

APEC SME INDICATORS: A Feasibility Assessment



Asia Pacific Economic Cooperation

**Small and Medium Enterprises
Policy Level Group**

1998

APEC SME INDICATORS: A Feasibility Assessment

**This project was led by the
Bureau of Small and Medium Business Development,
(BSMBD)
Republic of the Philippines
under the asupices of the
APEC SME Policy Level Group**

Prepared by - Chris Hall
PECC SME Project coordinator
and
MBA Director
Macquarie Graduate School of Management (MGSM)
Macquarie University 2109 Australia
Asia Pacific Research Institute Macquarie
100231.1327@compuserve.com fax 61 2 9973 1163

Published on behalf of APEC Secretariat
438 Alexandra Road
Singapore 119958
www.apecsec.org.sg

ISBN 1 86408 441 3
1998
printed in Australia by Graphic World

CONTENTS

Project aims and background	3
SUMMARIES	
Summary of main findings	5
Summary of action plan and recommendations	7
Summary Structure	8
MAIN REPORT	
1. Objectives and Approach	10
Objectives	
Approach and methodology	
2. Introduction	11
2.1 Indicators and statistics	
2.2 Why indicators	
3. Review of work relevant to SME statistics and indicators	14
3.1 Within APEC	
3.2 European observatory, Eurostat, OECD	
4. The feasibility of better SME indicators in APEC	15
4.1 resolving the definitional issue	
4.2 Using readily available information to develop better indicators	
4.3 Less readily available information	
a. Using white papers as a means of focussing on specific issues	
b. Addressing internationalisation of APEC SMEs	
c. Comparing policy commitments	
4.4 Making life easier for SMEs, while improving information	
DETAILED ACTION PLAN	26
APPENDICES	
Appendix A	31
Available information and statistics on SMEs in participating economies	
Appendix B	37
Summary background information on comparability	
Appendix C	38
Information request	
Appendix D	44
Examples of possible indicators and availability of information	
About the author	47

Project Aims and Background

The project had two main aims:

1. To assess the feasibility of developing operational set of measures (or indicators) for monitoring:
 - progress in achieving APEC objectives as they relate to SMEs;
 - SME trends and the contribution of SMEs to growth and development.
2. To develop an action plan for the implementation of a set of SME indicators in APEC economies.

The project did NOT aim to actually produce statistics or collect information on SMEs in APEC.

The project was proposed in Santiago in 1996, and the Philippines led the project. Preliminary and unfunded research led to a preliminary report being submitted to the Ministerial in Manila that year, where the project was approved for submission to APEC for funding. At that stage a smaller project was envisaged that would only cover a limited number of economies. However the ABAC report at Manila cited the SME Indicators project as one of three main priorities. Partly because of this, many more economies than originally anticipated indicated that wished to participate. This then required a rejigging of the methodology, and that caused delays. Additional delays were experienced obtaining information from the larger number of economies.

Acknowledgment is given to the many people and agencies who assisted by providing information and advice.

It is emphasised that the information contained in the report does not necessarily represent the official position of the economy concerned. Although all reasonable efforts were made to ensure the accuracy of the information presented, it cannot be guaranteed. The report is essentially a feasibility study; for that purpose, and in order that people participating in the project did not have to waste unreasonable amounts of time, detailed information and cross checks were not required.

Summaries

Summary of main findings

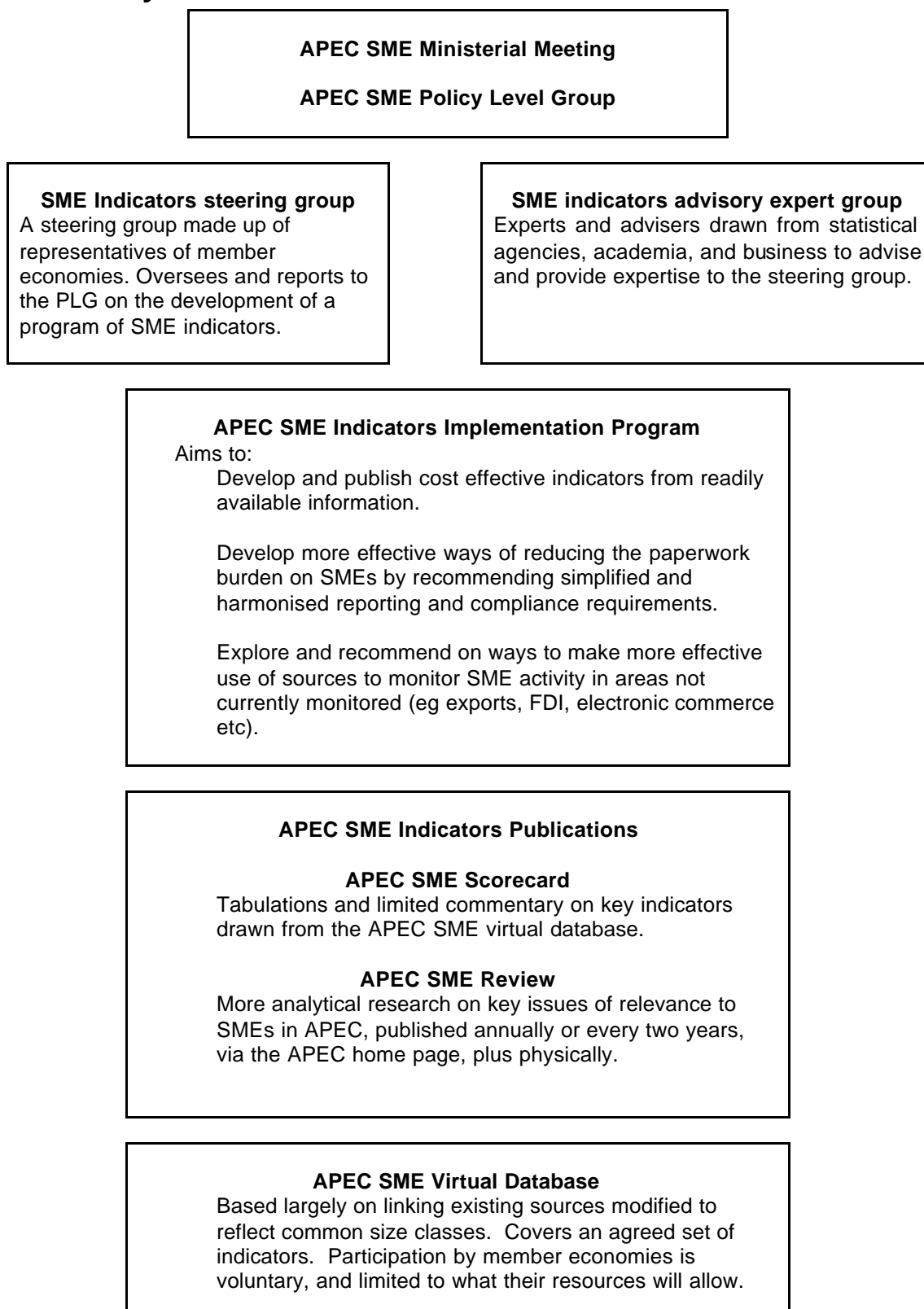
- ⇒ It is feasible to develop a set of APEC SME Indicators which will help monitor structural change in the region, based on reasonably readily available information.
- ⇒ It will be more difficult to develop Indicators to monitor progress in achieving APEC objectives as they relate to SMEs because APEC has not set out any clear targets or blueprint for achievements, and because information on international trade and investment is difficult to obtain broken down by size of firm. APEC's main concern is with internationalisation, but information on internationalisation by SMEs is very limited. Information on international trade and investment by SMEs is only collected by a few economies at present. However, in future it may be possible to monitor this activity much more effectively, first, by making better use of existing sources, and second, by taking advantages of developments emerging in electronic commerce and in more efficient electronic customs clearance procedures.
- ⇒ There is a need for better information and statistics on SMEs in APEC. Although it is widely accepted in APEC that SMEs are an important part of the APEC economy, relatively little is *actually* known about the contribution of SMEs to the economy, or of the impact of structural changes on SMEs, or about the performance of SMEs, or about the comparative resources being devoted to policy assistance to SMEs. At present there is no systematic way of monitoring the changes in these areas.
- ⇒ Information needs and priorities vary widely between APEC members and between users. However, investigations to date point to the main priority areas for policy makers being:
 - a) policy comparison; and
 - b) benchmarking the performance of SMEs.Unfortunately relevant information in these areas is difficult to access or simply not collected, so to develop indicators in these areas will require resource commitments and cooperation.
- ⇒ There are wide differences between economies in APEC as to the availability and quality of statistics and information on SMEs. About twelve of the 18 member economies have reasonably good, up-to-date statistics on SMEs that could be brought into comparable form within reasonable resource constraints
- ⇒ Definitions of what constitute an SME differ between members. However a common approach to size classes would overcome many of the definitional problems, and allow increased comparability between existing information on SMEs. This approach is also being adopted by OECD/Eurostat in its efforts to improve SME statistics.
- ⇒ There is a considerable amount of information on SMEs which is reasonably readily available. By agreeing on common size classes it would be possible to render this already available information into a more comparable form for APEC purposes, without having to compromise existing member economy definitions or statistics. This would not necessarily allow direct statistical comparisons, because collection methodologies still differ a lot. However it would allow useful indicators. It will not be possible to develop a uniform set of APEC-wide statistics on SMEs without incurring considerable expense, and at this is not warranted yet.
- ⇒ Some economies, including most of the major ones in APEC, already carry out some form of review of SMEs on a regular basis (ie Australia, China, Japan, Korea, Chinese Taipei, and USA) . This offers an opportunity to cooperate more by focussing on some common issues of relevance to APEC in these regular reviews.

- ⇒ Within APEC there are already some steps being taken to better coordinate, collect, and make available information; the HRD Labour Market Indicators (LMI) database is a good example. However there is relatively little information on SMEs.
- ⇒ There are only limited resources available to improve the quality and comparability of information on SMEs in APEC member economies. Any improvements or changes need to:
 - a) be able to be carried out at relatively low cost (eg by making use of using existing information and statistics in different and more useful ways); and
 - b) be related closely to priorities.
- ⇒ Technological change, and the adoption of business registers, and widespread use of VAT (value added taxes) in APEC means that there are now opportunities to reduce the time and resources spent by many SMEs in meeting compliance requirements, and at the same time to collect more accurate information at lower cost.

Summary action plan and recommendations

- ⇒ That the PLG should *in principle* endorse the development and implementation of a coordinated approach across APEC to further develop and improve SME Indicators in APEC.
- ⇒ That an Action Plan to achieve this be formalised as a Project (APEC SME Indicators Implementation Project) to be put forward for consideration in 1998 by the APEC SME PLG, and APEC central funding requested in 1998/99.
- ⇒ That individual member economies be asked to contribute in kind to the development of APEC SME Indicators. It be clearly understood that no APEC member is obliged to provide information or to participate in the development of APEC SME Indicators in general, or in any specific indicator. However, that in the spirit of APEC cooperation, all members be encouraged to participate.
- ⇒ That member economies be invited to participate in the management of the APEC SME Indicators Implementation Project by means of:
 - a) a policy advisory working group made up of members of the APEC PLG;
 - b) a technical expert advisory group nominated by the cooperating member economies. These two advisory groups would help oversee the design and implementation of the project;
 - c) a project management implementation team.
- ⇒ That the APEC SME Indicators Implementation Project work toward the following:
 - Over a one to two year time horizon -*
 - a) agreeing to a set of common APEC SME size classes based on employment at enterprise level;
 - b) agreeing to, and developing a trial set of common APEC SME Indicators, based on common size classes, on reasonably readily available information, and subject to resource limitations;
 - c) publication of these indicators as an APEC SME Scorecard, initially via the APEC web site, and then through normal publication channels;
 - d) updating the APEC SME Scorecard at least annually;
 - e) improving coordination and information sharing between members on SME information (eg by hot links to statistical and other relevant information sources on SMEs in member economies, rather than establishing a centralised SME indicators database as such).
 - Over a one to five year time horizon -*
 - f) agreeing to a set of priority APEC issues to be addressed in annual white papers by member economies, and encouraging the participation of member economies in a coordinated comparable approach to data collection and analysis of those issues;
 - g) publication of an APEC SME Review which brings together the APEC SME Scorecard, the results of common issues addressed in member white papers, and summaries of other specific SME research activities in APEC;
 - h) where possible, examining ways to reduce the paperwork burden on SMEs;
 - i) examining the possibilities for developing new and better sources of information on SME indicators, and in particular making more effective use of business registration, simplified customs procedures, and electronic commerce;
 - j) working with the private sector and with private sector representatives wherever possible to obtain better indicators on SME activity in APEC.

Summary structure



Main report

1. Objectives and Approach

Objectives

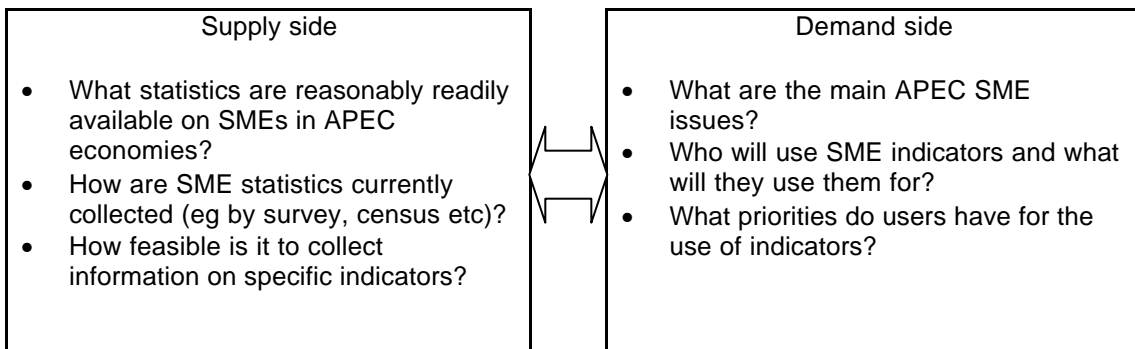
The project had two main aims:

2. To assess the feasibility of developing operational set of measures (or indicators) for monitoring:
 - progress in achieving APEC objectives as they relate to SMEs;
 - SME trends and the contribution of SMEs to growth and development.
3. To develop an action plan for the implementation of a set of SME indicators in APEC economies.

The project did NOT aim to actually produce statistics or collect information on SMEs in APEC.

Approach and methodology

The approach adopted was to look simultaneously at both the “supply side” and the “demand side”.



On the supply side, information requests (see appendix C) were sent to selected member economies, and in some cases, interviews were carried out by phone or in person. Similarly, a questionnaire was used to assess the feasibility of developing some specific indicators (see appendix D).

On the demand side, APEC documents and action plans were reviewed, and interviews were carried out with a range of experts and individuals. Ultimately, decisions about what resources are to be directed to which priorities must be made by policy makers.

It is emphasised that the information contained in Appendices A, B and D does not necessarily represent the official position of the economy concerned. Although all reasonable efforts were made to ensure the accuracy of the information presented, it cannot be guaranteed. The report is essentially a feasibility study; for that purpose, and in order that people participating in the project did not have to waste unreasonable amounts of time, detailed information and cross checks were not required.

2. Introduction

2.1 Indicators and statistics

It is commonly cited in APEC documents that:

1. there are perhaps around 40 million or more SMEs in the APEC area;
2. that they make up over 95% of all enterprises;
3. SMEs contribute between 30% and 60% of GDP;
4. SMEs employ up to 80% of the workforce in APEC member economies; and
5. SMEs contribute about 35% of all exports in APEC.

SMEs undoubtedly form an important economic, social, and political force in APEC. Just how important their contribution is, we do not know. For example, although the above points are often quoted as fact, some of them (points 1 and 5 in particular) are only estimates based on very limited information. Even the other points are based on member economy statistics which in turn are not necessarily comparable. We do not know what the real role of SMEs is in APEC, we do not know how that contribution is changing, nor do we know how APEC initiatives are affecting SMEs.

Indicators differ from statistics in that they are *only* indicators. They are subject to larger errors and inaccuracies, and so there is a trade-off between the accuracy and comparability of statistics, and the timeliness and pragmatism of indicators. However indicators can still be useful in addressing some key questions of relevance to APEC. What are those issues?

The competitiveness of SMEs. For a small but important group of SMEs, APEC moves will open new opportunities for across-border activity, *provided* they are competitive and can take advantage of those opportunities. SMEs face many impediments in achieving international competitiveness, for example in areas of HRD, access to finance and information, markets, and technology. All APEC members have policies in varying degrees to assist their SMEs to overcome these impediments and become more competitive. *Suitable indicators would be a useful tool to assist governments know how competitive their SMEs are. They may also help to identify areas where their economies are below benchmarks set by more competitive economies (eg in terms of HRD performance, of provision of finance) so assisting them to more effectively direct policy efforts to make them more competitive.*

The internationalisation of SMEs. These internationally competitive SMEs seem to make an important contribution to sustainable growth, especially of employment. We would expect however that both the absolute, and more importantly, the **relative** contribution of these SMEs to exports and to FDI should be increasing, and that this should, in turn, be increasing the contribution of SMEs to sustained GDP growth in APEC. The fact is that we do not know, and at present have no way of telling. A key APEC objective should be to raise the level of international SME activity from what it is now (ie about 30% to 35% of exports, and about 10% of FDI by value), to closer to what it might be expected to be in an integrated economy (ie about 50% of trade, and 50% of investment). *Suitable indicators would give some idea of overall progress on SME internationalisation, and the relative progress of some economies in comparison to others in internationalising their SMEs.*

Policy assistance to SMEs. Many SMEs will be affected by the changes being brought about by APEC. Much of the success of the APEC agenda toward liberalisation in the next century will depend on how successfully SMEs accommodate to changes. A non interventionist approach suggests that simply removing trade barriers will be enough to achieve APEC objectives. The political reality is that all APEC members have policies designed to assist their SMEs. For SMEs to take full advantage of the opportunities opened up by APEC will require policy measures to help SMEs overcome the intrinsic impediments and difficulties that they face. Simply reducing trade and investment barriers is not enough by itself; more positive actions are required if SMEs are to fully realise their potential to contribute to growth and development of the region. The danger is that such forms of assistance can distort markets and become a form of protection in their own right. *Suitable*

indicators would give some idea of the extent of such assistance, and of relative trends in the level of such assistance.

The impact of APEC initiatives on SMEs. For another much larger group of SMEs, APEC changes are likely to pose a real threat because they are less likely to be able to adjust quickly to increased pressures of international competition. Many will not be able to meet the competitive challenges, and so will face major structural upheaval. These domestically oriented SMEs are a significant political force, and may see protection as a solution, thus directly opposing the thrust of APEC agendas. The pace of trade liberalisation still has to reflect a human and political reality. *SME Indicators may give a better idea of relative competitiveness of SME sectors, and of the pace and impact of structural change at a regional and economy level. Indicators could thus help in identifying potential “hot spots” so that APEC members can direct attention to them and facilitate adjustment toward a more competitive regional economy.*

In summary, with the exception of a few APEC members, the lack of SME statistics, and the lack of comparability of those statistics that do exist in the region, often makes it difficult to make any informed policy assessments at an economy level, or at an APEC level. *It is also difficult to monitor the progress that is being made to the achievement of APEC objectives in the SME area.*

2.2 Why Indicators?

How can SME Indicators assist in meeting APEC objectives? APEC's objectives are to:

- Sustain the growth and development of the region for the good of its people;
- Contribute to the growth and development of the world economy;
- Enhance the positive gains arising from increasing economic interdependence;
- Develop an open multilateral trading system; and
- Reduce barriers to trade in goods, services and investment.

In short, the main APEC objectives are to liberalise trade and investment, and in doing so improve the welfare of the APEC region. Indicators can be useful in four main ways.

Reasons for using indicators

1. To monitor trends and structural changes
2. To benchmark and compare the performance of SMEs
3. To benchmark and compare policy initiatives and their impact
4. To monitor progress in achieving APEC agendas

1. To monitor trends and structural changes affecting SMEs

APEC is leading to major structural changes in the region. Because these changes pose major social, economic and political problems, policy makers need to be able to keep track of these and respond to them, at member economy level, and in some cases multilaterally. This poses questions such as, for example:

- What is the relative proportion of SMEs in the agricultural/manufacturing/service sectors in different economies, and what is the rate of change of structural composition in different economies?
- What is the rate of net and gross start up, and exit rate, in different industries in different economies?
- How do start up and exit rates relate to the business cycle, and to exchange rate changes?
- What is the ratio of SMEs (informal and formal) to population, and what rate of change is there?
- What is the approximate absolute cost, and index of change of cost of finance, rent and labour to SMEs in different economies?

2. To benchmark and compare the performance of SMEs

Some indicators may be useful to policy makers to give them information on whether their SMEs are performing better or worse than SMEs in other economies. As APEC moves toward 2020, and as SMEs face more international competition, policy makers will increasingly need to know the relative competitiveness of their SMEs. This requires indicators which address questions such as, for example:

- Do SMEs in economy X contribute more to GDP and employment growth than those in economy Y?
- Are the SMEs in economy X more productive than those in Y?
- What is the relative rate of change of productivity growth?
- Are SMEs in industry Z in economy X becoming more or less internationally competitive than those in economy Y?
- Are SMEs in economy X adopting technology (PCs, internet, E commerce etc) faster than those in economy Y?
- What is the export level and growth rate for SMEs in different economies?

3. To compare and benchmark policy initiatives and their impacts

All economies have adopted policy measures to assist their SMEs and to make them more competitive. Specific questions of comparison of policy effectiveness are very difficult to answer, and it is unlikely that indicators can be found to do this readily. However, there are some broad policy issues which are suitable to an indicator approach. For example:

- How much venture finance is made available to SMEs on a per SME basis in different economies, and how does this compare to gross and net start up rates?
- What resources are directed to HRD and management education, or to consultancy advisory services, per SME and per SME assisted?
- What is the level of policy assistance provided to SMEs relative to other members in areas such as technology, exports etc, and is this increasing or decreasing over time?
- What are the administrative compliance costs (eg registration, reporting etc) of running certain specified types of business, and are these changing over time?

4. To monitor the impact of APEC initiatives and the achievement of APEC SME Agenda

Has APEC had a beneficial impact on SMEs? Are APEC's objectives in relation to SMEs being achieved? These questions are difficult to answer, not the least because APEC has no specific, stated, objectives in relation to SMEs. This may seem odd - SMEs have been a priority item in the leaders agenda since the 1993 Seattle meeting, and SMEs are a focus of one of the six key goals in the Ecotech agenda. However, here are no specific TILF targets set with regards to SMEs. IAPs (Individual Action Plans at economy level) do not address SMEs as such. Similarly, APEC has an active Ecotech agenda on SMEs, which has encompassed over 100 projects to date. However, there are no clear targets for what this activity should achieve.

To monitor the impact of APEC it will be necessary to develop measures to assess the success of APEC initiatives, such as for example:

- Is the proportion of exports produced directly and indirectly by SMEs increasing?
- Is the proportion of FDI by value by SMEs increasing?
- Are the impediments to SME mobility and improved SME competitiveness being reduced?
- How many SMEs use APEC channels for matchmaking versus other channels?
- How many SMEs use information access channels provided by APEC?

It would also be useful if APEC could work to a clearer statement, or blueprint, of what it sees the world looking like for SMEs in 2010 and 2020.

3. Review of Work Relevant to SME Statistics and Indicators

3.1 Within APEC

Within APEC there has been something of a proliferation of databases, to the extent that a restriction has been placed by SOM on the creation of new APEC databases. The key areas of relevance in APEC are:

The HRD LMI database. The Labour Market Indicators database is maintained as a central database based on information supplied by member economies on labour markets. At present it does not have size of firm as a classifying variable. It is possible that in the future information could be requested from members and categorised according to size of firm.

Trade and Investment Data Review Working Group. This group has examined the availability of data on trade by firm size, and by and large found that data on SME exports, imports or trade is incomplete or non-existent.

3.2 European Observatory, Eurostat, OECD etc.

the **European Observatory for SMEs** is funded by DG XXIII of the Commission of the European Communities. It produces a major report or review of SME issues each year in the European Community. This is put together by the European Network for SME Research, and coordinated by EIM Small Business and Research Consultancy in the Netherlands. The annual cost of the review is in the order of 1 million ECUs.

The **OECD** is now cooperating with **Eurostat** to:

1. *Continue to update tabular data disaggregated by size class.* This has led to a questionnaire being sent to OECD members, requesting data to be provided broken down by specific size classes, and according to priorities. The size classes being used are:

- 0 - 9 micro (0 only for those members who collect that information)
- 10 - 99 small
- 100 - 499 medium
- 500+ large

although more disaggregated data are also requested if available.

The priorities for data sought are:

- Priority 1
 - Employees
 - Salaried employees
 - Turnover or output
 - Value added
 - Labour costs

- Priority 2
 - Wages and salaries
 - Tangible assets
 - R&D expenditure
 - Exports
 - Imports

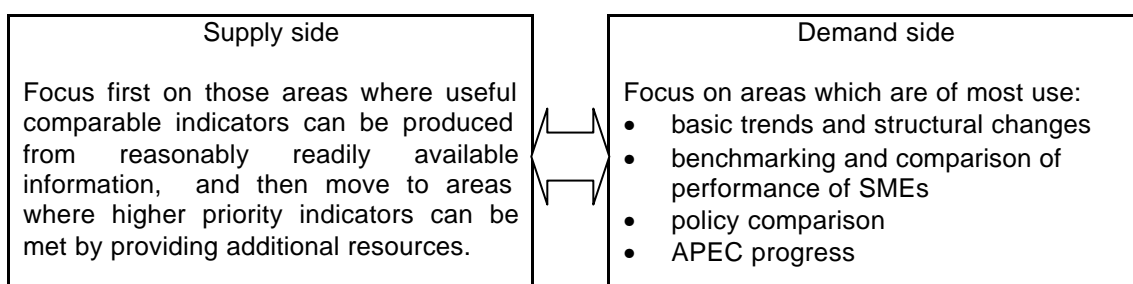
2. *Work on a special project on statistics on women owned SMEs.*

4. The Feasibility of Better SME Indicators in APEC

How feasible is it to develop better SME indicators in APEC? Feasibility depends on costs relative to benefits, and on the balancing of “supply” relative to “demand”. To determine the feasibility of improved indicators we need to be able answer two main questions:

1. what information is available, at what cost, and is it possible to reduce the cost of obtaining relevant information?
2. what are the priorities of the users of indicators, and what are they willing to pay to improve indicators?

It then makes sense to focus on those areas which are more feasible:



Box 4.1 provides a simple schematic overview of what appears to be the feasibility of introducing better SME indicators in APEC.

Box 4.1 Schematic comparison of indicator feasibility

Indicator type	priority (demand)	cost (supply)	feasibility
<i>Monitor trends and structural changes</i> eg... Change in number of service SMEs per head of population Start up rates (gross and net)	moderate	low to moderate	good
<i>Benchmark and compare the performance of SMEs</i> eg... Value added per employee of manufacturing SMEs Contribution of SMEs to GDP growth	high	moderate to high	good to fair
<i>Compare policy initiatives and their impact</i> eg... Government grant expenditure per SME Administrative compliance costs per SME	high	high	fair to low
<i>Monitor progress in achieving APEC SME agendas</i> eg... Trend in proportion of value of exports from SMEs Trend in SME FDI	high	?	?

This is obviously a simplification. The priority rankings are based on reviews of APEC documents, and on straw surveys of experts and policy makers. The cost estimates are based on surveys of participating member economies. Appendices A and B summarise the SME statistics that are reasonably readily available in APEC. Appendix C provides the more detailed pro forma information request that was used to elicit this information. Appendix D shows the results of preliminary assessment of the feasibility of possible indicators.

Box 4.1 helps to illustrate three main points:

- The indicators most likely to be feasible are those which can be generated from readily accessible information, and as shown below, these are usually concerned with trends and structural change. Users do not generally attach a high priority to these indicators, but they are relatively low cost to develop.
- Policy makers generally attach a high priority to using indicators to benchmark the performance of their SMEs against those in other economies, to compare their policy performance, and to assess progress in APEC. Unfortunately, the cost of developing such indicators tends to be higher, so if they are to be developed it will require more time and more resources. This makes these less feasible at this stage. However as shown below, there are possibly ways of reducing the costs of collecting some useful information, and thus rendering some of these indicators more feasible.
- Indicators to monitor APEC progress in achieving its objectives in the SME agenda are difficult to develop, primarily because APEC has not set out any clear targets or a blueprint with which to compare progress.

The costs of developing indicators vary widely depending on the indicator and on the economy concerned. Box 4.2 gives a subjective overview of the state of SME statistics in APEC.

Box 4.2 The state of SME Statistics in APEC.

<p>Category 1 Annual or reasonably regular review of SMEs or small business in the economy, which could be modified to take account of some APEC issues</p>	<p>Australia Canada China Japan Korea Chinese Taipei USA</p>
<p>Category 2 Reasonably good up to date statistics on SMEs that could be brought into comparable form within reasonable resource constraints</p>	<p>Australia Brunei Darussalam Canada Hong Kong China Japan Korea Malaysia New Zealand Philippines Singapore Chinese Taipei USA</p>
<p>Category 3 Some good statistics which could be used, but problems of lack of data, and of comparability mean that coverage would be limited, and often out of date. Significant resources would be required to collect data or to render it comparable.</p>	<p>Chile Peoples Republic of China Indonesia Mexico Papua New Guinea Thailand</p>

On the cost side it makes sense to take a path of least resistance, first focussing on the information which is readily at hand. This will enable the production of some reasonable and useful indicators on the structural aspects of SMEs in APEC (eg - number of SMEs, start up rates etc). Unfortunately, from a demand side point of view, this will not necessarily provide the indicators that are most useful. To meet some more sophisticated user needs for indicators (eg - exports by SMEs, amount of venture finance available to SMEs) will require additional resources. It is ultimately up to member governments and to APEC to decide which activities or indicators should be given priority. It is quite feasible to develop better indicators, but which indicators are indeed developed will ultimately depend on the decisions of policy makers to allocate resources to those indicators.

The rest of this section focuses on:

- 4.1 Using readily available information to develop better SME indicators
- 4.2 Indicators and less readily available information
- 4.3 Making life easier for SMEs, while improving SME indicators

The key points to note from the rest of this section are that:

1. There are many different definitions of what constitutes an SME amongst APEC members, and this makes it difficult to make comparisons across economies about SMEs. A common APEC definition of what constitutes an SME is unlikely to be acceptable to members. However, most economies gather information on the actual number of employees so it may be possible to agree on some common size classes. To a large extent this approach could overcome the definitional issue fairly easily and cost effectively.
2. There is a considerable amount of information on SMEs which is reasonably readily available. By agreeing on common size classes it would be possible to render this already available information into a more comparable form for APEC purposes, without having to compromise existing member economy definitions or statistics. This would not necessarily allow direct statistical comparisons, because collection methodologies still differ a lot. However it would allow useful indicators, especially of changes.
3. Some economies in APEC, including most of the major ones, already carry out some form of review of SMEs on a regular basis (ie Australia, China, Japan, Korea, Chinese Taipei, and USA) . This offers an opportunity to cooperate more by focussing on some common issues of relevance to APEC in these regular reviews.
4. APEC's main concern is with internationalisation, but information on internationalisation by SMEs is very limited. Information on international trade and investment by SMEs is only collected by a few economies at present. However, it may be possible to monitor this activity much more effectively, first, by making better use of existing sources, and second, by taking advantages of developments emerging in electronic commerce and in more efficient electronic customs clearance procedures.
5. There are many other areas where better indicators might be useful, but where available information is difficult to access or simply not collected. For example, the ability to compare expenditure on SME programs, or to benchmark the productivity growth of SMEs.
6. Technological change, and the adoption of business registers, and widespread use of VAT (value added taxes) in APEC means that there are now opportunities to make life easier for many SMEs, and at the same time to collect more accurate information at low cost.

4.1 Resolving the definitional issue

The definition of what constitutes an SME varies widely amongst member economies, as shown by the following table:

Table 4.1 Main elements of the definitions of SMEs in APEC

	employ	n	capital	assets	sales	share holders	production capacity
Australia	100						
Brunei Darussalam	100						
Canada	499						
Chile							
PRC		no					
Hong Kong China	100						
Indonesia	100						
Japan	300						
Korea	300						
Malaysia							
Mexico							
New Zealand							
PNG							
Philippines	200						
Singapore	100						
Chinese Taipei							
Thailand	200						
USA	499						

Source - The APEC survey on SMEs

employ: - figures indicate the maximum number of employees in a firm defined as an SME

n : shaded means that information on the actual number of employees is collected, so it is relatively easy to stratify by employment size. Blank indicates that it that those economies were not surveyed.

It is unlikely that all members would want to adopt a single APEC definition for an SME. However, 11 of the 18 economies *already* use employment as a defining characteristic, and most collect information on the actual number of employees (for example, a respondent must indicate that they have 16 employees, rather than just ticking a box to show they have between 5 and 19 employees). This is shown by the shading in the “n” column in table 4.1. This means that no matter what definition of SME is used by a member economy, or what size classes are used, it is *in principle* possible to reconstruct existing data on any size class based on number of employees. Thus if a set of agreed APEC size categories (ie zero, 1-4, 5 -19, 20 - 99 etc) can be arrived at, it would be possible to produce reasonably comparable figures on firms by size measured by employment. Although this is not perfect, it would allow better comparisons than are presently possible. For example, at present comparing the proportion of employment covered by SMEs in Japan with that in USA and with Australia is meaningless because the SMEs in Japan are delimited as having 300 employees, in USA 500 employees, and in Australia 100. With common size classes it would be at least possible to look at the proportion of employment contributed by firms with between, say, 20 and 99 employees in APEC member economies.

4.2 Using readily available information to develop better indicators

There is a fair amount of information which is reasonably readily available, broken down by firm size. Table 4.2 lists the information that

- ✓ is readily available in at least 5 APEC economies
- ✓✓ is readily available in a majority of APEC economies

More detailed information is set out in table 4.3 and in Appendix A, which shows which economies have this information, and where it is obtained.

Table 4.2 Readily available information*

Number of business units	✓✓
Number of establishments	✓✓
New business registrations	✓✓
Legal structure	✓✓
Ownership structure - foreign owned	✓
Ownership structure - other	✓
Bankruptcies	✓
Year of commencement, or age	✓
Industry class - 3 digit	✓✓
Industry class - 4 digit	✓✓
Total employment	✓✓
Output - value	✓✓
Sales	✓✓
Cost of goods sold	✓✓
Costs of energy or fuels	✓
Wages costs	✓✓
Value added	✓✓
Tax paid	✓
Operating surplus	✓
Interest payments, finance costs	✓
Total assets, and change in	✓✓
Total liabilities, and change in	✓
Inventories, and change in	✓
Depreciation	✓✓
Taxation	✓

Note: * Information which is based on regular census or survey data
Source - Appendix A

This suggests that for a significant number of APEC economies reasonably good comparable indicators could be developed fairly cost effectively by using existing data. For example, indicators that could be obtained relatively easily are:

- total number of SMEs per head of population, (and also broken down by industry category);
- start up rates (broken down by industry);
- age of firms by size class;
- sales per employee by size class by industry;
- etc.

Producing these indicators would require some additional resources. For example, it would require some economies to re-run data analysis based on different size classes, but this should not be too difficult. For some economies (eg China) that do not currently use employment as a definitional criteria, it may be necessary to introduce a new element (number of employees) on some data collection forms - thus there would be a time delay, but not a great deal of additional expense need be involved.

Table 4.3 Summary of reasonably readily available information on SMEs

Statistic		A U S	C A N	P R C	H K C	J A P	I N D	K O R	N Z	P H I	S I N	C T P	U S A
General													
Number of business units	✓												
Number of establishments	✓												
New business registrations	✓												
Legal structure	✓												
Ownership structure - foreign owned	✓												
Ownership structure - other	✓												
Affiliation with other firms													
Franchisee or franchisor													
Member of cooperative													
Bankruptcies	✓												
Cessation of business -													
Reason for cessation of business													
Year of commencement, or age	✓												
Industry class - 3 digit	✓												
Industry class - 4 digit	✓												
Total employment	✓												
Output - value	✓												
Sales	✓												
Value of shipments to contractors													
Value of exports													
Sales/revenue from abroad													
Other income from abroad													
Cost of goods sold	✓												
Costs of energy or fuels	✓												
Wages costs	✓												
Value added	✓												
Tax paid	✓												
Operating surplus	✓												
Interest payments, finance costs	✓												
Total assets, and change in	✓												
Total liabilities, and change in	✓												
Shareholders' funds, and change in													
Inventories, and change in	✓												
Depreciation	✓												
Taxation	✓												
Expected investment													
Expected sales													
Expected change in conditions													

Source - Appendix A

✓ = information reasonably readily available in at least 5 APEC member economies

4.3 Less readily available information

The APEC SME Agenda has focussed on five main areas where government has the potential to have a positive effect on SMEs. These are:

1. HRD;
2. Finance;
3. Technology and technology sharing;
4. Market access;
5. Access to information.

Two others have received some attention:

1. Government services and assistance to SMEs, especially best practice policies; and
2. Government imposed regulatory burden and impediments.

As shown in Appendix A, although some economies collect some information on some of these issues, they usually do so by means of ad hoc, irregular surveys. There is not much by way of regular surveys providing comparable readily available information on such specialised indicators as the :

- number of women setting up or managing SMEs;
- volume of exports by SMEs;
- amount of FDI by SMEs;
- level of formal training of SME managers;
- volume of venture capital finance available to SMEs;
- amount of R & D expenditure per SME;
- number of SMEs with access to world wide web, or with a web page
- etc.

For many useful indicators, the information needed is not readily available and would require special surveys, or the piggy backing of additional questions on existing surveys. This would require additional resources and time, and whether this is justified will depend on the potential benefits. Most benefits are only obtained if several economies commit to also developing the indicators so that they can be compared.

Appendix D sets out the responses of a select number of economies to some trial indicators. This shows, for example, that:

- it would be possible to compare export assistance to SMEs, but governments might be reluctant to do so unless other governments in APEC agreed to provide similar information;
- it would be difficult to monitor and compare internet access by SMEs, computer usage, subcontractor trade, or matchmaking activity without undertaking special surveys;
- it would be possible, though it would require some effort, to monitor trends in venture capital supplies to SMEs, productivity growth, and the contribution of SMEs to GDP growth.

Thus, although there is considerable interest in developing useful SME indicators, at an APEC level it will require:

- cooperation in defining priorities and in defining the nature of the information to be collected; and
- additional resource commitments.

In this respect there are three areas where some progress could be made fairly quickly:

- a. making better use of the white paper process;
- b. addressing the internationalisation issues; and

c. comparing policy commitments.

a. Using white papers as a means of focussing on specific issues

Most of the major economies in APEC already produce an “SME White Paper” or review document, either regularly, or intermittently. For example:

- Japan - SME White Paper (annual in Japanese and summary in English);
- USA - The State of Small Business (annual in English);
- China - White Paper (produced in 1996 but publication delayed);
- Australia - Small Business in Australia (about every two years);
- Korea - White Paper on SMEs (annual, in Korean, but plans on English summary in future);
- Chinese Taipei - White Paper on SMEs (annual in Chinese, but plans English summary in future).

These review documents usually provide updated statistics, and address some specific issues, such as the relative importance of problems facing SMEs, SME use of new technologies, the role of women entrepreneurs in setting up SMEs, etc. Any specific issue usually requires some additional research or survey work to be carried out, and this is then done on an ad hoc basis by the agencies responsible for statistics or for SMEs in the economy concerned. If there was some APEC wide agreement on a set of key issues to be addressed on a rolling basis every two years, then it may be possible to focus some of these review processes on addressing some specific issues in APEC, and doing so in a reasonably comparable way. For example, the APEC SME PLG might decide that the use of electronic commerce by SMEs might be an important issue to address in 1998, especially in the light of currency instability in the Asian region. This could then be developed into a set of more specific sub-issues and questions to be addressed by participating member economies in the course of their SME reviews over the next 12 to 24 months. The survey results and research could be reported separately in each economies own review, but brought together for comparative purposes in an APEC SME Review.

b. Addressing the internationalisation of APEC SMEs

Internationalisation is a key plank in APEC’s objectives. Although APEC has not sought to set any specific targets for SME internationalisation, it is clear that a de facto target is to raise the level of international activity of SMEs in absolute and in relative terms. This means raising the level of international SME activity from what it is now (ie about 30% to 35% of exports, and about 10% of FDI by value), to closer to what it might be expected to be in an integrated economy (ie about 50% of trade, and 50% of investment). Indicators on SME international trade and investment should be a high priority for APEC.

However part of the problem in monitoring progress on this is that only a few economies keep any figures on exports or international trade by size of firm, or of international investment broken down by size of firm. These are shown in the following summary table drawn from Table 4.3.

Statistic	A	C	P	H	J	I	K	N	P	S	C	U
General	U S	A N	R C	K C	A P	N D	O R	Z	H I	I N	T P	S A
Ownership structure - foreign owned												
Value of exports												

Even this is a bit misleading. For example Chinese Taipei estimates the value of SME exports by deducting large firm exports from the total export figure - it does not actually collect information from the SMEs. Similarly Japan estimates SME exports based on a proportion of SMEs at industry level in known export industries; estimates of the contribution of SMEs are obtained by allocating known export volumes to one of three categories (SME, large firms, and unexplained) on the basis of the role of SMEs in industry production. Some economies

(Philippines, Korea, China, Indonesia) keep records of approved foreign investments, but these do not record the size of firm making or receiving the investment. Similarly some economies track investments abroad by firms (Japan, Korea, China, Chinese Taipei, Singapore), but of these, only Korea has reasonably accurate figures of FDI by size of firm.

This means that if better indicators are to be feasible in this key area of APEC concern it will be necessary to devote resources to collecting source data. There are three ways that this can be approached:

The first is to provide support for those economies that already have some source data so that they can improve the collection and presentation of what data they already have and collect. For example, Indonesia, Philippines and China all collect quite good data at individual firm level on FDI and/or on foreign ownership. These data dates back some years. The problem facing these economies is that they do not have the resources to analyse the data and provide indicators and benchmarks with which to compare trends, however the resources required to do this are not all that large.

Second, is to use the approach outlined above to focus white papers on some specific issues relating to exports and FDI, and to agree to carry out surveys of SMEs in selected economies.

Third, emerging technological trends are such that collection of some trade and investment data might be able to be done more cost effectively than in the past. This is dealt with in section 4.4

c. Comparing policy commitments

Many of the economies in APEC provide assistance to their SMEs, in the form of direct grants, or in the form of access to subsidised assistance to programs of training, diagnostics, technology, etc. There is a considerable amount of interest in being able to better compare this activity. Doing so is not all that difficult, although there is understandably some sensitivity about how the results might be used. In most cases it is relatively simple to extract budget figures, and in most cases the agencies responsible have records of the number of SMEs seeking or obtaining assistance. The following table, for example, shows that some governments would be able to produce some indicators on technology assistance and export assistance, but would probably only do so if other governments agree to provide similar information.

Feasibility of trial indicators - government assistance to SMEs

indicator	defined	Canada	Indonesia	Singapore	Chinese Taipei
Technology assistance	Total value of assistance to SMEs to improve technology Value per SME assisted	possible have some related information	possible -	possible if other economies agree	possible, but may require other economies to agree to also provide information
Export assistance	Value of assistance given to SMEs to encourage exports Value of assistance per SME	possible - have some related information	possible	possible if other economies agree	possible, but may require other economies to agree to also provide information

Source - Appendix D

4.4 Making life easier for SMEs while improving information

One of the problems facing SMEs is the paperwork and administrative burden. This is not helped by being asked to fill in the same information on numerous forms and surveys - a problem which becomes worse for SMEs operating across borders. Is it possible to both improve the data on SMEs in APEC and at the same time to reduce the paperwork burden on SMEs? The short answer seems to be "yes", but it will require some international cooperation.

Most APEC economies already have, or are moving to, a business register (see Appendix C). This means that each firm can have a unique identifier. Once a firm has a unique identifier, it should not be necessary for it to have to supply any other demographic data on government forms anywhere in APEC. For example, instead of having to fill in a mass of detail on customs forms or on tax records, it should just be able to supply its identifier number. Once a year it could be asked to update the register information - (name, registered address, number of employees, and perhaps some other economic information). To achieve this would require some cooperation in having agreed codes, and in providing reciprocal access to data bases. This might involve some security which restricts access to open register information (ie name and address, but not restricted or confidential information). The concept of single number access and compliance reporting is already being trialed and used in some member economies to reduce paperwork.

Once this sort of approach is working it becomes relatively simple to link information. Four examples of how this might be done follow:

1. *Contribution of SMEs to growth of GDP.* Many APEC economies use a value added tax or some equivalent. Usually this requires regular lodging of returns (monthly, quarterly), and increasingly this is done electronically. A link between business register information and VAT information would in most cases simplify the document lodgment for the firms, and it would allow monitoring of value added by size of firm. This is important because it would give policy makers a much better idea of the "health" of their SME sectors at a quarterly or monthly level, and throughout the business cycle. Being able to monitor this and make comparisons of the contribution of SMEs to total value added is becoming more important in a more volatile global business environment.
2. *Export volume by SMEs.* In most economies, goods sold abroad are exempt from VAT. It thus becomes possible to monitor gross exports by size of firm, something which is difficult to do at present. This would not allow any monitoring of destinations of exports.
3. *SME exports and their destination.* The blueprint for APEC customs procedures in APEC points to a simpler and more electronic process by 2005. Once this is in place, an exporter will only have to quote a registration number once on each transaction (instead of supplying the same information about the firm up to as many as 60 times on different forms). This will not only make it a lot simpler for SMEs to export, but it will also allow tracking of SME exports, something which is impossible to do now, so long as a link exists between the business register data and the customs data. It would also allow tracking of the type of SME exports and the destination of them.
4. *Electronic commerce.* The emergence of electronic commerce, especially in conjunction with web based sales supported by post and courier, will have far reaching consequences for SMEs and their ability to penetrate international markets. At present it is not at all clear how the regulatory and reporting regime for Electronic Commerce will evolve. However, it seems likely that for tax purposes, all E-commerce transactions will need to be reported in some way, and in a way that links them to an identifiable entity. This offers the potential to track

the participation of SMEs in E-commerce, and their role in international E-commerce.

5. Detailed Action Plan

⇒ **That the PLG should *in principle* agree to the development and implementation of a coordinated approach across APEC to further develop and improve SME Indicators in APEC.**

This is in the APEC spirit of consensus. It will require some discussion of the concept of SME Indicators to be held at a PLG meeting.

⇒ **That an Action Plan to achieve this be formalised as a Project (APEC SME Indicators Implementation Project) to be put forward for consideration in 1998 by the APEC SME PLG, and APEC central funding requested in 1998/99.**

This will require a project proposal to be prepared and put forward by an economy, and endorsed by other member economies. The APEC SME Indicators Implementation Project will need to meet the requirements set out under the APEC SME Framework. The project will only lead to indirect benefits to SMEs in the short term, so some special consideration may have to be pleaded.

⇒ **That individual member economies be asked to contribute in kind to the development of APEC SME Indicators. It be clearly understood that no APEC member is obliged to provide information or to participate in the development of APEC SME Indicators in general, or in any specific indicator. However, that in the spirit of APEC cooperation, all members be encouraged to participate.**

Even if APEC central funding is available, it will not be sufficient to cover all commitments. The success of the project will depend partly on the support of members. The extent of this support does not have to be large - initial indicators can be developed cost effectively with existing data sources,

⇒ **That member economies be invited to participate to the management of the APEC SME Indicators Implementation Project by means of:**

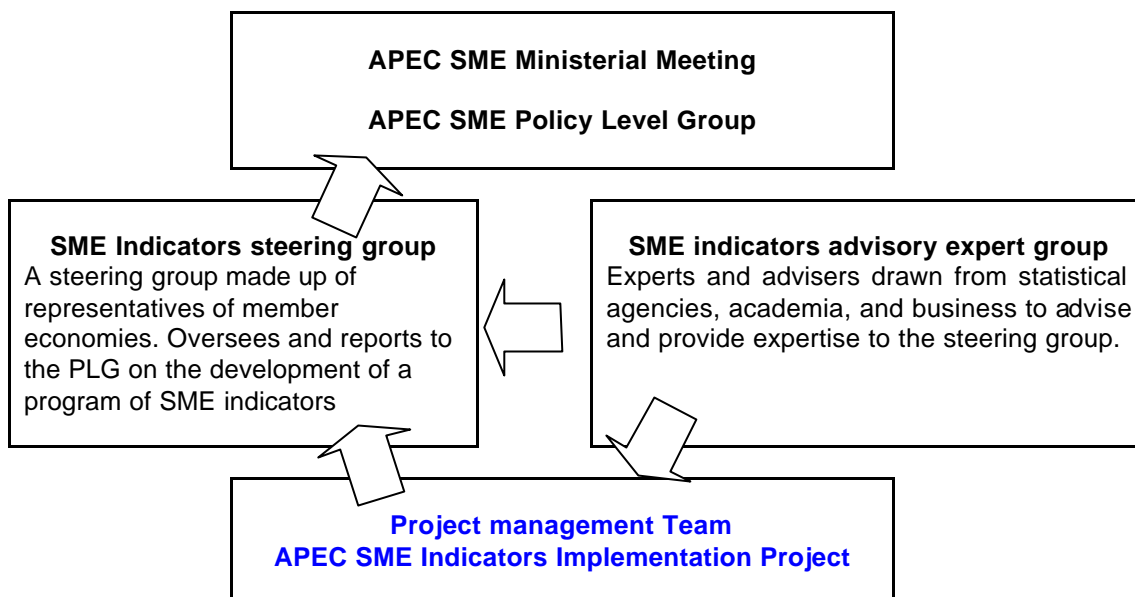
- 1. a policy advisory working group made up of members of the APEC PLG;**
- 2. a technical expert advisory group nominated by the cooperating member economies. These two advisory groups would help oversee the design and implementation of the project;**
- 3. a project management implementation team.**

A possible management structure is set out below.

Members of the SME PLG might form a specific steering group to oversee the project. This steering group can be ad hoc and informal. It would serve to champion the project, to ensure that momentum is maintained. It would be responsible for establishing realistic priorities for the development of APEC SME indicators, and advising the PLG and SME Ministerial accordingly .

An advisory group would provide expert advice on the feasibility of specific indicators. It could be drawn from relevant statistical and other agencies, from business and from academia.

A small team would be responsible for day to day management of the project.



⇒ That the APEC SME Indicators Implementation Project work toward the following:

Over a one to two year time horizon -

1. **agreeing to a set of common APEC SME size classes based on employment at enterprise level;**

This will probably require circulation of this report to relevant agencies (statistics and SME agencies mostly), along with a specific request to consider the timeframes, the resource implications, and the practical difficulties to be overcome, of adopting common size classes.

2. **agreeing to, and developing a trial set of common APEC SME Indicators, based on common size classes, on reasonably readily available information, and subject to resource limitations;**

This will require the Project Management Team to draw up a draft list of possible indicators in priority order. This can then be checked with the Advisory and Expert group, and then subsequently passed to relevant agencies for specific comments. It may be useful to then hold a special meeting of experts, agency representatives and the Steering Group to discuss key issues and arrive at a common core. Such a meeting could be held back to back with a normal PLG meeting.

3. **publication of these indicators as APEC SME Scorecard, initially via the APEC web site, and then through normal publication channels;**

Publication of indicators will require them to be brought together in a comparable format. This can be done by the Project Management Team, who will have to work with agencies providing the source material to ensure that it is provided in comparable format.

4. **updating the APEC SME Scorecard on annually at least;**

Regular updating will require some funding continuity to be established. Since APEC project funding is not usually available for ongoing recurrent activity, this will need to be addressed in other ways, such as sponsorship.

5. **improving coordination and information sharing between members on SME information (eg by hot links to statistical and other relevant information sources on SMEs in member economies, rather than establishing a centralised SME indicators database as such);**

The main outcomes of the project are set out in the following boxes.

APEC SME Indicators Implementation Program

Aims to:

Develop and publish cost effective indicators from readily available information.

Develop more effective ways of reducing the paperwork burden on SMEs by recommending simplified and harmonised reporting and compliance requirements.

Explore and recommend on ways to make more effective use of sources to monitor SME activity in areas not currently monitored (eg exports, FDI, electronic commerce etc).

APEC SME Indicators Publications

APEC SME Scorecard

Tabulations and limited commentary on key indicators drawn from the APEC SME Virtual Database.

APEC SME Review

More analytical research on key issues of relevance to SMEs in APEC, published annually or every two years, via the APEC home page, plus physically.

APEC SME Virtual Database

Based largely on linking existing sources, but modified to reflect common size classes and definitions. Covers an agreed set of indicators. Participation by member economies is voluntary, and limited to what their resources will allow.

Over a one to five year time horizon -

1. **agreeing to a set of priority APEC issues to be addressed in annual white papers by member economies, and encouraging the participation of member economies in a coordinated comparable approach to data collection and analysis of those issues;**
2. **publication of an APEC SME Review which brings together the APEC SME Scorecard, the results of common issues addressed in member white papers, and summaries of other specific SME research activities in APEC;**
3. **where possible, examining ways to reduce the paperwork burden on SMEs;**
4. **examining the possibilities for developing new and better sources of information on SME indicators, and in particular making more effective use of business registration, simplified customs procedures, electronic commerce**

5. working with the private sector and with private sector representatives wherever possible to obtain better indicators on SME activity in APEC.

Appendices

Appendix A. Available information and statistics on SMEs in participating economies

The following tables summarise what specific information is reasonably available in selected economies, based on information obtained from the Information request set out in Appendix C.

Statistic	Australia	Canada	China	Hong Kong China
General				
Number of business units	2	2	1	
Number of establishments	2	2		2
New business registrations	2	2		
Legal structure	2			
Ownership structure - foreign owned	2		2	
Ownership structure - other	2		2	2
Affiliation with other firms	2	4	2	
Franchisee or franchisor	4	4	2	
Member of cooperative	4	4	2	
Bankruptcies	1	2	2	
Cessation of business -	4	2	2	
Reason for cessation of business	4	4	2?	
Year of commencement, or age		2	2 jv only	
Industry class - 3 digit	2	1	?	2
Industry class - 4 digit	2	1	?	2
Total employment	2	1	2	2
Output - value	2	2	2	2
Sales	2	2	2	2
Value of shipments to contractors			?	
Value of exports			2	
Sales/revenue from abroad			2	
Other income from abroad			?	
Cost of goods sold	2	2	2	2
Costs of energy or fuels	4	4	?	2
Wages costs	2	2	2	2
Value added	4	4	2	2
Tax paid	2		2	
Operating surplus	2		2	2
Interest payments, finance costs	2		5	2
Total assets, and change in	2		2	2
Total liabilities, and change in	2		2	
Shareholders' funds, and change in	2		?	
Inventories, and change in	2			2
Depreciation	2			2
Taxation	2		2	
Expected investment	4	4		
Expected sales	4	4		
Expected change in conditions	4	4		

Note:

1 = regular census of all or most enterprises (appendix B gives periods of census)

2 = annual (or more regular) survey

3 = regular survey (less frequent than annual)

4 = irregular survey, or requires special work to extract, or only partial coverage

blank = none

? = uncertain - ie information may be available

Statistic	Japan	Indonesia	Korea	New Zealand
General				
Number of business units	1	2	1	1
Number of establishments	1	2	1	1
New business registrations	1	2	1	1
Legal structure	1	2	1	1
Ownership structure - foreign owned		2		1
Ownership structure - other				1
Affiliation with other firms		4		
Franchisee or franchisor	4	4		
Member of cooperative	4?	2		
Bankruptcies	2	2	2	
Cessation of business -	4	?		1
Reason for cessation of business	4	?	1	
Year of commencement, or age			1	
Industry class - 3 digit	1	2	1	1
Industry class - 4 digit	1	2	1	1
Total employment	1	2	1	1
Output - value	1	2	1	
Sales	1	2	1	
Value of shipments to contractors	4		?	
Value of exports	4	2	2	
Sales/revenue from abroad			4	
Other income from abroad				
Cost of goods sold	2	2		
Costs of energy or fuels		2	2	
Wages costs	2	2	2	
Value added	1	2	2	
Tax paid	1			
Operating surplus			3	
Interest payments, finance costs	2		3	
Total assets, and change in	1	2	2	
Total liabilities, and change in	2	2	2	
Shareholders' funds, and change in		2	2	
Inventories, and change in	1	2	2	
Depreciation	2	2	2	
Taxation				
Expected investment	2	4	2	
Expected sales	2	4	2	
Expected change in conditions	2	4	2	

Note:

1 = regular census of all or most enterprises (appendix B gives periods of census)

2 = annual (or more regular) survey

3 = regular survey (less frequent than annual)

4 = irregular survey, or requires special work to extract, or only partial coverage

blank = none

? = uncertain - ie information may be available

Statistic	Philippines	Singapore	Chinese Taipei	USA
General				
Number of business units			2	2
Number of establishments	2	2	1	2
New business registrations	2		2	2
Legal structure	2	2	2	2
Ownership structure - foreign owned	2	2	2	
Ownership structure - other	2	2		
Affiliation with other firms	2		2	
Franchisee or franchisor	4		2	
Member of cooperative	4			
Bankruptcies	4			
Cessation of business -		1		
Reason for cessation of business				
Year of commencement, or age	2	2	2	
Industry class - 3 digit	2	2	2	2
Industry class - 4 digit	2	2	2	2
Total employment	2	2	2	2
Output - value	2	2	2	2
Sales	2	2	2	2
Value of shipments to contractors				
Value of exports		2	4	4
Sales/revenue from abroad		2		
Other income from abroad		2		
Cost of goods sold	2	2	2	
Costs of energy or fuels	2	2	2	
Wages costs	2	2	4	2
Value added	2	2	1	2
Tax paid	2		1	
Operating surplus	2	2		
Interest payments, finance costs	2		4	4
Total assets, and change in	2		4	
Total liabilities, and change in	2		4	
Shareholders' funds, and change in			4	
Inventories, and change in	2		2	
Depreciation	2	2	2	
Taxation	2		2	
Expected investment	4		2	4
Expected sales	4		2	4
Expected change in conditions	4		2	4

Note:

1 = regular census of all or most enterprises (appendix B gives periods of census)

2 = annual (or more regular) survey

3 = regular survey (less frequent than annual)

4 = irregular survey, or requires special work to extract, or only partial coverage

blank = none

? = uncertain - ie information may be available

Statistic	Australia	Canada	China	Hong Kong China
HRD				
Gender of employees	4		2	
Level of training/education manager	4			
Level of training/education - staff	4			
Training expenditure	4			
Hours worked per employee	3	2		
Family employees - number of	4			
Number employees in union	3			
Technology				
License/franchise fees received	?			
License/franchise fees paid	?			
Expenditure on R & D	4			
Patents registered - number	4	2?	2?	
Licenses/franchises abroad -location	?			
Finance				
Source of investment funds				
Funds received from abroad - \$			2	
Working capital	2	2	2	
Fixed capital investment		2	2	2
Planned investment	4			
Loans made by banks	4			
Market access and exports				
Destination of exports			2	
Funds received from abroad -origin			2	
Origin of imports			2	
Foreign direct investment			2	
Destination of FDI			2	
Policy and government				
Use of govt advisory services	4			
Use of other advisory services	4			
Government fees and charges paid	4			
Time spent on compliance	4	4		
Budget allocation for SME services	4		2	
Grants to SMEs	4			

Note:

1 = regular census of all or most enterprises (appendix B gives periods of census)

2 = annual (or more regular) survey

3 = regular survey (less frequent than annual)

4 = irregular survey, or requires special work to extract, or only partial coverage

blank = none

? = uncertain - ie information may be available

Statistic	Japan	Indonesia	Korea	New Zealand
HRD				
Gender of employees	1			1
Level of training/education manager				
Level of training/education - staff				
Training expenditure				
Hours worked per employee	2			
Family employees - number of	1			
Number employees in union				
Technology				
License/franchise fees received				
License/franchise fees paid				
Expenditure on R & D				
Patents registered - number	2			
Licenses/franchises abroad -location				
Finance				
Source of investment funds				
Funds received from abroad - \$				
Working capital	2			
Fixed capital investment				
Planned investment				
Loans made by banks				
Market access and exports				
Destination of exports			2	
Funds received from abroad -origin			2	
Origin of imports			2	
Foreign direct investment			2	
Destination of FDI			2	
Policy and government				
Use of govt advisory services			2	
Use of other advisory services	4		2	
Government fees and charges paid	4		2	
Time spent on compliance				
Budget allocation for SME services	4	4	2	
Grants to SMEs	4	4	2	

Note:

1 = regular census of all or most enterprises (appendix B gives periods of census)

2 = annual (or more regular) survey

3 = regular survey (less frequent than annual)

4 = irregular survey, or requires special work to extract, or only partial coverage

blank = none

? = uncertain - ie information may be available

Statistic	Philippines	Singapore	Chinese Taipei	USA
HRD				
Gender of employees			2	2
Level of training/education manager				
Level of training/education - staff				
Training expenditure				
Hours worked per employee			2	
Family employees - number of			2	
Number employees in union			2	
Technology				
License/franchise fees received				
License/franchise fees paid				
Expenditure on R & D			1	
Patents registered - number			2	
Licenses/franchises abroad -location				
Finance				
Source of investment funds				
Funds received from abroad - \$				
Working capital			4	
Fixed capital investment			4	
Planned investment				
Loans made by banks	4			
Market access and exports				
Destination of exports				
Funds received from abroad -origin				
Origin of imports				
Foreign direct investment				
Destination of FDI				
Policy and government				
Use of govt advisory services	4	4	4	4
Use of other advisory services	4	4	4	4
Government fees and charges paid	4		4	
Time spent on compliance				4
Budget allocation for SME services	4	4	4	4
Grants to SMEs	4	4	4	4

Note:

1 = regular census of all or most enterprises (appendix B gives periods of census)

2 = annual (or more regular) survey

3 = regular survey (less frequent than annual)

4 = irregular survey, or requires special work to extract, or only partial coverage

blank = none

? = uncertain - ie information may be available

Appendix B. Summary background information on comparability

	Australia	Canada	China	Hong Kong China
SME definition - employees?	yes	yes	no	yes
Size class - employees actual numbers used	yes	yes	no	yes
Business register	yes	yes	yes	yes
Central agency	yes	yes		yes
Industrial census? last carried out?	no	no	yes 1995	no
Longitudinal data?	some survey data	some survey data	no	no

	Indonesia	Japan	Korea	New Zealand
SME definition - employees?	yes	yes	yes	no definition
Size class - employees actual numbers used	yes	yes	yes	yes
Business register	no	no	yes, but not full coverage	yes
Central agency	yes	no	yes	yes
Industrial census? last carried out?	yes	yes, 5 years 1996	yes each year	yes yearly
Longitudinal data?	yes, but not for SMEs	some	some	some but limited access

	Philippines	Singapore	Chinese Taipei	USA
SME definition - employees?	yes	yes	no	yes
Size class - employees actual numbers used	yes	yes	no	yes
Business register	yes	yes	tax register	partial
Central agency	yes	yes	no	no
Industrial census? last carried out?	yes 5 years 1994	no	yes 5 years 1997	no
Longitudinal data?	no	some	yes	no official but some unofficial

NOTES:

- SME definition - employees? - yes indicates that information on the number of employees is used in the definition of SMEs and thus is collected
- Size class - employees - actual numbers used? - yes indicates that data can be resorted to bring into line with other categories if required.
- Business register - yes indicates that an attempt is made to keep a register of all existing firms
- Central agency - yes indicates that a central statistical agency is responsible for SME statistical collection (as against responsibility being diffused amongst several agencies)
- Industrial census? last carried out? Yes indicates that an attempt is made at an industrial census of all firms or enterprises.
- Longitudinal data? yes indicates that it is possible to track individual firms over time

Appendix C. Information request

Pro Forma Information Request

This information request is in two parts:

1. Background information on how statistics on SMEs are collected; and
2. The availability of specific statistics on SMEs.

It is recognised that some questions may be difficult to answer, and may not be appropriate to all economies, hence they are structured as a pro forma. We will work through the questions with you, either by phone or in person in order to clarify any point which may be ambiguous or difficult to answer.

1. Background information on how statistics on SMEs are collected

The purpose of this section is to gain a better idea of how the statistics are collected. This is important for comparative purposes, and to help in preliminary assessment of the feasibility of moving towards comparable APEC wide indicators.

1. Definition[s] of SMEs used for statistical purposes

How are SMEs defined for statistical purposes? eg by number of employees, assets etc

Are different definitions used for policy and program purposes?

2. What size classes are used for statistical purposes? When participating in statistical collection.....

Do respondents give the actual numbers (eg number employed, value of assets) yes/no or Do respondents check a size class - (eg 1- 19 employees) yes/no If yes what are the divisions or classes used?

3. Sources of information

3.a Who is responsible for general statistical collection related to SMEs?

eg are statistics collected centrally by a single agency or are they collected by a variety of agencies?

3.b Is there a Business Register or regularly updated list of enterprises? yes/no

If yes does this endeavour to cover all firms in the economy ? (eg does it usually exclude non employing firms, or firms which are not registered, or less than a certain size?)

3.c Is there any attempt to monitor the size of the informal sector (ie business not formally registered, or the black economy?)? Are there any estimates of the size of it?

3.d How are groups and levels of organisation (enterprise, establishment etc) dealt with in statistics?

3. e What industrial classification schema is used?

3.f Is there an industrial census or comprehensive collection of information on firms, broken down by size class? If yes, how often is this carried out? When was the last one held?

3.g Are there regular surveys of industrial activity (ie sales, production, employment etc) which provide information by size classes, and if yes
How often are these implemented?
What is the sample size relative to the population of SMEs?

3.h Are there periodic or intermittent surveys of SME activity
(eg on specific topics)

3.i Are any statistics on SMEs able to be collected longitudinally (ie so that an individual firm can be tracked from year to year?)

4. Are there other useful sources of information on SMEs, and if so what information do they provide and how can they be contacted?

eg

- Central Bank
- Board of Investment
- Chambers of Commerce or Industry Associations
- Private Foundations or Research Organisations
- others?

5. Availability and access

Is statistical information on SMEs generally published on a regular basis? (if yes in what publications?)

Is it available via the web (if yes at what address?)

6. Regular reviews or white papers

Is there any regular review or white paper based on SMEs? (such as the MITI SME White Paper or the US State of Small Business)

7. Revisions to the statistics.

Part of the point of the project is to explore the feasibility of developing useful and comparable indicators. This may require consideration of some modifications or revisions to the collection of statistics on SMEs.....

Are there any major changes or modifications being proposed to the way SME statistics are collected or presented?

How long might it take to consider and incorporate additional requests for information that is not currently being collected.

2. The availability of specific statistics on SMEs

This section seeks to gain an understanding of what statistics are reasonably readily available on SMEs in APEC economies. Basically we are interested to know if the following information is:

- available broken down by size of firm;
- where it might be sourced from (eg surveys, or census or other sources);
- how often it is available (eg once a year or only once every few years);
- any comments that might help explain the statistics that are available, or which might be made available.

Statistic	availability by firm size?	Source census? survey?	How often? 5 years? annual occasional?	Notes and comments
General				
Number of business units				
Number of establishments				
New business registrations				
Legal structure				
Ownership structure - foreign owned				
Ownership structure - other				
Affiliation with other firms				
Franchisee or franchisor				
Member of cooperative				
Bankruptcies				
Cessation of business -				
Reason for cessation of business				
Year of commencement, or age				
Industry class - 3 digit				
Industry class - 4 digit				
Total employment				
Output - value				
Sales				
Value of shipments to contractors				
Value of exports				
Sales/revenue from abroad				
Other income from abroad				
Cost of goods sold				
Costs of energy or fuels				
Wages costs				
Value added				
Tax paid				
Operating surplus				
Interest payments, finance costs				
Total assets, and change in				
Total liabilities, and change in				
Shareholders' funds, and change in				
Inventories, and change in				
Depreciation				
Taxation				
Expected investment				
Expected sales				
Expected change in conditions				

Statistic	availability by firm size?	Source census? survey?	How often? 5 years? annual occasional?	Notes and comments
HRD				
Gender of employees				
Level of training/education manager				
Level of training/education - staff				
Training expenditure				
Hours worked per employee				
Family employees - number of				
Number employees in union				
Technology				
License/franchise fees received				
License/franchise fees paid				
Expenditure on R & D				
Patents registered - number				
Licenses/franchises abroad -location				
Finance				
Source of investment funds				
Funds received from abroad - \$				
Working capital				
Fixed capital investment				
Planned investment				
Loans made by banks				
Market access and exports				
Destination of exports				
Funds received from abroad -origin				
Origin of imports				
Foreign direct investment				
Destination of FDI				
Policy and government				
Use of govt advisory services				
Use of other advisory services				
Government fees and charges paid				
Time spent on compliance				
Budget allocation for SME services				
Grants to SMEs				

Are there any other statistics that are available that may not be covered in the above?

Appendix D - Examples of Possible Indicators and Availability of information

The following tables are by way of example only. They set out:

1. examples of suggested indicators;
2. the likely availability of information relevant to those indicators in some selected economies.

Indicators are *only* intended to be indicators - they are not intended to be statistically perfect and accurate. There are many definitional and measurement problems which make comparisons difficult between economies and between different periods of time.

The suggested indicators are intended to do two things:

1. Improve and maintain information on SMEs in APEC, thus helping to update the original work done in the Chinese Taipei survey;
2. Help to address key policy questions such as:
 - How internationally competitive are SMEs relative to those in other member economies?
 - How much do SMEs contribute to growth of employment and GDP relative to those in other member economies?
 - To what extent are structural changes affecting SMEs?
 - Are the impediments to SME mobility and improved SME competitiveness being reduced (especially in areas such as HRD, finance, market access, information access, and technology)?
 - What is the level of policy assistance provided to SMEs relative to other members?

The following tables give the Focus of the indicator. These correspond roughly to the existing framework used for the APEC SME agenda:

GEN General
HRD - Human Resource Development
FIN - Finance
ACC - Access to markets
INF - Access to information
TEC - Technology and technology sharing
GOV - Government assistance to SMEs.

Possible Indicators

Focus	Possible indicator	Defined	Indicator of...	Possible sources	Why?
GEN	Gross start up rate	Number of new SMEs as a % of total	New ventures Adjustment capability of economy	Business register Business names Taxation statistics	To help compare longer term competitive "health" or regrowth of economies, and to help identify areas where greater policy initiatives (eg in venture financing) may warrant attention to improve competitiveness of SMEs
GEN	Net start up rate	Number of new SMEs less "deaths" (bankruptcies, etc), as a % of total	Turnover of firms, volatility or turbulence in economy	Business register Bankruptcy filing Taxation statistics	To help compare longer term competitive "health" or regrowth of economies, and to help identify areas where greater policy initiatives (eg in venture financing) may warrant attention to improve competitiveness of SMEs
GEN	Gross exit rate	Number of SMEs ceasing business	Adjustment pressures - especially if broken down by industry	Business register Bankruptcy filing Taxation statistics	To identify areas and regions where adjustment pressures are greatest.
GEN	Population per SME	Number of people per SME in different industry sectors	Structure of economy Structural change	Business register Census Industry census Informal sector estimates	To compare longer term structural aspects of economies, and to monitor changes in the structural contribution of SMEs.
GEN	Gross GDP contribution	Change in GDP less change in GDP from SMEs (or from large firms)	Contribution by SMEs to economic growth	GDP, value added statistics Industry census, surveys	To compare whether SMEs are contributing as much as in other economies to growth
GEN	Gross Employment contribution	Change in total employment less change in employment in SMEs (or in large firms)	Job creation by SMEs	Employment statistics Industry census, surveys	To compare whether SMEs are contributing as much as in other economies to growth
HRD	Productivity growth	change in GDP per employee by size class and industry	International competitiveness	GDP, value added statistics Employment statistics Industry census, surveys	To help compare international competitiveness of industry sectors
HRD	Management training	Proportion of population with formal or short course management training Number of management courses and number of attendees each year	management capability competitiveness	Educational and Training institutes	To help monitor reduction in HRD management impediments to improved competitiveness

continued

Focus	Possible indicator	Defined	Indicator of...	Possible sources	Why?
FIN	Venture finance supply	estimates of amounts of venture finance available or amounts lent	Size of venture finance pool	Industry sources such as provider annual reports, survey	To help compare supply of venture capital in different economies To help monitor reduction in impediments to venture finance
ACC	Matchmaking activity	Number of business inquiring about business matches and/or completing match	Economic interdependence Cross border alliances	Matchmaking providers (Tradepoint, etc) APB Net	To help monitor number of internationally competing cooperating SMEs
ACC	Subcontractor trade	Volume of trade across borders from subcontractors	Large firm- small firm trade	Selected surveys of major international contractors EDI systems	To help monitor changes in SME intra firm trade.
INF	Internet access	Number of Internet connections	Access to electronic sources of information	Providers	To help monitor reductions in impediments to information access
GOV TEC	Technology assistance	Total value of assistance to SMEs to improve technology Value per SME assisted	Government assistance	Government	To help compare levels of government assistance to SMEs.
GOV	Export assistance	Value of assistance given to SMEs to encourage exports Value of assistance per SME	Government assistance	Government	To help compare levels of government assistance to SMEs.

Availability of relevant information in selected economies

Focus	Possible indicator	Defined	Availability Canada	Availability Indonesia	Availability Singapore	Availability Chinese Taipei
GEN	Gross start up rate	Number of new SMEs as a % of total	possible	possible - but only applies to formal SMEs, not informal	possible	possible
GEN	Net start up rate	Number of new SMEs less "deaths" (bankruptcies, etc), as a % of total	possible	possible - but only applies to formal SMEs, not informal	possible	possible
GEN	Gross exit rate	Number of SMEs ceasing business	possible	possible - but only applies to formal SMEs, not informal	possible	possible
GEN	Population per SME	Number of people per SME in different industry sectors	possible	possible - but only applies to formal SMEs, not informal	possible	possible
GEN	Gross GDP contribution	Change in GDP less change in GDP from SMEs (or from large firms)	Requires some time and effort, but may be possible for manufacturing	possible - but only applies to formal SMEs, not informal	possible	possible
GEN	Gross Employment contribution	Change in total employment less change in employment in SMEs (or in large firms)	possible	possible - but only at industrial census every 5 years. but only applies to formal SMEs, not informal	possible	possible
HRD	Productivity growth	change in GDP per employee by size class and industry	possible with some effort for manufacturing	possible - but only applies to formal SMEs, not informal	possible	possible via census every 5 years
HRD	Management training	Proportion of population with formal or short course management training etc	Have some related information on training from a sample of growing SMEs	requires survey	possible	possible but requires special survey
TEC	PC usage	proportion of SMEs with PC of at least 486 chip standard	Have some roughly related information on use of technology in SMEs	requires survey	requires special survey	requires survey
FIN	Venture finance supply	estimates of amounts of venture finance available or amounts lent	Results of a small firm financing survey available soon	may be possible from several sources, but not readily available	possible	possible, requires cooperation with financial institutions
ACC	Matchmaking activity	Number of business inquiring about business matches and/or completing match	difficult		difficult	some figures available from Board of Investment and from Chambers of Commerce
ACC	Subcontractor trade	Volume of trade across borders from subcontractors	difficult	difficult	difficult	?? not possible to distinguish SMEs
INF	Internet access	Number of Internet connections	difficult	difficult	possible	difficult - needs cooperation with private sector providers
GOV TEC	Technology assistance	Total value of assistance to SMEs to improve technology Value per SME assisted	possible have some related information	possible -	possible if other economies agree	possible, but may require other economies to agree to also provide information
GOV	Export assistance	Value of assistance given to SMEs to encourage exports Value of assistance per SME	possible - have some related information	possible	possible if other economies agree	possible, but may require other economies to agree to also provide information

About the author..

Dr Chris Hall

Has had extensive experience in the internationalisation of SMEs in Asia, Japan and Europe.

Recent major projects on the internationalisation of SMEs

- **PECC Assessment of APEC Action Plans (1998)**
- **PECC Review of ABAC Recommendations to APEC (1997)** - review of the MAPA and the APEC SME PLG activity in achieving ABAC's recommendations.
- **APEC Techno Forum Project(1996/7)**, Trial program to set up electronic forum for technologically oriented SMEs in APEC.
- **APEC Statistical Indicators for SMEs (1996/7)**, feasibility of establishing statistical indicators in APEC.
- **APEC Business Forum (1996)**, Meeting of APEC business leaders, and associated projects.
- **OECD Fast Growth SME Project (1996/7)**. Project to examine contribution of fast growth SMEs to entrepreneurial engine of job and GDP growth.
- **UNCTAD (1996/7) FDI Facilitation in Asia**. Project on role of FDI, especially in SMEs, as an engine of growth for development.
- **Industry Canada with support from Trade and Industry Philippines (1996) APEC and SMEs, overview of findings issues and gaps**. Project drew together existing SME related work in APEC into a policy framework as a basis for future directions in APEC.
- **Japan Small Business Research Institute (1995) Assessment of the Feasibility of Establishing an International Network of SME Researchers in APEC**. Project covered Indonesia, Australia, Philippines and Thailand.
- **MEIC Japan (1994) Examination of policies and impediments to cross border access of SMEs in Asia**. Project covered Japan, Australia, New Zealand, PRC, Chinese Taipei, Korea, and Indonesia
- **OECD Project on the Globalisation of Economic Activities and SME Development (1993 - 1995)** Project coordination and synthesis, in consultation with the OECD secretariat, of studies in 18 member countries and 8 Asian countries, examining the pattern of globalisation of SMEs and the national and international policy implications.
- **DITARD (Department of Industry Technology and Regional Development) Australian country study in the OECD project on Globalisation of Economic Activities and SME Development (1993)**
- **MEIC Japanese country study in the OECD project on Globalisation of Economic Activities and SME Development (1993)**
- **New South Wales Department of Business and Regional Development (1993)** Study of specific policy issues arising from globalisation of SMEs in NSW
- **Japan Economic Foundation short country studies in Asia as part of OECD project on Globalisation of Economic Activities and SME Development (1993)** Coordination of study of role of SMEs and key policy issues in Indonesia, Singapore, Thailand, Malaysia, Peoples Republic of China, Chinese Taipei, Hong Kong, Korea and Philippines

Invited expert to recent international expert meetings;

OECD EUROSTAT combined meeting on SME statistics Paris May 1991

OECD SME globalisation project Paris May 1992

OECD SME globalisation project Paris December 1992

OECD Local and regional employment creation Paris December 1992

OECD SME globalisation project Paris February 1993

APEC SMEs and Export Development Shen Zhen July 1993

OECD SME globalisation project Paris October 1993

APEC Economic Development and Human Resource Development Seoul, December 1993

OECD Symposium on globalisation Paris December 1993

APEC Experts Meeting on SMEs Jakarta,

APEC 2nd Experts Meeting on SMEs, Jogjakarta, Indonesia, September 1994
APEC Ministerial Meeting for SME Ministers, Osaka November 1994
OECD Working party on SMEs Cordoba, Spain, September 1994
OECD Working Party on SMEs, Paris March 1995
OECD Workshop on SMEs and Employment Innovation and Growth, Washington DC, June 1995
APEC Policy Level Group, Canberra, August 1995.
APEC Meeting for SME Ministers, Adelaide, September 1995
APEC Symposium on SME Research Networking and Venture SMEs, Nagoya, October 1995
APEC Symposium on HRD for SMEs, Taipei, November 1995
APEC Symposium on ACTETSME, Manila, March 1996
APEC SME Policy Level Group, Santiago, April 1996.
APEC Credit Guarantee Systems Symposium, Taipei, September 1996
APEC SME Ministerial Meeting and SME Policy Level Group Meeting, Cebu, September 1996
APEC Business Forum, meetings, Manila, June, July, August and November 1996
OECD Experts Meeting - High Growth SMEs Project, Paris September 1996
APEC HRD Working Group, Sydney, January 1997
APEC SME PLG, Mexico City, May 1997
APEC Congress on Entrepreneurship, Bangkok, July 1997
APEC SME PLG and Ministerial Ottawa September 1997
UNCTAD Conference on FDI by SMEs in Asia, Kunming, 1997
OECD SME Working Group, Seoul, October 1997
APEC Seminar on Market Access for SMEs, Taipei, November 1997
USAid ACEAES Conference on Sustaining Economic Growth in Indonesia, Jakarta, December 1997
APEC Technomart II Seminar, Taipei, January 1998