share of the budget pie.

Assessment

a. The budget-driven model might be useful in determining a State's overall mid-term (e.g. 5 years) security direction. However, securing the Land Transport System against terrorist attacks would require a mixture of short and mid-term security strategies. The complex and dynamic mix of different transport modes highlights the need for risk assessments to be done not just at the "local-node" level but also in tandem with budgetary allocation processes.

Australia: Risk-Driven

Strengths

a. The budget size would be more proportional to the magnitude and type of risk faced.

b. This approach would ensure that the budget dollar is not spread too thinly and is allocated to areas that require more protective measures.

c. The Australian Homeland Security Research Centre (AHSRC) has noted that, in general, Australian transport organisations determine the appropriate security responses by consulting the results of threat-driven assessments. In fact, each transport unit's share (e.g. commuter train and bus services) of the land transport security budget would vary in size according to the risk faced, the probability of a threat occurring and the overall consequences for national security. In essence, this implies that the security measures will not only be cost-effective but also reflective of the "ground-level" security challenges encountered.

Weaknesses

a. Governments hardly operate in a monolithic environment where there is only one mode of transport and one agency oversees the entire transport system. As a result, risk assessment results might not only vary among organisations but might also be valued differently.

b. The AHSRC observed that the Australian Government is still seeking ways to refine its transport security programmes and budgetary processes. Due to the mix of public-private ownership, transport security measures and even cost differ from state to state. The AHSRC added that neither the Australian Government nor most State and Territory governments give funds to the transport sector to undertake security upgrades. The differences in security measures and expenditure size could also be attributed to how risk is perceived and assessed by individual transport operators and state-regulators. For instance, during the 2004-2005 period, AHSRC reported that 90% of the Australian Government's transport security budget was allocated to the aviation and maritime sectors. The response was partly shaped by risk assessment results that placed aviation and maritime terrorist threats at the top of the transport security priority list.

Assessment

a. There is usually a time lag between the budget allocation and policy implementation phases. The type of threat and risk faced might evolve or change during this period. This means that by the time the budget is allocated and used, another area or sector would have required more protection than originally forecast.

b. The exclusive or over protection of one critical infrastructure might result in the "under-protection" of another.

c. In Australia's case, the complex mix of public-private land transport service ownership has prompted efforts to both refine the risk-driven approach and seek ways to facilitate greater participation from the stakeholders. The rationale is the stakeholders would have a better gauge of the challenges and even risks faced at the operational level. As such the risk-assessment process could be more systematic and land transport security expenditure could expand to include contributions (financial and non-financial) from the various stakeholders.

America: Cost Sharing (Stakeholder-Pays Approach)

Strengths

a. The Cost Sharing model evolves around the idea that the cost of security and even risk could be shared and managed better when the entire land transport community (commuters, building owners, transport service providers, regulators... etc) are engaged: a whole-of-network approach.

b. Under a Cost Sharing scheme, the cost of security could be shared amongst the stakeholders according to the level of impact that an attack and security measure might have on their individual operations. This idea seems to have worked favourably for countries like America (and even Australia) where land transport systems are managed by different groups of public and private organisations, and, regulated differently from state to state. A cost sharing or stakeholder-pays approach ensures that both the national land security budget and policies remain flexible and broad enough to deal with local dynamisms and risk-assessment inputs.

Weaknesses

a. In a recent national survey on Americans' attitudes towards anti-terrorism spending, the Homeland Security Affairs journal revealed that the majority of Americans polled responded that it is highly probable that there would be another terrorist attack on the public transportation system. Yet, the respondents also indicated in the same survey that more resources should be devoted to food security instead. This implies that a stakeholder-pays approach does not necessarily guarantee the full support of all members of the land transport community.

b. Free rider problems could also limit the effectiveness of this budgetary approach. Not all stakeholders will be convinced of the need to shoulder the cost of security. This is especially so if some perceive that security is a free public good that they should gain access to even if they do not pay, or pay a very nominal fee for it.

Assessment

a. The cost-sharing model does not prioritise spending according to the criticality of the risks faced at each transport node. Rather, it is a cost-appropriation method where the cost of security to each stakeholder is made proportional to the impact that an attack or a security requirement would have on its daily operations. For instance, train and bus operators would in this model have to foot a higher share of the bill for iCCTV installations in their depots/stations than adjoining commercial building owners.

b. The main merit of this model is that every member or associate of the land transport community has a part to play in land transport security. In essence, this would promote a Whole-of-Stakeholder culture: a key aspect of any crisis response-and-recovery strategy.

c. Free rider problems may still persist. However, this could be addressed through, for instance, policy schemes that integrate or factor the cost of security into the daily operational requirements of each stakeholder.

d. This model could be used to determine the roles each stakeholder could play in land transport security and areas where security costs could be effectively shared. In countries like America, where the land transport systems are, in general, privately run and publicly regulated, the private sector's involvement (financial and non-financial) in security enforcement is critical.

Conclusion: Considerations for Singapore

The models discussed can be applied in varying degrees at different stages of the budgeting process. The budget model selected need not be exclusive in nature. Based on the findings of this review, it seems that a viable option for Singapore to consider is a combination of risk-based and cost-sharing budgetary models.

Given the rate at which Singapore's land transport system is growing and progressing, an umbrella-like security structure might not suffice. A combination of risk-based and cost-sharing budgetary models would not only prioritise the security expenditure according to risk levels and security functions required (e.g. deterrence and recovery), it would also create avenues for cooperation within and beyond the transport network. Moreover, similar to Australia and America, Singapore's land transport network is jointly operated and regulated by the private and public sectors respectively.

A cost-sharing approach along with the risk-based model could possibly facilitate greater sharing of counter-terrorism data amongst the various stakeholders. Most importantly, such an integrative stance could strengthen the grounds for a whole-of-stakeholders and whole-of-network approach towards land transport security.