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**Title:** *Multi-Country Foresight – Issues and Challenges*  
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**Abstract:**

The APEC Center for Technology Foresight, launched in February 1998, is pioneering the development of foresight at a multi-country level. The Center’s first technology foresight study into The Future for Water Supply and Management in the APEC Region succeeded in attracting the interest and cooperation of 9 APEC members in developing scenarios for the year 2010, while a Delphi survey of water experts that uses topics derived from the scenario-planning workshop includes almost all 18 member economies.

This paper outlines the first six months of the study, highlighting certain issues and challenges that arose while attempting to encompass a region so diverse in geography, culture and levels of technological development in one foresight study. It then focuses on three closely-linked issues which are recognised as fundamental to the success of all foresight exercises and which, these authors suggest, create particular difficulties for multi-country studies: authority, legitimacy and credibility.

**Multi-Country Foresight – Issues and Challenges:**  
*A paper based on a foresight study in progress (January-December 1998), on:  
The Future for Water Supply and Management in the APEC Region to 2010*

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***Introduction***

The APEC Center for Technology Foresight, launched in February 1998, is based in Bangkok, Thailand. With a small core staff, the Center aims to serve and involve all APEC member economies (in APEC terminology, the word ‘economy’ is used instead of ‘country’ when referring to the 18 members). The Center has adopted a definition of Foresight very close to that of OECD:

*Foresight involves systematic attempts to look into the longer-term future of science, technology, the economy and society, with a view to identifying emerging generic technologies, and the underpinning areas of strategic research, likely to yield the greatest economic and social benefits.*

The Center intends to spread technology foresight expertise across the APEC region, allowing economies new to this process to learn from those with more experience. Recent economic turmoil shows that the advanced countries of APEC cannot afford to ignore those still developing, since the global interconnection of markets mean that no economy is completely isolated from others. Moreover, it is anticipated that developments in the techniques and practices of technology foresighting will result from the expansion of its use to a wider range of economies, which should benefit even those economies with previous experience of foresighting.

However, the Center aims not just to assist economies with their own foresight efforts, but also to conduct research at a multi-economy level. Technology foresight may be able to contribute to issues which cross national boundaries - from air pollution, to chicken virus, to electronic information distribution. Prior to the selection of topics for multi-economy study, the Center developed a number of criteria: the issue must be of concern to most economies, with at least 4 agreeing to participate in the study; the issue must transcend national boundaries, so that it can go beyond anything that might be achieved by a national or bi-lateral study; there must be potential for sharing the results with all the APEC members; the issue is likely to be of general, public concern/ benefit and not one that is likely to be dealt with by the private sector; and finally, the issue will have important technological components but not necessarily ‘high-tech’ ones.

The APEC Center for Technology Foresight is not the only multi-country foresight institution, but in undertaking multi-country foresight research, it is breaking new ground. The possibility of a comprehensive European Foresight Program has been mooted but is not considered feasible at present, mainly because of diverse national and regional cultures and structures<sup>1</sup>. A Latin American Foresight Center, developed by UNIDO, has yet to begin multi-country foresight research<sup>2</sup>. This paper attempts to report some of the methodological issues arising from this first attempt at multi-economy research. At the time of writing, the project has another four months to run, and this paper cannot therefore report the final outcome of the study, nor evaluate its impact. However, from the very beginning, this study has been a learning process, posing methodological problems of sufficient interest to justify the current interim paper.

***Subject and Objectives of the Study***

The first subject for an APEC-wide technology foresight study was chosen after wide consultation throughout APEC. A survey of APEC members identified a list of more than 50 possible topics of concern, which were then prioritised at a Technology Foresight Symposium attended by over one

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<sup>1</sup> Cecilia Cabello, Fabiano Scapolo, Per Sorup and Matthias Weber: Foresight and Innovation: The role of initiatives at European level. (1996) <http://www.jrc.es/iptsreport/vol07/english/Inn5E076.htm>

<sup>2</sup> Technology Foresight: Proceedings of APEC Symposium on Technology Foresight, Chiang Mai, Thailand (1997) p181 National Science and Technology Development Agency, Thailand.

hundred participants from sixteen different countries<sup>3</sup>. The topic “Water Supply and Management” that was eventually selected at the inaugural joint meeting of the Center’s Steering Committee and International Advisory Board was considered to meet all the criteria outlined above for a multi-economy study. Its importance and relevance to the region cannot be disputed. Water problems are not limited to developing countries:

*Current patterns of water use in developing countries, countries with economies in transition and industrialised countries alike are often not sustainable. There is mounting evidence that the world faces a worsening series of local and regional water quantity and quality problems, largely as a result of poor resource management, including ill-adapted allocative mechanisms, wasteful use of the resource, unregulated effluent disposal and weak institutional frameworks. There is also a close interaction with declining biodiversity, desertification and pollution of the marine environment. (UN Economic and Social Council, Geneva, June 1997)<sup>4</sup>*

...and cannot be addressed only at national level:

*Of more than 200 international river basins, 148 are shared by two countries, 30 by three countries and 22 by four or more... apart from island countries, almost all countries are involved in the problems of international river basins to some extent...Over a third of these major international river basins are not covered by any international agreement...Pollution, impoundment and diversion of water by upstream nations is likely to be a growing source of international tension and insecurity (Union of International Associations, April 1998)<sup>4</sup>*

In examining the issue at the symposium, participants recognised that:

*Beyond 2000 there will be great need of supplies of water for domestic, agricultural and industrial uses while excessive water supplies cause seasonal flooding and global warming may start to increase the sea level causing flooding of low lands. Clean water will become ever-increasingly more scarce. Technologies include water management, remote sensing, irrigation with environmental concerns, and recycling and conservation technologies. Other technologies to purify water such as membrane filtering are needed.<sup>4</sup>*

The objectives of this first multi-country foresight study in APEC were defined as:

1. To develop a strategic and coherent view of the challenges, threats and opportunities associated with water supply and management in and across APEC economies
2. To provide an APEC-wide demonstration of the application and value of technology foresighting techniques in addressing an issue of great and long-term significance.

### **Methodology**

Choosing from the variety of foresighting methods available, Professor Greg Tegart, Director of the Center designed the following procedure for this study. Firstly, an Issues Paper was commissioned from Consultant 1<sup>5</sup>. This was used as the background material for a scenario-building workshop, attended by water experts from APEC member economies and facilitated by Consultant 1<sup>5</sup>. With the assistance of a second Consultant<sup>5</sup>, an APEC-wide Delphi study comprising two rounds was then carried out. The Issues Paper, Scenarios and Delphi results will be compiled into a single report, which will then be disseminated to water experts and institutions, planners and politicians in 1999. The different parts of the study are intended to be both independent and complementary. The approach chosen for this study is unique and will require careful evaluation before the next multi-country study is attempted.

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<sup>3</sup> Proceedings of APEC Symposium on Technology Foresight (1997), op cit (reference 2)

<sup>4</sup> cited in the Introduction to the Issues Paper: Water Supply and Management in the APEC Region, prepared for the APEC Technology Foresight Center by Professor Ron Johnston FTSE, Executive Director, Australian Center for Innovation and International Competitiveness, University of Sydney, Australia, [http://www.nstda.or.th/aphec/html/water\\_supply\\_\\_management\\_i.html](http://www.nstda.or.th/aphec/html/water_supply__management_i.html)

<sup>5</sup> **Consultant 1:** Professor Ron Johnston FTSE, Executive Director, Australian Center for Innovation and International Competitiveness, University of Sydney, Australia **Consultant 2:** Dr Taeyoung Shin, Head, S&T Indicators and Analyses, Science and Technology Policy Institute, Republic of Korea

### ◆ *The Issues Paper*

The paper reviews the supply, management and use of the world's water resources, and identifies key issues and policy options. A case study of a technology foresight study of one highly relevant technology – desalination – is also presented. Following discussion with the water experts at the scenario-building workshop, two further issues were added, producing the following final list: quantity, quality, demand, technologies, economic development, market forces, environment, infrastructure including structural safety, human health, resource assessment, integrated resource management across the full water cycle, geo-politics, enforcement and energy costs. The paper also suggests a framework for considering policy options.

### ◆ *The Scenario-building Workshop*

All APEC members were invited, through APEC channels, to send one water expert to this workshop and nine accepted: Australia, Canada, Chile, Hong Kong China, Korea, Malaysia, Mexico, Chinese Taipei and Thailand. Experts offered brief presentations about water issues in their own economy which allowed issues of common concern, such as the fragmentation of water management or the recognition that water was already becoming a highly commercial issue, to emerge clearly. The scenario-building process was then carried out over one and half days. Having identified 15 'uncertainties', and rated them according to their likely impact and degree of uncertainty, experts were divided into three groups, with each group being assigned a different set of scenario logics. The groups explored these logics from the point of view of people looking back from the year 2010, at the events that had led to 'present' situation. The outputs of these group discussions were then drafted into scenarios by the facilitator, and subsequently refined by the groups. Each group contained experts from a variety of economies, along with a small-group facilitator with greater understanding and experience of foresighting and scenario-building. Finally, topics for a Delphi survey were identified.

### ◆ *The Delphi Survey*

The list of topics produced by the APEC water experts at the workshop was refined into clear and concise topic questions by the Center, with the assistance of a group of Thai water experts and in consultation with the APEC experts and both Consultants. The first round questionnaire contained 58 topics, covering technology, resource and policy issues. For the technology and resource questions, the survey used the concept of "innovation stages"; The instructions explained that these were:

- ❑ **Elucidation:** the earliest stage – scientists have discovered the principles or ideas in an APEC member economy and are exploring it further. Elucidation will probably occur in just one (or a few) member economies, with transfer to other member economies at a later innovation stage;
- ❑ **Development:** scientists have reached a specific technological goal, e.g., completion of the first prototype in the lab. Development will probably occur in just one (or a few) member economies, with transfer to other member economies at a later innovation stage;
- ❑ **Practical use:** the technology or idea has been proved possible and economically viable, and has been used a few times outside laboratory or prototype conditions. Practical use *in the APEC region* refers to more than one APEC member economy.
- ❑ **Widespread use:** after the technology or policy was introduced for practical use, it has been adopted in many different places. Widespread use *in the APEC region* refers to at least 10 of the 18 member economies.

These innovation stages were not applicable to the policy questions, and instead it was explained that 'year of realization in the APEC region' should be taken to mean 'year of realization in a majority of APEC members'. Respondents were also asked for comments and suggestions.

The sample of Delphi experts was obtained through the APEC experts that attended the workshop, through the APEC Industrial Science and Technology Working Group, and through other contacts of the Center and its Consultants. For some economies, co-nomination was also attempted to increase the sample size, and this yielded a few extra names. Although it had been hoped that the questionnaire could be sent electronically, in practice, two-thirds of them did not have access to email and so post was mostly used. The response rate to the first round was about only about 21%, despite active follow-up.

At the time of writing, the second round questionnaire is being prepared with some additional parameters. It will be returned to respondents along with a simple summary of the first round results and an anonymous report of all the comments and suggestions that were made.

## **Discussion**

### **◆ Overall Methodology**

In terms of the classification of foresight studies, as suggested by Martin and Irvine<sup>6</sup>, the key features and distinguishing characteristics of the APEC study on Water Supply and Management may be described below.

- a) Organizational Characteristics. The APEC Center for Technology Foresight, though hosted by NSTDA of Thailand, is an *international body* under the Industrial Science and Technology Working Group of APEC.
- b) Degree of Specificity. The study focussing on a limited number of research fields of Water Supply and Management is at *macro-level*.
- c) Aims, Objectives and Functions of Foresight. The main objective of the study is to develop a strategic and coherent view about water supply and management in APEC region. The functions of the study therefore provide *anticipatory intelligence* through the scenario building exercise and *consensus generation* by Delphi survey. Its results should be *direction setting*. *Advocacy* is more limited because it did not involve many important stakeholders. *Communication and education* are planned through dissemination activities. The task of *determining priorities* is left to individual economies due to their diversity of problems and different levels of development.
- d) Orientation and Structural Characteristics of Research. The orientation of the study is *strategic or applied* whereas its structural characteristics is *complex* involving a large number of disciplines from meteorology to membrane material to genetic engineering.
- e) The Balance between Various 'Intrinsic Tensions' in Foresight may be stated as follows. The Center has no stake in water supply and management and is therefore a neutral *third party*. *Demand pull* factors were considered in the issues paper and in the scenarios and are rather prominent in the topic statements of the Delphi questionnaire. Since we have not involved most of the stakeholders, the study has to be classified as a *top down* approach.
- f) Time Horizon. The time horizon is set at about 12 years or in the year 2010 in the scenario building exercise. However, the Delphi questionnaire provides time slots of five years each covering a total of 15 years and beyond. The time horizon is therefore *long term*.
- g) Methodological Approach. Scenario building was deployed to generate more visionary topics for a subsequent Delphi survey. The survey is conducted *formally* and the results are *quantitative* predictions of year of realization, as well as more *qualitative* information emerging from the comments offered, and more significantly, from the scenario-building exercise.

### **◆ Issues Paper**

As the Issues Paper clearly shows, the study included both technological and policy issues from the outset. While this may be a feature of choosing a topic of such immense socio-political importance, it also reflects the fact that the study encompassed a divergent group of economies, at widely differing levels of economic and technological development. Thus, the issue of how and why new technologies become adopted and diffused was at least as relevant as when and how genuinely new technologies might emerge in the APEC region. It was also made clear in the Issues Paper that the study sought to develop an APEC-wide perspective, rather than collect a series of national pictures:

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<sup>6</sup> Ben R Martin and John Irvine: Research Foresight: Priority Setting in Science (1989). Ch 2.

*No attempt has been made to develop a comprehensive description of challenges for and capabilities of water supply and management at the level of the individual member economies. Rather, the situation in individual member economies will be used as illustration and example to develop a more APEC-generic analysis and strategy.*<sup>4</sup>

#### ◆ **Scenario-building workshop**

The scenario workshop involved experts from various sub-disciplines and institutional settings (academia, public service and private organisations), all of whom were sufficiently senior to contribute to policy as well as technical matters. In terms of the range of people who could be considered to be ‘stakeholders’ in the field of water, this was obviously a very narrow group but this was appropriate for the clearly defined purpose of the exercise. Most of the experts were completely new to foresight and to scenario-building, and moreover, most were using English as a second language. The presence of small-group facilitators was therefore important to overcoming their initial confusion about the task and increasing their commitment. The scenario exercise succeeded in encouraging these experts to look beyond their every-day concerns about water, and into the longer-term future, a leap of imagination that was greatly assisted by such a structured approach<sup>7</sup>. The scenario material will be used extensively in developing the analysis and findings in the final report. It also proved successful as a mechanism for developing Delphi topics, as pioneered in earlier work of Consultant 1<sup>8</sup>.

#### ◆ **The Delphi Survey**

It was very difficult for the Center to exert any control over the expert samples. Neither the original Delphi experts, nor those actually responding can be viewed as representative of all water experts in each economy, in view of the sample size and the way in which their names were obtained. However, the degree of representativeness will vary between economies and probably reached a good level where the Center succeeded in cooperating with a key water agency in an economy and obtaining a decent response rate from there, for example, as was the case for Chinese Taipei, Hong Kong China and Malaysia. Much of the success here can be attributed to the interest and involvement of the experts from those economies that attended the scenario-building workshop and went on to contribute actively to the Delphi process. However, other experts appeared equally enthusiastic at the initial workshop and yet were less successful in promoting the cooperation of others from their economy in the Delphi, suggesting that it is sensible not to rely on one individual, or even, one institution. Building credible links with key agencies in each economy is therefore likely to be an essential task in any multi-country study, in order to secure the cooperation of relevant experts and institutions. This would have the added advantage of increasing the chances that the research output will be respected and implemented. Given the distance between experts and the Center, both geographical and professional, multi-country Delphi surveys probably also take longer than usual, since the follow up is more complex, yet more necessary.

The questionnaire did not contain a benchmarking question but this information emerges from the responses to the final parameter about ‘realization in your economy’ since the responses range from ‘now’ to ‘never’. Thus the issue of technology adoption and diffusion was also highlighted in the Delphi responses. Neither are explicit parameters on ‘contribution to quality of life’ and ‘contribution to wealth creation’ included, but again, some indirect information is provided by the experts’ rating of each topic’s importance. In any case, wealth creation was not considered particularly relevant since water was viewed as an issue of such basic human need and value. The number of parameters was deliberately kept to a minimum, in view of the complexity of considering both an own-economy and an APEC-wide view. The accompanying notes and explanations were nevertheless rather complicated and it was clear from a few of the respondents comments, that some of them had not really understood what they were being asked to do. Since many respondents were non-native English speakers, a pilot

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<sup>7</sup> Lance Schultz: The ASTEC Shipping Partnership’s Experience with the Delphi Survey. ASTEC Occasional Paper No. 29 (1997) p22

<sup>8</sup> for example, see Ron Johnston and P Chudleigh: ‘Application of Foresighting for Future Management of R&D into Sustainable Irrigation and River Health’, Land And Water Resources R&D Corporation, Canberra, (March 1998).

study might have been helpful to assist the Center to produce clearer instructions, but since other studies have found similar confusion on the part of a few respondents even when using their own language, there may be only a little scope for improvement<sup>9</sup>. Given the complexity of Delphi surveys, a fairly low response rate is not unexpected; indeed the leader of German national foresight efforts comments that: *'as a rule of thumb, detailed and time-consuming questionnaire surveys with a response rate of some 15-20% are considered successful'*<sup>10</sup>. However, many other national foresight studies have managed first round response rates of over 30%<sup>11</sup>. The first round response rate in this study was 20.8% and some further loss can be expected after the second round, indicating that a multi-country study should perhaps attempt to compile a larger initial sample of experts for a Delphi survey than a survey of smaller scope.

Owing to time constraints, it was decided not to contact first round 'outliers' for an explanation of their response. In many cases, no comment has been volunteered, perhaps because they are unaware that they hold an unusual view, although the second questionnaire will try to encourage self-evaluated outliers to explain their position. It is possible that moves towards consensus detected between rounds will be more attributable to a common tendency towards conformity, rather than being based on a genuine consideration of new evidence or a different point of view<sup>12</sup>. However, this possible weakness is shared by many, if not most, other Delphi surveys as used in foresight research<sup>13</sup>.

The Center was concerned that the experts would not feel able to answer questions regarding the whole of APEC but in fact, less than 5% commented on this. However it remains to be seen from the final analysis whether their views on the whole of APEC have any coherence or value.

#### ◆ *Process Benefits*

In *Research Foresight*<sup>14</sup>, Martin and Irvine suggest that considerable benefits accrue from the process of carrying out foresight research, in addition to the formal outcomes of the study. They describe these process benefits in terms of 5 'C's: Commitment - Coordination - Communication - Consensus - and Concentration<sup>15</sup>. A sixth 'C' has been proposed by Anderson and Fears<sup>16</sup>: *Comprehension - Encouraging those involved in the field to understand the changes happening in their field, and to exert some control over these events*. While it is too soon to evaluate these process benefits, some initial comments are perhaps warranted. Informal, and very positive, comments from the experts attending the scenario-building workshop indicated that the workshop was quite successful in terms of communication, comprehension and concentration. However, given the diversity of the experts, professionally, linguistically, and geographically, it seems a little unlikely that new and enduring partnerships have been achieved at this level. A major aim of the overall study is to achieve coordination at an APEC-wide level, and it is hoped that all those who participated in the study, and their agencies, will have increased understanding of each other, and the relevance of an APEC wide perspective. By working with key institutions in each economy, the study should be able to contribute to the development of new working relationships and networks, and this supports the previous suggestion that multi-country studies should focus on working through agencies in each country, rather than trying to contact experts directly, since these relationships and networks might remain once the Center itself has moved on to other research topics.

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<sup>9</sup> Schultz: op cit (reference 7) p26

<sup>10</sup> Hariolf Grupp: Foresight in Science and Technology: Selected Methodologies and Recent Activities in Germany, in OECD: Science, Technology Industry Review No 17: Special Issue on Government Technology Foresight Exercises. (1996)

<sup>11</sup> UK Transport Delphi 1995: 35% / Japan STA Delphi 1971: 34% / Australia Shipping Delphi 1996: 30%, cited in Schultz, op cit (reference 7) p18

<sup>12</sup> for an interesting discussion of feedback between Delphi rounds, see Gene Rowe, George Wright and Fergus Bolger: Delphi, A Reevaluation of Research and Theory (1991) p244, 247 Journal of Technological Forecasting and Social Change 39, 235-251.

<sup>13</sup> Schultz: op cit, (reference 7) p28

<sup>14</sup> Martin and Irvine (1989) op cit (reference 6)

<sup>15</sup> for a succinct definition of these terms, see Ben Martin: Technology Foresight as Tool for Strategic Management, in Joe Anderson, Robin Fears and Bernard Taylor: Managing Technology For Competitive Advantage (1997) p40

<sup>16</sup> Joe Anderson and Robin Fears: Shaping Things to Come, A Report of a Meeting on Planning National Research Priorities: Foresight and the Science Base in Wealth and Health Creation. (1994).

‘Commitment’ (generating a sense of commitment to the results among those who will be responsible for implementing changes in the light of the foresight exercise) is a key concern of the Center and this will depend very much on the authority, legitimacy and credibility of the study. While recognising that authority, legitimacy and credibility are fundamental to success in foresight, it is clear that a ‘third party’, international body like the APEC Center for Technology Foresight cannot hope to achieve them in a multi-country study at the same level and in the same way as a foresight exercise conducted at a national level. On one hand, the Center is not part of the ‘water community’ which implements water policies<sup>17</sup>. On the other hand, to get the recommendations to the ‘APEC power structure’, the Center and its project will have to be brought to the attention of many levels of APEC bureaucracy.

Nevertheless, that the Center has the mandate of APEC to conduct APEC-wide foresight exercises and that Water Supply and Management was one of the most highly rated topics by representatives of APEC economies, provide some *authority*. Involvement of high-level individuals and relevant institutions in the process would provide more authority, but it is much more difficult to achieve at the multi-country level. Alternatively, the results of the study should be reported at the Industrial Science and Technology Working Group and pass through the APEC bureaucracy to be finally included the Leaders’ statement.

The study had the consent of the APEC Industrial Science and Technology Working Group to use the APEC Central Fund to finance part of the activities. It was approved by the Center’s Steering Committee and International Advisory Board. Most of the topic statements for the Delphi survey were generated from a scenario building exercise of water experts from many stakeholder institutions of the 9 APEC economies. All these provide some *legitimacy*.

To establish *credibility*, the study was conducted in accord with accepted administrative principles and procedures of scenario building and Delphi survey. Professor Johnston who has extensive experience in conducting scenario workshop acted as the consultant for the scenario building exercise and Dr. Taeyoung Shin who was responsible for the first Korean Delphi Survey was the consultant for the Delphi survey. Further credibility can be developed by writing a good final report.

### ***Conclusion***

A 1996 OECD review of technology foresight concluded that there is no one correct, nor perfect, method of carrying out foresight research, and that any study should be designed to meet the circumstances of the organisation, the topic and the research environment<sup>18</sup>. It follows that any methodology adopted requires rigorous evaluation, which this paper attempts to begin, but this effort will need to continue until the project is complete, and beyond that to assess its impact.

Thus far, the project has successfully engaged water experts from over half of the APEC member economies in this first multi-country technology foresight study. The challenge now is to carry out an effective ‘post-foresight’ phase that sees the implementation of the key findings of the study.

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<sup>17</sup> One water expert, upon invitation to the expert meeting, expressed skepticism about the added value of the study since there has been so many studies on water to date. Fortunately, he changed his mind after having gone through the scenario building exercise and has been actively cooperative.

<sup>18</sup> OECD STI Review No. 17, op cit (reference 10) p81



**Appendix 1: Delphi Questionnaire (first round)**

The design of the Delphi questionnaire (first round) is shown below, with three example topic statements. Respondents were also asked for suggestions for additional topics, and comments on the questionnaires topics, for example, by describing the major actions that need to be taken to realize the topic, or the major constraints on achieving the topic. If they considered that a topic was unnecessary or undesirable, they were asked to explain why.

For each of the four questions, please check one box.

Topic #	Topics	1. Degree of Expertise				2. Degree of Importance				3. Year of Realization in APEC Region					4. Year of Realization in Your Economy				
		H i g h	M e d i u m	L o w	N o n e	H i g h	M e d i u m	L o w	U n c e s s a r y	1 9 9 2 0 0 3	2 0 0 4 - 2 0 0 8	2 0 0 9 - 2 0 1 3	B e y o n d	N e v e r	1 9 9 2 0 0 3	2 0 0 4 - 2 0 0 8	2 0 0 9 - 2 0 1 3	B e y o n d	N e v e r

1	<u>Water as a Resource</u> Scientific methods of long range weather forecasting, up to 3 months in advance, are developed																			
17	<u>Technologies</u> Water containers for large-scale long distance transport across oceans are in practical use																			
35	<u>Policy Issues</u> A mechanism for negotiating and concluding agreements for international water transfer is accepted																			

**Appendix 2: Distribution of responses to the first round of the Delphi questionnaire**

Economy	No. of experts contacted	No. of experts responding	Economy	No. of experts contacted	No. of experts responding
Australia	36	4	Malaysia	37	16
Brunei Darussalam	0	0	Mexico	27	3
Canada	28	5	New Zealand	0	0
Chile	27	3	Papua New Guinea	8	2
China	5	2	Philippines	48	6
Hong Kong, China	38	23	Singapore	7	2
Indonesia	7	1	Chinese Taipei	35	19
Japan	18	8	Thailand	84	24
Korea	53	7	USA	147	1

Total: 605 126 (20.8%)