

## A Study Commissioned by ABAC

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### Online Survey of Stakeholders: Views Regarding the Effectiveness of Broadband Adoption Policies in the APEC Region

Phase 2: Information Communications  
Technologies: A Tool to Accelerate Inclusive,  
Balanced, Sustainable and Knowledge-Based  
Development across the APEC Region

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*This report analyses a survey of telecommunications industry experts from eighteen APEC nations on the effectiveness of broadband adoption policies with particular regard to SMEs. It finds that national telecommunications markets are, in general, viewed as competitive whereas broadband markets are seen as less competitive. Urban areas typically have higher rates of broadband adoption for SMEs and households than rural areas. By international standards, broadband prices are viewed as relatively high. Around 30 per cent of respondents thought the provision of online services from the private and public sectors were advanced, comprehensive and sophisticated. Respondents pay close attention to markets and regulatory developments in other nations with leading benchmark economies being within the APEC region. The maturing of broadband markets in the region is very diverse. Respondents believe that policies that are intended to directly encourage SME broadband adoption are somewhat effective, but that broadband market competitiveness, lower broadband prices and an emphasis on education and awareness of broadband benefits are a more important focus.*

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### Acknowledgement

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## 1 Introduction

It is widely accepted globally that broadband services are an integral component of business infrastructure. Uptake and use of broadband by businesses leads to increased productivity and is therefore a focus of policymakers considering the economic development agenda.

In accordance with Windsor Place Consulting's research project for the APEC Business Advisory Council, Information Communications Technologies: A Tool to Accelerate Inclusive, Balanced, Sustainable and Knowledge-Based Development across the APEC Region, we have conducted an online survey of experts in the region. Survey requests were sent to experts including government officials, policy makers and personnel in telecommunications companies, telecommunications regulators and peak business groups. Our objective was to discover best practice in relation to the design and implementation of broadband adoption policies, especially those policies targeted at small and medium enterprises ('SMEs').

The 24-question survey was conducted in June and July 2010, covering mainly qualitative issues. It requested three (3) categories of information from respondents, namely:

- General information on the country's telecommunications market;
- Information on economy-wide broadband policy and e-government; and
- Information on broadband policy targeted at SMEs.

We received 37 responses (28 complete), representing 17 out of 21 APEC economies. The breadth of input adds significant credibility to our results, particularly given that available information on policies targeted at the uptake of broadband by SMEs is limited.

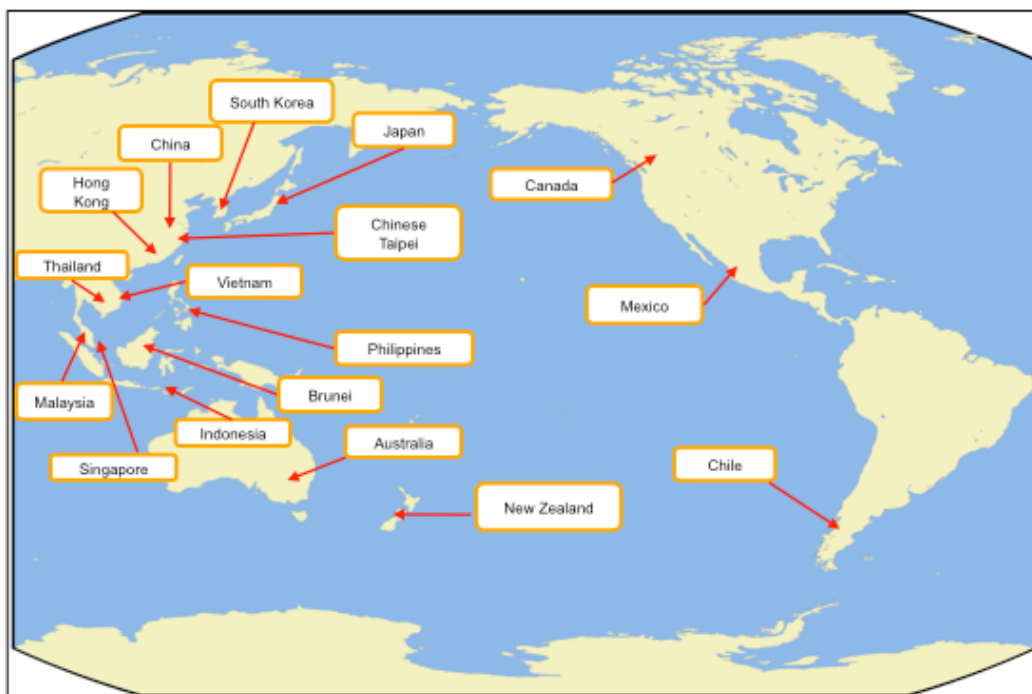
Responses to each of the above sets of questions will be analysed in [Section 2](#), [Section 3](#) and [Section 4](#) of the report. We detail our conclusions in [Section 5](#). [Appendix A](#) contains the list of questions posed to respondents by WPC.

## 2 Telecommunications and Broadband Markets

### 2.1 Framing the survey

The objective of the survey was to gather the views of policy makers and other experts about the state of broadband markets in their various economies and to obtain their views about the effectiveness of a range of policy option for encouraging broadband adoption by SMEs. Therefore, data of a statistical nature, for example, the level of broadband adoption in various economies, should be regarded as indicative rather necessarily statistically accurate.

### 2.2 Telecommunications markets in surveyed economies



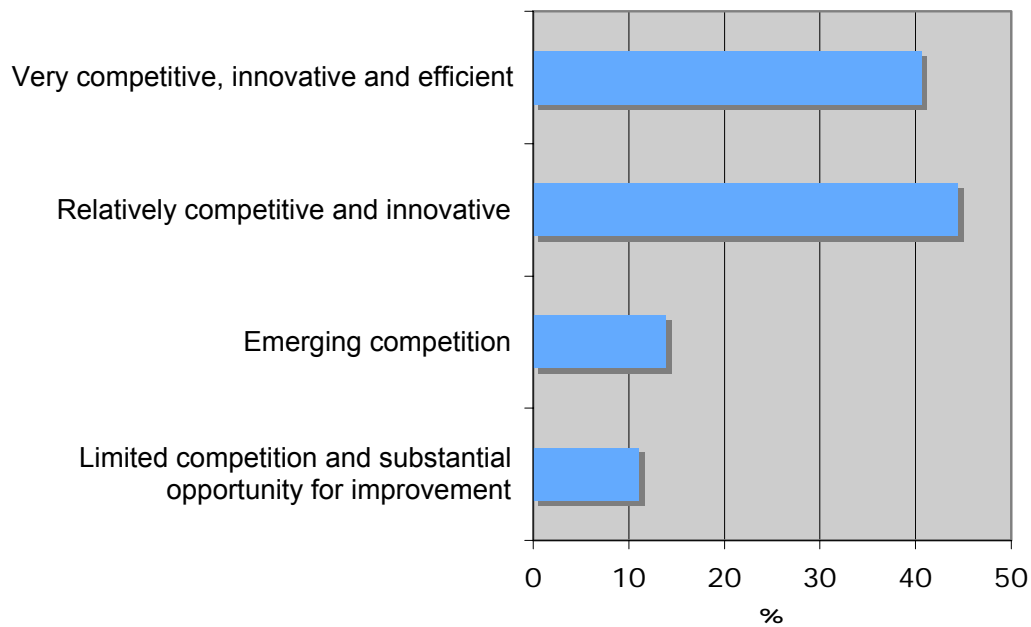
Surveys were collected from respondents representing the following economies:

- Australia
- Brunei Darussalam
- Canada
- Chile
- China
- Chinese Taipei
- “Emerging”
- Hong Kong
- Indonesia
- Japan
- Malaysia
- Mexico
- New Zealand
- Philippines
- Singapore
- South Korea
- Thailand
- Viet Nam

Most APEC telecommunications markets are competitive in the delivery of broadband services. When asked to characterise their national telecommunications markets, nearly 75 per cent of respondents identified them as either relatively or very competitive.

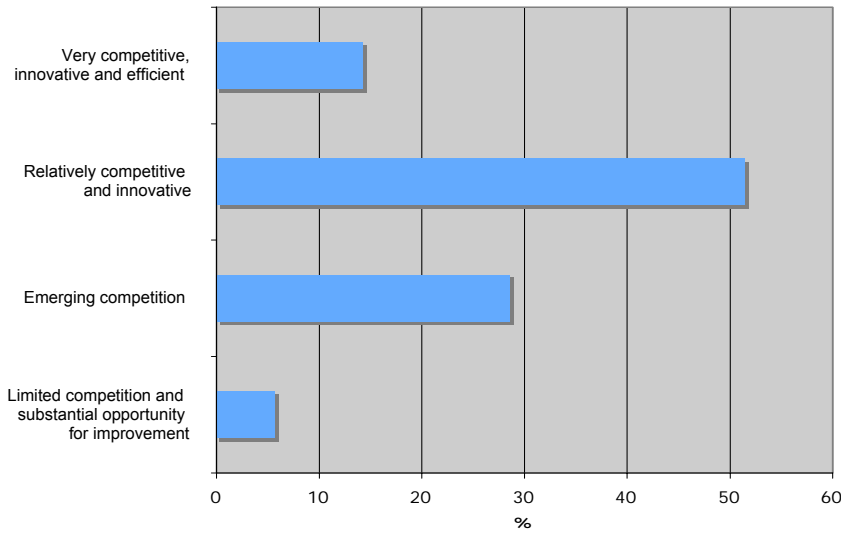
When the data is considered in further granularity, it emerges that low and middle income APEC economies are more likely to have relatively or very competitive telecommunications environments (nearly 91 per cent). In contrast, high income economies appear to have a wider spread of competitive environments.

**Exhibit 1: Characterisation of National Telecommunications Market**



Owing to the relative youth of the technology, broadband markets are less likely, on average, to be very competitive, innovative and efficient than telecommunications markets. However, they are also less likely to be characterised by limited competition and substantial opportunity for improvement than the wider telecommunications markets. Nearly 80 per cent of respondents submitted that their markets are relatively competitive or have emerging competition.

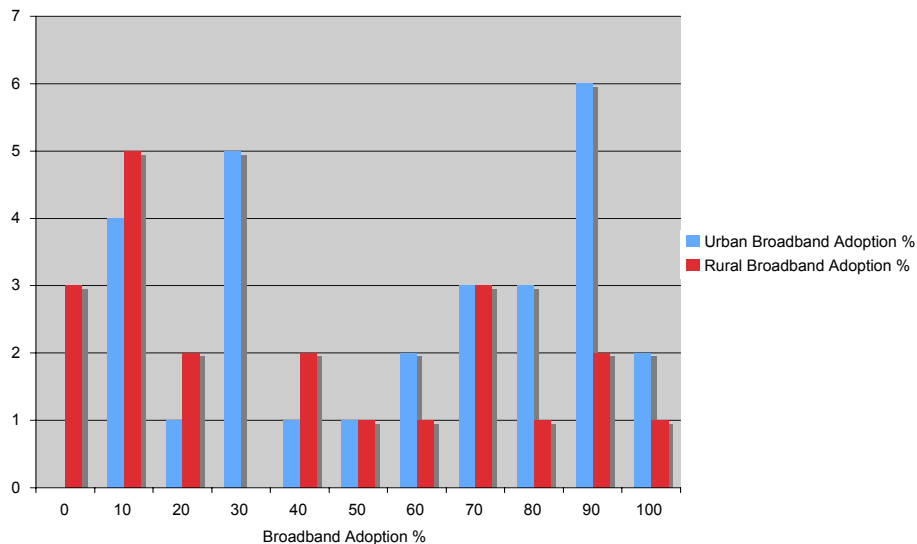
**Exhibit 2: Characterisation of National Broadband Market**



### 2.3 Broadband adoption levels

When asked to estimate the current level of household broadband adoption in urban areas to the nearest 10 per cent, responses ranged widely from 10 to 95 per cent. Respondents provided an average estimate of approximately 52 per cent. The range for broadband adoption in rural areas was even wider across the countries surveyed, ranging from 0 to 82 per cent, with an average response of approximately 38 per cent.

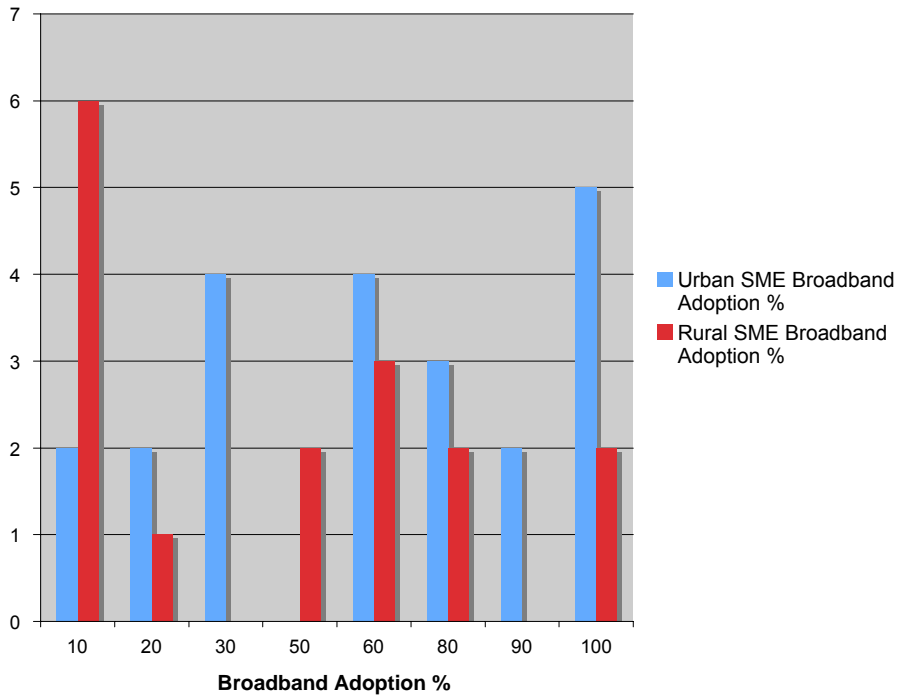
**Exhibit 3: Household Broadband Adoption Levels**



Estimates for broadband adoption were slightly higher for SMEs. Responses again ranged widely - in urban areas broadband adoption rates ranged from 10 to 100 per cent and rural areas, 0 to 100 per cent across the surveyed APEC countries. The average of the responses received was 60 per cent SME broadband adoption for urban areas and 43 per cent for rural areas. It should be noted,

however, that a greater number of responses were received to the household question (28 for urban and 21 for rural) than the SME question (22 urban, 16 rural).

**Exhibit 4: SME Broadband Adoption Levels**



As with actual observed levels of broadband, average Government targets for broadband adoption are higher in urban areas than rural areas and higher for SMEs than for households. They increase significantly between 2015 and 2020, just as 2015 target levels are much higher than today's estimated levels of broadband adoption in APEC economies.

**Exhibit 5: Government Targets for Broadband Adoption**

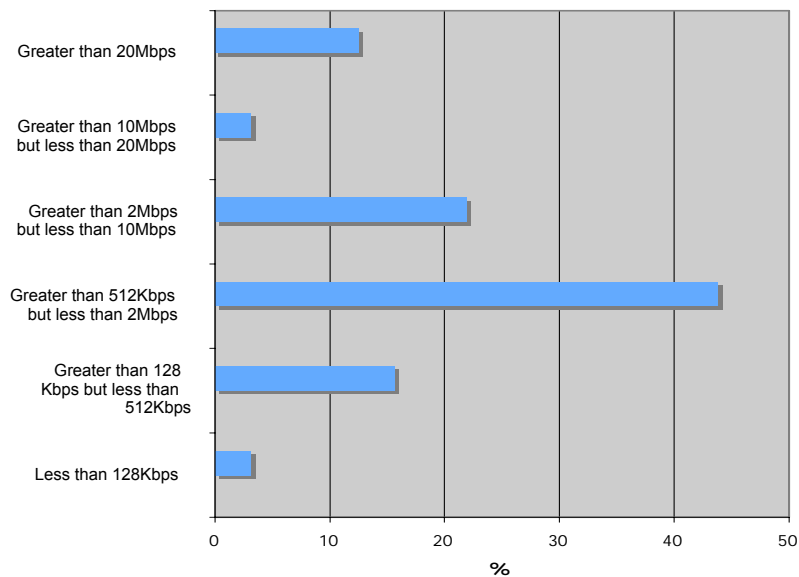
Sector	Year	Geography	Min. Target	Max. Target	Ave. Target
Household	2015	Urban	40	100	73.4
Household	2015	Rural	10	100	53.3
Household	2020	Urban	60	100	87.8
Household	2020	Rural	30	100	66.8
SME	2015	Urban	20	100	73.1
SME	2015	Rural	10	100	56.8
SME	2020	Urban	50	100	89.2
SME	2020	Rural	30	100	75

However, it should be noted that less than half of respondents attempted to answer questions addressing SME targets and little more than half answered questions regarding household adoption. Furthermore, even fewer answered either question in full. This suggests that many countries may not have specified adoption targets.

## 2.4 Broadband market characteristics

There is room for improvement in average household broadband speeds amongst APEC economies. Exhibit 6 below shows that nearly 65 per cent of respondents nominated average household speeds of between 512Kbps and 10Mbps. Only one response saw a speed of less than 128Kbps. In a promising development, 4 respondents nominated speeds of 20Mbps and above. It is reasonable to expect these figures to rise in the years ahead given the implementation of national broadband strategies by APEC economies.

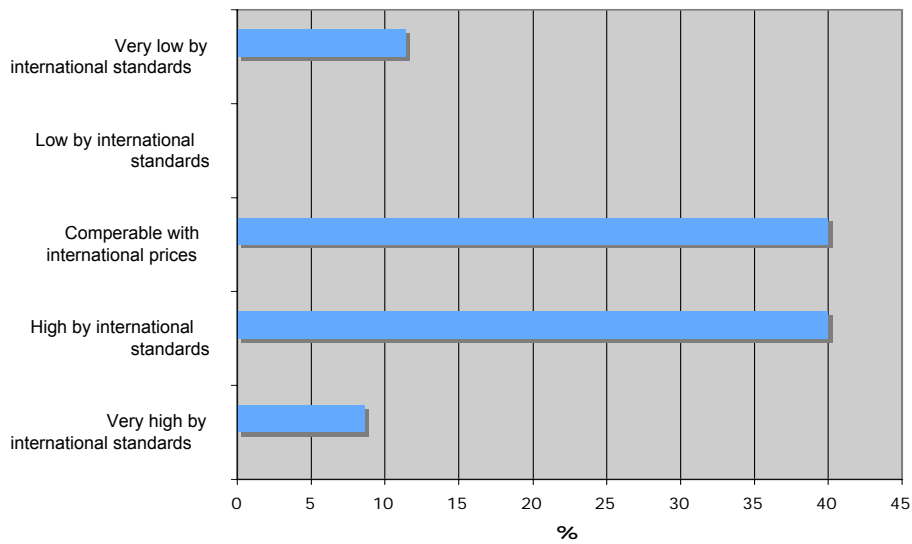
**Exhibit 6: Speed of Average Household Broadband Connection**



Most respondents thought broadband pricing in their own economy was either high or competitive. Only 11 per cent of respondents surveyed stated that their nation’s broadband pricing was cheaper in comparison with other international economies. Over 48 per cent of those surveyed stated that their broadband prices were either high or very high by global standards. Given these results, it can be inferred that broadband pricing in some APEC economies may be contributing to adverse views on broadband competition policy.

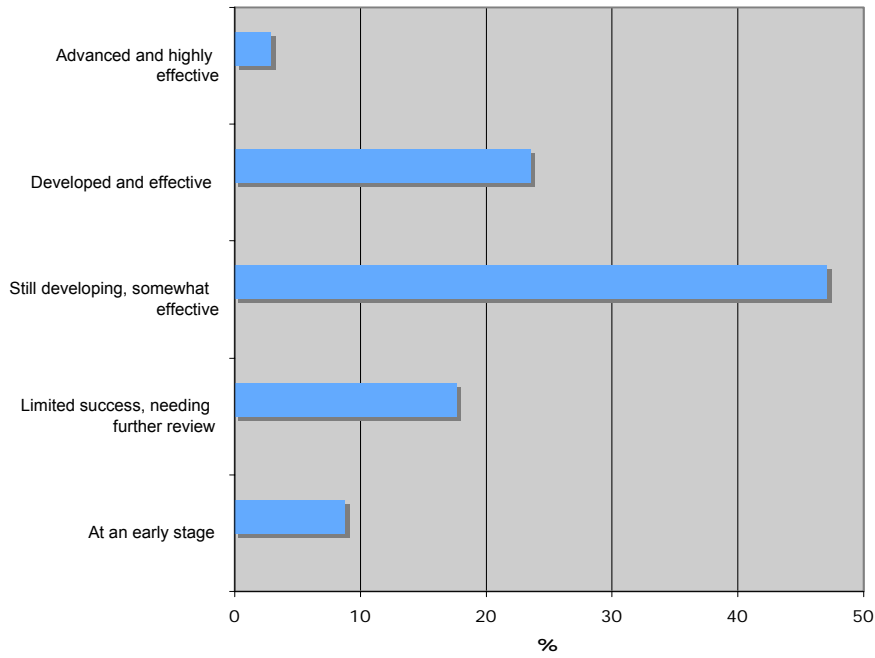


Exhibit 7: Comparative Broadband Pricing



Surveyed experts were also generally unimpressed by regulatory efforts to increase competition in broadband markets. Only 23 per cent of respondents stated that regulatory mechanisms in place to increase broadband competition were developed and effective. Notably, no respondent stated that their national regulatory regime was advanced and highly effective. Some 26 per cent of respondents said that regulatory efforts were at an early stage or in need of further review. Given the responses for the question on comparative broadband pricing, there is support for the proposition that APEC economies may need to put greater emphasis into competition policy in order to reduce broadband pricing and incentivise the uptake of broadband services.

Exhibit 8: Classification of Regulatory Efforts to Increase Broadband Competition

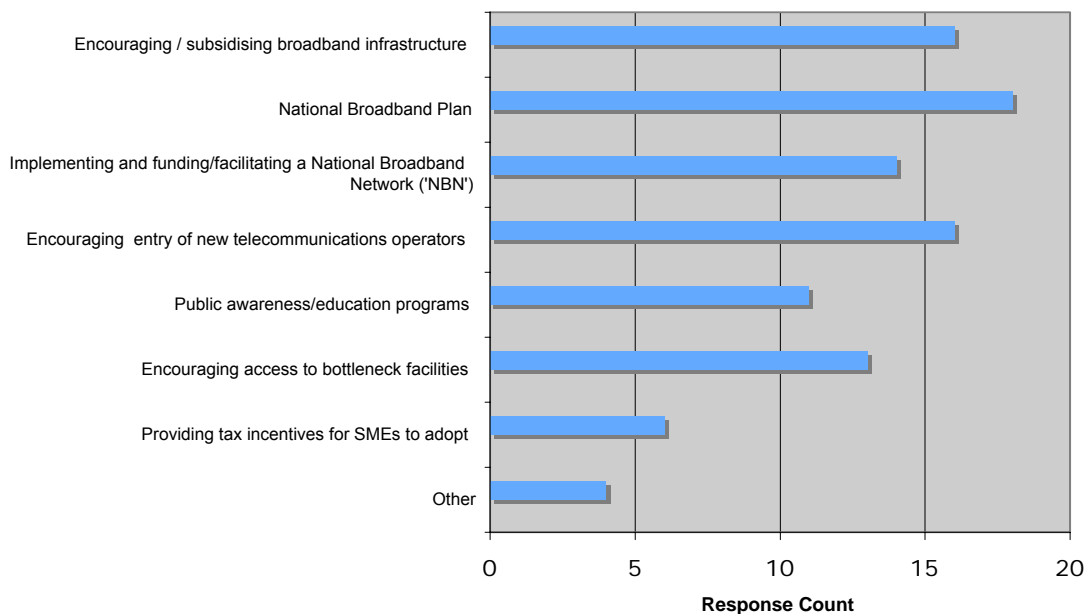


### 3 General Broadband Policy

#### 3.1 Government policies designed to encourage broadband adoption

Out of 30 responses received, the most frequently cited policy pursued by governments to encourage broadband adoption was the implementation of a national broadband plan, including broadband adoption by SMEs. This option was selected by 60 per cent of respondents. Three other policies were selected by over 45 per cent of respondents, namely, encouraging the entry of new telecommunications operators into the market (53 per cent), implementing and funding/facilitating a national broadband network (NBN) (46 per cent), and encouraging or subsidising deployment of broadband infrastructure, both wired and wireless (53 per cent). Encouraging access to bottleneck facilities received significant support, as did public awareness and education programs for SMEs.<sup>1</sup>

**Exhibit 9: Most Common Policies to Encourage Broadband Adoption**



In some markets, governments have pursued broadband adoption policies for a number of years, with one respondent naming 1990 as the year in which policies to increase the adoption of broadband were first put in place. Most of the 20 respondents selected years between 2000 and 2008, with one naming 2010 and another 2012 as the years in which these policies will first be adopted.

<sup>1</sup> Responses under 'other' were (i) free netbooks and subscriptions for underprivileged students and rural poor. Community broadband centres; (ii) Competition-based regulatory environment and (iii) Operational separation of incumbent telecommunication operator.

### 3.2 Decision making processes and international benchmarking

The survey indicates that policy makers monitor related developments in other economies and use some information to inform and benchmark broadband policy development. The following table shows the nations that survey respondents consider to be leaders in broadband policy and adoption. Up to three (3) economies could be nominated.

**Exhibit 10: Leading economies in broadband policy / adoption which are used for informing and benchmarking policy development**

Country	Number of 1 <sup>st</sup> Preference Nominations	Number of 2 <sup>nd</sup> Preference Nominations	Number of 3 <sup>rd</sup> Preference Nominations
South Korea	10	4	1
Singapore	8	3	1
Japan	3	4	
Australia	2	4	2
USA	2	3	2
Other EU	1	1	2
France	1		
Malaysia		3	
United Kingdom		2	3
Hong Kong		1	3
Brunei			1

Unsurprisingly, the three most preferred nations, South Korea, Singapore and Japan are regarded as world leaders in broadband technology, speed and deployment.

This information is significant because 100 per cent of responders reportedly attach importance to broadband policies of other economies when devising and implementing domestic policy.

### 3.3 E-business and e-government are still in their early stages

The adoption of e-business and e-government services within a particular economy is often viewed as an indicator of ICT development.

When asked about the supported payment mechanisms for the provision of online services, 28 of 30 responses, or 93 per cent of respondents selected credit cards. Direct debit cards were the next most popular (60 per cent), followed by secure payment sites (53 per cent).

On a similar note, 9 of 30 respondents, or 30 per cent would characterise the provision of online services by the private sector in their economy as advanced, comprehensive and sophisticated. The same number of respondents answered some sophisticated services but lacking full coverage and some sophistication, but were beginning to develop.

It appears that, on average, governments lag behind the private sector in the provision of online services. Just 5 respondents out of 29, or 17 per cent, would characterise the provision of online services by their government as advanced, comprehensive and sophisticated. 34 per cent of respondents indicated that some services are sophisticated, but lacking in full coverage. 17 per cent of respondents indicated that some sophistication beginning to develop and 31 per cent of respondents indicated that the provision of online services was at an early stage and relatively unsophisticated.

### **3.4 Future plans for broadband adoption**

18 respondents provided brief comments about future plans or targets for broadband adoption within their economy. Some common themes of such responses were:

- Fibre rollouts (mostly FTTH), mentioned by 8 respondents;
- 7 respondents mentioned the expansion of coverage in underserved urban and/or rural areas;
- 7 respondents described comprehensive, national initiatives in various stages, often accompanied by national broadband adoption and speed targets;
- 5 respondents discussed wireless technologies as a potential solution; and
- 2 respondents stated that their economies have not implemented policies to increase broadband adoption, but rather, focus on the creation of competitive regulatory environments to drive down prices and increase broadband adoption.

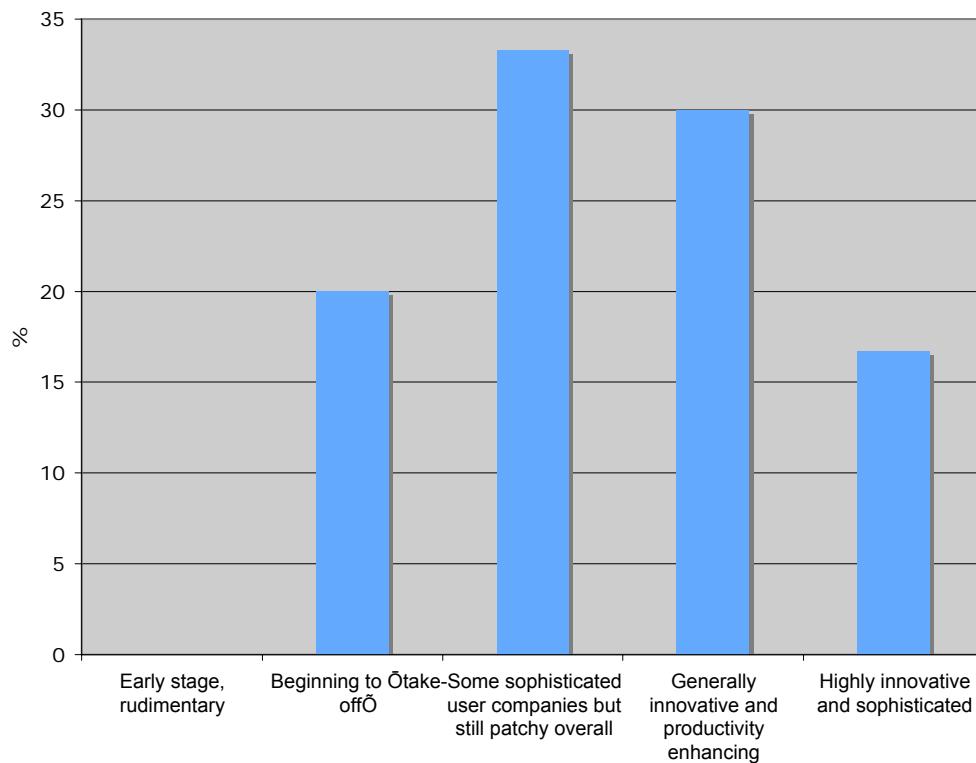
## 4 SME Broadband Policy

### 4.1 SME use of broadband

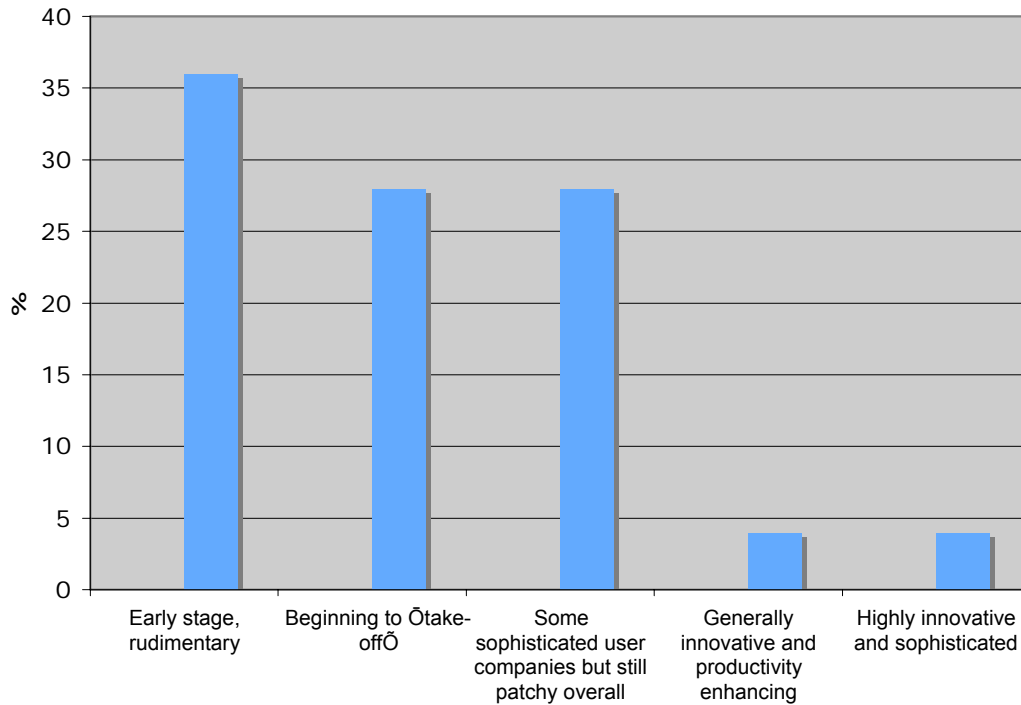
The benefits of broadband technology to small and medium sized enterprises are numerous. The survey ascertained the usage of broadband by SMEs in rural and urban areas. Not surprisingly, urban areas contained much higher rates of broadband use. The need for policymakers to put emphasis on the deployment of broadband technologies in rural areas is underscored by the fact that over 35 per cent of respondents submitted that broadband use is in its early and rudimentary stages in rural areas.

The tables below describe SME use of broadband technology in urban and rural areas.

**Exhibit 11: Characterising SME Broadband Use in Urban Areas**



**Exhibit 12: Characterising SME Broadband Use in Rural Areas**



#### **4.2 APEC governments are implementing broadband policies specific to SMEs**

The majority of survey respondents were of the opinion that their governments pursue policies specifically designed to increase the adoption of broadband by SMEs in their own economies. 12 respondents, or 54 per cent answered that their governments did pursue such policies, 23 per cent said they did not and 23 per cent of responders did not know.

Those who answered in the affirmative stated that these policies had first been implemented in years ranging from 1996 to 2012.

#### **4.3 Training and price the most important factors influencing SME broadband adoption**

Twenty five surveyed experts identified high prices and the lack of appropriate skills within SMEs as the greatest barriers to the adoption of broadband services by SMEs. Both options were chosen by 48 per cent and 52 per cent respondents, respectively. The next most common answer was the lack of awareness of the benefits to business offered by broadband (44 per cent) followed by a perceived lack of attractive online services or applications to attract SMEs to broadband services (36 per cent) and inadequate infrastructure (36 per cent).

**Exhibit 13: Major Barriers to Greater Adoption of Broadband Services by SMEs**

Reason	Response Count	Response Percent
Lack of sufficient skills within SMEs to effectively use broadband	13	52%
Prices are too high	12	48%
Lack of awareness of the benefits to business of broadband	11	44%
There are no sufficiently attractive online services and/or applications to attract SMEs to broadband services	9	36%
Inadequate infrastructure	9	36%
Most SMEs are not in businesses that will benefit much from the use of broadband	6	24%
Capital cost (or set up cost) of broadband connectivity is too high	6	24%
Broadband services are low quality and/or unreliable	5	20%
Customer service by telecommunications companies is poor	3	12%
Broadband services penetration in our economy is too low for SMEs to view broadband adoption as important (ie low customer demand)	2	8%
Given that the majority of urban SMEs have broadband those that don't use broadband technologies probably have insufficient needs for it.	1	4%

This suggests that the most effective policies to increase the adoption of broadband by SMEs would be measures to lower prices. This could take the form of increasing competitive pressure on broadband providers or subsidisation of SME broadband costs. Additional investment also needs to be made in the areas of education, content and infrastructure development.

This is at least partly consistent with other responses provided on the importance of certain factors in driving broadband adoption by SMEs in the respondents' economies. The survey assessed whether respondents believed that SME adoption would be better served by general policies or specific measures catered towards SME broadband usage. Four options were provided:

- The price of broadband services;
- The competitiveness of the telecommunications market;
- The availability of infrastructure; and
- Specific policies designed to encourage broadband adoption by SMEs.

Respondents were asked to rate these options between 1 (extremely important) and 5 (not important). Price was the factor most often rated extremely important by the experts (16 respondents, or 64 per cent). We highlight that 23 per cent of respondents rated specific policies designed to encourage broadband adoption either 4 or 5 (unimportant).



**Exhibit 14: Relative Importance of Factors Driving SME Broadband Adoption**

	<b>1 (Extremely Important)</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5 (Not Important)</b>	<b>Rating Average</b>
<b>The competitiveness of the telecommunications market</b>	50%	23%	23%	4%	0%	1.8
<b>The price of broadband services</b>	64%	20%	16%	0%	0%	1.5
<b>The availability of infrastructure</b>	42%	42%	8%	4%	4%	1.8
<b>Specific policies designed to encourage broadband adoption by SMEs</b>	38%	31%	8%	19%	4%	2.2

8 respondents provided additional information on the ideal policy framework for broadband adoption by SMEs in their economies. The two recurring suggestions received were:

- The reduction of broadband costs to SME end users, whether it be by subsidisation, expansion of coverage to promote competition in traditionally underserved areas or otherwise;
- Policies either directly providing information to SMEs, or promoting awareness of the benefits of broadband through education measures.

## 5 Conclusions

Windsor Place Consulting would make the conclusions from the responses received in the SME survey:

- **Telecommunications and broadband markets are competitive in APEC economies**, but there is room for improvement;
- The **most common average household broadband speeds are between 512 Kbps and 2 Mbps**;
- **Most respondents perceive broadband prices in their economies to be either high or competitive. This is particularly important considering that respondents identified price as the most important factor influencing SME broadband adoption in their economy**;
- **Levels of broadband adoption are high in urban areas and less so in rural areas.** This is true for households as well as SMEs. However, governments have set ambitious adoption targets for the next decade;
- **Governments favour large-scale broadband policies such as national broadband plans, funding/facilitating national broadband networks and encouraging/subsidising the deployment of broadband infrastructure.** Encouraging competition is also common;
- **Policy makers look to other markets, particularly to perceived broadband leaders, in developing broadband policies and benchmarking progress in their economies**; and
- **More than half of the APEC governments (in the economies surveyed) pursue policies specifically designed to increase the adoption of broadband by SMEs. However, respondents perceive those policies as less important to driving SME broadband adoption than general factors such as price and the level of competition in the market.**

## 6 APPENDIX A

### 6.1 Text of survey provided to respondents

**We would like your help to learn more about telecommunications and ICT regulation in your economy and about the factors affecting the adoption of broadband by small to medium enterprises (SMEs).** This survey by Windsor Place Consulting is part of a study commissioned by APEC Business Advisory Council (ABAC) (see [www.abaonline.org](http://www.abaonline.org)) to learn more about effective policies to encourage the adoption of broadband by SMEs. Windsor Place Consulting is a Melbourne, Australia -based consultancy specialising in telecommunications regulation and media and communications economics. It has a particular focus on broadband policy issues.

**Why a survey of policy makers in the APEC region?** We are seeking expert opinion in a qualitative survey and we believe that policy makers and appropriate government officials across economies in the region will be able to contribute valuable information and perspectives. We are seeking your perspectives on the telecommunications sector, broadband and SME-targeted broadband policy developments in your economy. There is limited information available especially, on policies targeted at the uptake of broadband by SMEs, and we need the input of policymakers to better understand the issue across the region.

**What we are looking for in your responses** We would like you to give us your subjective responses to the questions – most of them require a qualitative response. If you have data easily to hand for the quantitative questions please use it but we are happy with your estimates for these questions.

**Confidentiality** Your survey responses will be **confidential**. Any reports of the results from this survey will not identify individuals, nor will any individual responses to the survey be made public.

**Is the survey compulsory?** Participation in this research is **voluntary**. However, the information collected from the survey will provide valuable information that will assist ABAC in the development of better recommendations to policy makers within the APEC region.

**Further information** For further information about the research, please contact: Simon Molloy [simon.molloy@windsor-place.com](mailto:simon.molloy@windsor-place.com)

I hope that you will participate in this important survey.

Fauziah Talib, Chair of the ABAC Capacity Building and Action Plan Working Group

**YOUR TELECOMMUNICATIONS SECTOR AND MARKET**

1. In this survey we will be asking questions about telecommunications and broadband in your economy. What is the name of your economy?

(please specify one APEC economy)

2. How would you characterise your national TELECOMMUNICATIONS market? (please select one)

- Limited competition and substantial opportunity for improvement
- Emerging competition
- Relatively competitive and innovative
- Very competitive, innovative and efficient.

3. How would you characterise your national BROADBAND market? (please select one)

- Limited competition and substantial opportunity for improvement
- Emerging competition
- Relatively competitive and innovative
- Very competitive, innovative and efficient.

4. Please estimate the current level of BROADBAND ADOPTION BY HOUSEHOLDS in urban and rural areas in your economy to the nearest 10%. (please estimate)

urban areas  %      rural areas  %

5. Please estimate the your Government's target level of BROADBAND ADOPTION BY HOUSEHOLDS in urban and rural areas in your economy to the nearest 10% for the following time frames (if known please estimate, or, if not known, if not, please click the box below please leave blank).

by 2015      urban areas  %      rural areas  %

by 2020      urban areas  %      rural areas  %

- Not known.

6. Please estimate the current level of **BROADBAND ADOPTION BY SMEs** in urban and rural areas in your economy to the nearest 10% (please estimate, or, if not known, please leave blank).(if known please estimate, if not, please click the box below).

urban areas  %      rural areas  %

Not known.

7. Please estimate the your Government's target level of **BROADBAND ADOPTION BY SMEs** in urban and rural areas in your economy to the nearest 10% for the following time frames (please estimate, or, if not known, please leave blank).(if known please estimate, if not, please click the box below).

by 2015      urban areas  %      rural areas  %

by 2020      urban areas  %      rural areas  %

Not known.

8. The speed of an average or typical household broadband connection in your economy is: *(please select one)*

- Less than 128Kbps
- Greater than 128 Kbps but less than 512Kbps
- greater than 512Kbps but less than 2Mbps
- greater than 2Mbps but less than 10Mbps
- greater than 10Mbps but less than 20Mbps
- greater than 20Mbps.

9. In comparison with other international economies how would you characterise broadband prices in your economy. *(please select one)*

- Very high by international standards
- High by international standards
- Comparable with international prices
- Low by international standards
- Very low by international standards.

**10. How would you characterise regulatory efforts to increase competition in broadband services. (please select one)**

- At an early stage
- Limited success, needing further review
- Still developing, somewhat effective
- Developed and effective
- Advanced and highly effective.

**BROADBAND POLICY**

**11. What type of policies does your Government pursue to encourage broadband adoption? (please select as many as apply)**

- Encouraging the entry of new telecommunications operators into the market
- Encouraging access to bottleneck facilities (for example, such as unbundling of local loop)
- Adopting a National Broadband Plan which also includes broadband adoption by SMEs
- Implementing and funding/facilitating a National Broadband Network ('NBN')
- Encouraging / subsidising deployment of broadband infrastructure – both wired and wireless
- Providing tax incentives for SMEs to adopt ICT and «go online»
- Public awareness/education programs for SMEs on awareness of and adoption of broadband
- Other (please specify) \_\_\_\_\_

**12. Since what year have such policies to increase the adoption of broadband been in place?**

(please insert)

**13. Can you please nominate, from your perspective, the leading economies in broadband policy and/or adoption that you use to inform and/or benchmark your policy development? (please nominate between 1 and 3 economies from anywhere in the world)**

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

**14. If you are a government policy maker in the area of broadband policy development how important is it to you to analyse policies from other economies? (please select one)**

- Very important
- Quite important
- Not a consideration (neither important or unimportant)
- Quite unimportant
- Irrelevant.

**15. What type of payment mechanism is supported for the provision of online services in your economy? (please select as many as apply)**

- Direct debit cards
- Credit cards
- BPAY (or equivalent)
- Visa with microchips
- Secure payment sites
- Don't know
- Others (please specify) \_\_\_\_\_

**16. How would you characterise the provision of online services by the private sector in your economy (online banking, real estate services, job seeking and recruitment services etc)? (please select one)**

- Early stage, relatively unsophisticated
- Some sophistication beginning to develop
- Some sophisticated services but lacking full coverage
- Advanced, comprehensive, sophisticated.

**17. How would you characterise the provision of online services by your Government (government information services, registration and licensing services etc)? (please select one)**

- Early stage, relatively unsophisticated
- Some sophistication beginning to develop
- Some sophisticated services but lacking full coverage
- Advanced, comprehensive, sophisticated.

**18. Can you please provide some brief comments about what future plans or targets your economy has for broadband adoption?**

**BROADBAND POLICY AND SMES**

**19. How would you characterise the use of broadband by SMEs in your economy? (please enter number for each area type: urban and/or rural)(please select for each area type: urban and/or rural)**

	urban areas	rural areas
<b>Early stage, rudimentary</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Beginning to 'take-off'</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Some sophisticated user companies but still patchy overall</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Generally innovative and productivity enhancing</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Highly innovative and sophisticated.</b>	<input type="checkbox"/>	<input type="checkbox"/>



**20. Does your Government pursue policies specifically designed to increase the adoption of broadband by SME's in your economy? (please select one)**

- Yes
- No
- Don't know

**21. Since what year have such policies to increase the adoption of broadband by SME's in your economy been in place?**

(please insert)

**22. What, in your view are the major barriers to greater adoption of broadband services by SMEs in your economy? (please select all that you think are relevant)**

- Lack of awareness of the benefits to business of broadband
- Lack of sufficient skills within SMEs to effectively use broadband
- Most SMEs are not in businesses that will benefit much from the use of broadband
- Inadequate infrastructure
- Prices are too high
- Capital cost (or set up cost) of broadband connectivity is too high
- Customer service by telecommunications companies is poor
- Broadband services penetration in our economy is too low for SMEs to view broadband adoption as important (ie low customer demand)
- Broadband services are low quality and/or unreliable
- There are no sufficiently attractive online services and/or applications to attract SMEs to broadband services
- Other (please specify) \_\_\_\_\_

**23. Can you please rate on the scale below the importance of the following factors in driving broadband adoption by SMEs in your economy. We are particularly interested in whether you think *general* policies to increase competition and decrease prices for broadband are more or less important than polices that are specifically targeted to increase broadband adoption by SMEs.**

**The competitiveness of the telecommunications market**

**Extremely  
important**

**Not important**

1

2

3

4

5

**The price of broadband services**

**Extremely  
important**

**Not important**

1

2

3

4

5

**The availability of infrastructure**

**Extremely  
important**

**Not important**

1

2

3

4

5

**Specific policies designed to encourage broadband adoption by SMEs**

**Extremely  
important**

**Not important**

1

2

3

4

5

24. Can you please provide some brief comments about which polices for broadband adoption by SMEs either have been or would be most effective in your economy?