

SUMMARY OF FINDINGS AND FOLLOW-UP TO INDUSTRY CONSULTATION

A FRAMEWORK ON BUILDING TRUST AND CONFIDENCE IN ELECTRONIC COMMERCE

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INFOCOMM DEVELOPMENT AUTHORITY OF SINGAPORE (IDA)

SUMMARY OF FINDINGS AND FOLLOW-UP TO INDUSTRY CONSULTATION:**“A FRAMEWORK TO BUILDING TRUST AND
CONFIDENCE IN ELECTRONIC-COMMERCE IN SINGAPORE”****INTRODUCTION**

Trust is essential to success in the online world. In consideration of putting in place a conducive and trusted environment for E-Commerce (EC) to flourish, and as part of its ongoing efforts to drive EC, IDA together with relevant government agencies had identified a four-pronged approach to building trust and confidence: establishing a secure environment, establishing confidence in E-business, building user Confidence and raising user awareness. In order to ensure the strategies identified are in the right direction, IDA issued a consultation document on 26 Sep 2000, “A Proposed Framework to Building Trust and Confidence in Electronic Commerce”. This document was issued with the objective to obtain feedback from the industry and public on the framework of strategies towards instilling trust and confidence amongst users and industry players so as to raise the level of EC activities. The period for interested parties to submit comments closed on 31 Oct 2000.

SUMMARY AND REVIEW OF COMMENTS RECEIVED AND FOLLOW-UP ACTIONS

A total of 48 companies, industry associations and individuals, representing a broad range of interests, filed comments. IDA had together with other government agencies assessed these responses and identified the keys areas for follow-up actions.

Overall, majority of the respondents supported the need to raise the level of trust and confidence in EC and the list of strategies proposed towards achieving it. The respondents also made a number of suggestions and views regarding specific strategies proposed in the consultation paper.

The following summarises some of the views expressed on the various strategies and highlights some of the more critical areas and strategies that Singapore should take towards putting in place a trusted EC environment.

I. ESTABLISHING A SECURE ENVIRONMENT**Adopting a Secure Public Key Infrastructure (PKI)**

Respondents generally felt that, although not the only solution, PKI is the best solution available today that addresses the key issues of authentication, confidentiality, integrity and non-repudiation required for secure EC transactions. However, some respondents expressed the need for alternatives to meet the different security needs of businesses and consumers. For example, PKI is not needed for low-value, low-risk, B2C transactions type.

Some of the key impediments to PKI adoption that were highlighted by the respondents include:

- a. General lack of awareness (education);

- b. Lack of inter-operability standards for cross-border certification;
- c. Cost and complexity of deployment and maintenance;
- d. Issues related to ease of use and convenience;
- e. Lack of consensus on cross-border legal issues;
- f. Lack of demand and killer applications; and
- g. Impact on performance of applications.

Education was highlighted as one of the key areas that required attention as it was felt that the general lack of awareness has contributed to the slow adoption of PKI. The respondents also felt that the Government should play a bigger role to jump-start the adoption of PKI by implementing key applications. Respondents were also supportive of the formation of an industry-led association that will help play a lead role in education, harmonising cross-border regulation, facilitating inter-operability, identifying and developing potential PKI applications. Respondents identified the financial, trading, healthcare, medical, B2B, G2B and G2C areas as potential key adoption areas for PKI.

In light of the comments received, IDA will continue to promote and raise current PKI awareness by working with the industry to organise more conferences, seminars and workshops. IDA is also currently working with various industry partners on the formation of a PKI Forum Singapore to help address the key issues and impediments, as well as to serve as a platform for closer co-operation between the government and industry. The PKI Forum Singapore will comprise leaders representing a cross section of the industry, from the telcos, certification authorities, financial institutions and technology companies. The PKI Forum Singapore will also be representing Singapore in the ASIA PKI Forum, a joint initiative between Singapore, Japan and Korea, that aims to address the PKI issues on a wider scale. A formal announcement on the details of the PKI Forum Singapore will be made in due course. IDA will also continue to work closely with the industry and relevant government agencies to identify and implement key PKI applications in order to help drive PKI adoption.

Introducing Risk Assessment and Profiling Services

Majority of the respondents agreed that risk assessment and profiling would play an important role towards lowering e-business risks associated with online payments using credit cards. However, there were some respondents who disagreed on the effectiveness of risk assessment and profiling services as they felt that banks and credit card companies already have established credit procedures to help screen applicants and the presence of escrow and PKI solutions to manage risks. On the suggestion to form a Council to address e-business risk and fraud issues, majority of the respondents supported the formation of such a Council. They also see the Government playing a pivotal role in co-ordinating the various elements needed to build trust in online business. Other roles identified include education and promotion of risk assessment service by showcasing success stories and developing a supportive legal framework.

IDA will continue to work closely with the industry to address Internet fraud related issues, to help businesses and consumers understand the risk involved in e-commerce, identify projects and opportunities to help reduce risk and reduce monetary costs associated with Internet fraud. IDA will tap on ongoing studies on Internet fraud in Singapore, its prevalence and the common pitfalls faced by e-

merchants. Through these studies, it is hoped that new and innovative solutions will be identified and made available to the e-businesses/consumer communities to lower online fraud.

II. ESTABLISHING CONFIDENCE IN E-BUSINESS

Introducing EC Insurance

Majority of the respondents agreed on the importance and need for specialised e-commerce insurance to help cover risks associated with an online business. While a few have utilised exemption clauses, existing general policies or trade financial tools to help cover their online business activities, many were either not apprised of the availability of such service offerings or felt that the high premiums would add to their overall business costs. While respondents felt that the insurance companies and underwriters – especially top-tier international companies – are the most suitable candidates to extend their product offerings for such specialised policies, they were also concerned with the excessive premiums charged.

IDA will assist MAS which is currently looking to attract reputable and appropriate foreign EC insurance service providers and underwriters to Singapore. The MAS will also encourage local banks and insurance companies to offer such services. In addition, there is also a need to build up knowledge skills and expertise through increased training and international exchanges to help our insurers and underwriters better understand the nature of risks and needs of the online environment.

Introducing Credit Bureau Services

The level of adoption and awareness amongst the respondents were very low, although some have indicated interest to engage the services of a credit bureau if launched in Singapore. Those that said they do not subscribe for the credit bureau service were due to: familiarity with “reliable” clients, operating within a closed network, cost considerations and non-necessity reasons. While there was minimal objective to the set-up of the credit bureau service, there was also doubts raised on the effectiveness of such services and questions the integrity and possible misuse of the information collected. The key concerns raised by respondents are issues such as privacy, costs of services, information integrity such as accuracy, timeliness, misuse of information, lack of credit standards across borders and the non-existence of an inter-operable credit bureau service across Asia.

As regards the role of the government, respondents felt that it should act as a ‘watchdog’ over the information and data, imposing standards and regulations to protect customers’ privacy and to prevent misuse of the information gathered. A handful of the respondents seem to subscribe to the self-regulatory model and prefer private entities such as banks and trusted third parties to adopt self-regulatory principles governing the dissemination and use of data.¹

IDA agrees that the issues raised by the respondents are pertinent and deserve a thorough think-through. IDA together with key government agencies, and in tandem

¹ As in the case of US, 14 leading information industry companies formed the Individual Reference Services Group (IRSG) in Dec 1997. They pledged to adopt self-regulatory principles in the use and dissemination of data. The IRSG developed these principles in conjunction with the Federal Trade Commission during its examination of privacy concerns and the use of personal information.

with the industries, will examine and review the issues to facilitate the smooth set up of credit bureau services in Singapore.

Introducing Escrow Services

Majority of the respondents agreed that escrow will serve to bridge the gap of trust between buyers and sellers. However, the respondents were mixed as to how escrows could serve their needs. Some respondents felt that escrow is more suitable for high value B2B transactions and for sector-specific industries transactions which require anonymity of the trading partners, while others felt that escrow is more suitable for small-value B2C transactions. As money are entrusted with the escrow provider, respondents felt that the parties providing such service should have a global presence and possess sound financial backing, backed by a regulatory framework to ensure user's protection and redress.

There are no specific laws or statutory regulations in Singapore governing or regulating escrow activities on the Internet, at present. As each company with intention to engage in escrow service provision is likely to adopt its own unique business model, the company should therefore ensure they comply with all applicable laws and regulations. As the provision of escrow services involves the withholding in trust and transfer of monies from buyers to sellers, companies intending to provide such escrow services are therefore advised to seek professional legal advice on all relevant and related provisions, such as the Singapore Banking Act, Trust Companies Act, Guidelines on Prevention of Money Laundering, etc.

IDA together with MAS and key relevant government agencies are already in discussion with potential escrow service providers to help facilitate their entry and setup in Singapore. We will also continually monitor the trends and developments, both locally and globally, to ensure a trusted and confident e-commerce environment in Singapore. A FAQ guide on the provision of Internet escrow services in Singapore can be found at IDA's EC website: <http://www.ec.gov.sg>.

Making Available Alternative Dispute Resolution (ADR)

From the mixed views and responses received, it seemed to show that while the industry agreed on the usefulness of ADR, they are still unclear as to what exactly ADR can offer, how it works and its efficiency, efficacy or usefulness. It is therefore imperative that we raise the awareness of the industry on the various ADR mechanisms available, and how ADR can help them resolve, at low cost and without legal procedures, potential problems encountered by businesses and consumers. Respondents have also raised issues such as cross-border redress and arbitration.

IDA will continue to work with the Singapore IT Dispute Resolution Advisory Committee (SITDRAC), Singapore Mediation Centre, Singapore International Arbitration Centre and e@dr to educate and raise both business and consumer awareness on the usefulness of ADR schemes that are available to them. A series of roadshows will also be held in conjunction with various industry associations to educate the public on the ADR mechanisms provided by SMC, SIAC and e@dr. SITDRAC will also be organising a seminar to update the industry on available alternative dispute resolutions mechanisms. Promotional and educational pamphlets will also be distributed. IDA together with the relevant agencies will continue its

current efforts to achieve bilateral or multilateral co-operations with countries so as to address the need for cross-border dispute resolutions.

III. BUILDING USER CONFIDENCE

Issuance of Trust Marks

Majority of the feedback received agreed that trust marks would help to instil greater user confidence in e-commerce transactions. However, businesses stressed that the accreditation process should be transparent and able to address cross border transactions. Keeping the cost low is another key concern for the merchants. Most if not all, felt that public education is one of the critical success factors for trust marks. Respondents also felt that a trust mark programme will be successful only if backed by government endorsement and therefore suggested for the government to take the lead for the accreditation and administration of the trust mark programme. The government can also work with established brands/industry groups and collaborate with foreign authorities on a common standard for trust marking.

IDA together with key government agencies agrees that the government should work in close partnership with industry to implement an effective trust mark programme in Singapore. IDA and PSB will take the lead to encourage as well as to help the industry to develop and adopt best practices in the conduct of EC activities. It is also recognised that there will be challenges in raising the awareness and adoption rates and will require a co-ordinated multi-faceted approach to achieve widespread adoption and usage of trust marks. More details of the programme will be announced in due course.

Addressing Privacy Concerns

Respondents were generally in agreement that businesses are not doing enough to protect consumer privacy. While businesses were less inclined to see this as an immediate concern, consumers (and some businesses) felt that the lack of adequate privacy safeguards was already impeding the adoption of business-to-consumer e-commerce. However, respondents were also divided on whether compliance with privacy rules should be voluntary or mandatory.

A few respondents recommended that Singapore adhere to international best practice in developing its privacy framework. One respondent underlined the need for harmonisation with the data protection rules adopted by the European Union. IDA agrees that we should be mindful of these considerations in developing our privacy framework.

The government is studying how to address privacy concerns, including surveying practices in other countries. In the meantime, IDA urges industry to uphold consumer trust by not misusing personal information. This only makes good business sense. Studies have shown that privacy and security concerns are a key impediment to the adoption of B2C e-commerce. Conversely, applying fair information principles in the collection, use and disclosure of personal information offers company a competitive advantage in today's marketplace.

IV. EDUCATING AND INCREASING AWARENESS OF THE BENEFITS OF E-COMMERCE

Respondents felt that the programs and efforts by the Government in creating the awareness and promoting e-living has been fairly comprehensive and sufficient, although there were some suggestions that these efforts be further pushed out to the older (45-60 years) and younger student groups to ensure wide accessibility. Some felt that the transformation of the social fabric is a gradual process which involves a change in both lifestyle and skill sets. Besides programs to help educate and increase awareness of the benefits of e-commerce, there should also be corresponding programs, which helps users to overcome fears of technology changes.

Respondents also felt that the slow pickup in EC adoption can be primarily due to a lack of users' understanding of the transaction process and the ease of use of the Internet and electronic devices. There is therefore a need to focus education that will reach out to those non-EC savvy individuals and groups to raise their awareness on the fundamentals of EC, its process flow and the ease with which they could use these devices at their convenience.

IDA will endeavour to develop Singapore into a leading infocomm-savvy society with a pervasive e-lifestyle and culture. IDA will continue to further its promotional activities to enable everyone to be comfortable and adept at using the technology to reap the benefits of EC. In identifying the target audience, we will also emphasise on drawing the unconverted people and the unconverted businesses to visit these various showcases and programmes.

CONCLUSIONS AND NEXT STEPS

There are many dimensions to this work with many inter-related factors coming into play. As we work towards putting in place a framework for us to raise trust and confidence in EC, there will be a constant need to take into account these dimensions, factors and related or newly emerging initiatives and work efforts, both domestically and internationally. The challenge is for us to keep abreast of such developments to ensure the directions taken are in synch with our needs and requirements. It is therefore important that we keep such industry consultations and feedback ongoing in order that we be able to advance together in this new e-economy.

We would also like to take this opportunity to thank all those respondents who have taken time to share with us their most constructive views and suggestions. We hope that you will continue to support us in such dialogues and consultations and that you will continue to send us your views and comments to move Singapore forward in this new e-economy.