Evaluation of Enterprise Network Fund

Research, Evaluation and Monitoring Team

Industry and Regional Development Branch

MINISTRY OF ECONOMIC DEVELOPMENT

August 2006

Ministry of Economic Development
Industry and Regional Development
Research, Evaluation and Monitoring
Level 10, 33 Bowen Street
P O Box 1473
Wellington
New Zealand

Contents

Executive Summary

Purpose and Evaluation Methodology

1. In accordance with EDC Min (03) 7/3 the Ministry of Economic Development has conducted an evaluation of the Enterprise Networks Fund (ENF). This evaluation was completed as part of the review of Sector Facilitation undertaken by the Ministry of Economic Development.

2. The focus of the ENF evaluation was to examine

   - programme implementation
   - programme delivery
   - programme outcomes

   and conclude whether the programme should continue, continue unchanged or with changes.

3. The evaluation examined:

   - current implementation of the ENF by NZTE
   - delivery for the time period July 2003 to May 2006
   - outcomes for firms assisted by ENF between July 2004 and December 2005.

Enterprise Networks Fund

4. The ENF was formally part of the Enterprise Development Fund. The ENF was to provide grants to groups of firms for the same activities that individual firms could receive funding for under the EDF. Thus the ENF was for networks of firms who needed assistance with business or management capability of the network, via information, mentoring, or external expert assistance. The original intent for the ENF was for it to be a broad capability building programme for networks of firms.

5. NZTE focused the ENF on a much narrower range of eligible areas of assistance which were: international trade fair participation, offshore conferences, inward and outward missions, and marketing activities. The specific projects or 'events' firms could be assisted to attend or be engaged in were selected by NZTE in accordance with their sector objectives, and not by the firms themselves.

6. To facilitate this model of implementation, in 2004/05 the ENF was moved from EDF to Sector Facilitation, and funding was transferred to Operational Expenditure and reduced from the original $4.113 to $3.0M (CAB Min (04) 38/4 refers). ENF was to be a tool for the achievement of Sector Facilitation and Sector Projects objectives by linking the activities it funded with Sector Projects and Sector objectives, and by targeting ENF at Sector Facilitation clients.

7. ENF offers co-funding of up to 50% of costs of activities. Networks must be three or more firms, and with one person per firm. To be eligible, firms must be medium to high growth potential (as well as adhering to the standard eligibility criteria).

Findings

Implementation

8. With the shift to Sector Facilitation there were changes in implementation whereby ENF became invite only, and clients were selected by Sector Managers and sourced from their client lists, and not from NZTE's general database. This meant most foundational services clients, such as those of the EDF (who are not clients of Sector Managers), can not access the ENF.

9. NZTE uses the criteria of expected future turnover to assist it select firms for ENF. Analysis by the evaluation shows most firms expect little increase in turnover, and they are also poor predictors of their actual future turnover. Using expected turnover to predict growth potential does not seem to be an adequate criteria for selecting firms.

10. NZTE data on ENF firms has been poorly kept, with 80% of the data on ENF in NZTE's main database having no date attached. As the data includes entries from when ENF was a Trade NZ programme (and so extends back to 2000) it was impossible to use NZTE's main data source to determine numbers of individual firms assisted. Using the application forms firms fill in when responding to invite by NZTE, the numbers of individual firms was 1105 for the years 2004/05 to May 2006.

Delivery

11. The total operational cost of delivery per annum is $0.460M. The cost of delivery per applicant is $380.4.

12. The change in delivery in 2004/05 where ENF was moved to sector facilitation has seen a reduction in the numbers of events, participants, and new firms. This has been larger than the reduction in funding, so it would seem current operationalisation of ENF (and not just a reduction in funding) is reducing its reach.

13. 40% of ENF participants have also participated in sector projects (defined as projects by NZTE). The rest are engaged in activities selected by the sector team but which are not part of sector projects' objectives.

14. Over the 34 months since July 2003 the majority of ENF activities have been trade fairs and the majority of clients have been engaged in trade fairs. In 2003/04 $2.5M was allocated toward trade fairs; $2M in 2004/05.

15. The current offshore focus of ENF is on Europe and North America, with 500 firms assisted in events focused on those locations.

Outcomes

16. The ENF has increased the offshore sales of one in every two firms it sent offshore. Nearly half saw turnover increases. ENF enabled the majority of firms to learn about

their offshore customers' preferences, and offshore competition. Roughly half learnt about the regulatory requirements of their target offshore markets.

17. The networking component of the ENF has been operationalised as sending firms as groups to events. However, being part of a group has had less of an impact on firm outcomes. Roughly a third saw the group improve their offshore sales, their innovation capability, business practices or turnover. Only a fifth interacted with their group prior to the ENF event, with similar percentages doing so after.

18. This suggests that engagement in ENF events with a group of firms does not by itself foster a network (where network is defined as a grouping of firms that benefits the member firms).

19. Analysis shows networks arranged by NZTE are less likely to achieve offshore gains, or have their interactions translate into improvements in turnover. This may be because those firms NZTE must place in networks are also poor at networking (and this is why they not already in networks), and these firms need further assistance to develop their networking capability. If this were so, it adds weight to the finding that for many firms, attending an event with a group is not sufficient to develop that group into a network.

Conclusion

20. The ENF has increased the offshore sales of one in every two firms it sent offshore, the majority of firms learnt about their offshore customers' preferences and offshore competition, and nearly half saw turnover increases.

21. ENF has been focused on delivering a narrow range of activities targeted at offshore gains, not on delivering broad, capability building activities, so the rationale for ENF of building the capability of networks of firms, or that networks are mechanisms which can add value to firms, have never been tested. Therefore this evaluation makes no conclusions on networking per se, but concludes that offshore events are not a sole mechanism by which networks are created.

22. ENF was to be used to assist clients' engagement with sector facilitation projects: 40% of the participants in 2004/05 to May 2006 were also involved in sector projects, (as provided by NZTE as a list of projects and clients engaged in them); the majority of ENF participants are not typical sector clients - they are low growth and low turnover firms.

Recommendations

23. ENF should be disestablished as a separate programme.

24. NZTE should continue to support groups of firms to attend offshore events (including co-ordinating the activity, selecting capable participants, booking the event and undertaking marketing and branding activities).

25. NZTE should reprioritise the $3.000m allocated to ENF within existing appropriation for *Enabling Services – Facilitating the Development and Implementation of Sector and Regional Strategies*. This will provide NZTE with the flexibility to allocate more or less funding to support offshore trade events, depending on the objectives and likely benefits of each event.

Operational recommendations

26. NZTE should continue to support firms to attend those events that are aligned with its sector engagement plans.

27. NZTE, in consultation with MED, will develop criteria to guide operational decisions on providing financial assistance to firms attending an offshore event from NZTE's Output Class 1.1.

Part One: Evaluation Goals and Methodology

Goals

28. The evaluation sought to understand three aspects of the Enterprise Networks Fund (ENF):

    1. Current operational implementation of the ENF.

    2. Delivery of the fund, in terms of total allocations, cost of delivery, participants numbers and type; numbers of networks; activities funded and spread of funding across sectors.

    3. Outcomes for firms and networks of firms participating in ENF funded activities.

29. The evaluation looked in particular to see whether there were changes in delivery due to the shift of the ENF from being delivered as part of the Enterprise Development Fund grant programme to delivery as a feature of Sector Facilitation, (with its funding contained in operational expenditure). The shift occurred in 2004, so in many parts the evaluation has described 2003/04 and 2004/05 delivery.

30. Due to changes in the mechanisms of firm selection consequent to the shift to Sector Facilitation, the evaluation ensured the survey only sampled firms assisted after July 2004.

Methodology

31. The evaluation interviewed the programme manager, reviewed operational documentation, analysed data provided by NZTE, and for outcomes undertook a survey of firms.

32. The survey was a simple random sample of firms receiving ENF assistance between July 2004 and December 2005.

33. The targeted population included firms who had assistance for more than one engagement; when selected, firms were removed from the sample. This gave a targeted population size of 1142, with a sample size chosen to give a margin of error of 5% for estimates of proportions. This gave a minimum sample of 296. The evaluation surveyed 311 firms and received replies from 236, giving a response rate of 75%. Education sector activities were removed from the targeted population as the clients are typically schools and universities and the evaluation chose to focus on outcomes of firms.

Part Two: Policy Rationale and Programme Objectives

History of Enterprise Networks

34. Originally a Trade New Zealand programme, in 2003 Enterprise Networks was amalgamated with the Enterprise Awards Scheme and World Class New Zealanders to form the Enterprise Development Fund (EDF).

35. NZTE split the EDF appropriation of $8.613M between Enterprise Networks and the Enterprise Development Grants –Capability Building (the renamed Enterprise Awards Scheme). Enterprise Networks received $4.48M (EDG $4.413M).

36. The EDF sits within NZTE's Foundation Services. The Foundation Services are to assist small, young firms, new entrepreneurs and start-ups, via information, training and financial assistance. Enterprise Networks was to make available to groups or networks of such firms the activities available for funding for individual firms under EDG. Thus Enterprise Networks was to assist networks of firms who needed assistance with the business or management capability of the network, via information, mentoring, or external expert assistance.

37. Within the former Trade NZ, Export Networks had aided firms in their exporting efforts by assisting groups of firms to target high quality market development opportunities offshore which the members as individual firms could not, thereby achieving gains in forex performance. The 'market development opportunities' largely consisted of offshore trade fairs.

38. NZTE continued to operate Enterprise Networks along this model and principally funded groups of firms' attendance at trade fairs. The selection of offshore activities was sector-led: events were ranked by their degree of fit to NZTE's sector priorities, and those which fitted best were selected. Client managers were notified of the selection and they invited the firms on their books whom they deemed appropriate to apply. Offshore activities which were not selected by NZTE were not available for funding.

39. Due to this model of using Enterprise Networks to facilitate sector activities, in 2004 Enterprise Networks was moved from within the EDF to Sector Facilitation. Funding for Enterprise Networks was moved to Operational Expenditure and reduced to $3M per annum. (CAB Min (04) 38/4 refers).

40. In 2005 NZTE was invited to give its objectives for Enterprise Networks as a sector facilitation tool, which NZTE deferred until the completion of this evaluation and the overall Sector Facilitation review.

NZTE objectives for the Enterprise Networks Fund

41. NZTE call Enterprise Networks the Enterprise Network Fund (ENF).

42. ENF is to assist groups or networks of businesses to gain additional business skills, increase business opportunities and obtain external expertise in developing network based business projects. Networks of businesses (three or more) can apply for assistance and co-funding to:

    - undertake international market development activities related to investigating a new market and/or participation at a trade fair
    - access international experts through offshore or inbound missions
    - engage business expertise on well-defined projects or concepts that lead toward enhanced capability, profitability and international competitiveness
    - engage the services of a business mentor (maximum NZTE contribution $3,000 per business per annum GST inclusive)
    - Undertake advanced management or technology based training (maximum NZTE contribution $3,000 per business per annum GST inclusive).

NZTE criteria and eligible activities for the Enterprise Network Fund

43. The fund is targeted towards small to medium sized enterprises that have medium to high growth potential. Indicative upper thresholds of no more than 100 FTEs and/or annual turnover of no more than NZ$50M have been set.

44. Networks must be three or more firms, and only one person per firm can attend or be engaged in a network activity. As the scheme is project based, the project or activity must be capable of generating high returns, or high levels of growth, for the applicant network once commercialised or undertaken.

45. Co-funding is offered on a basis of up to 50:50 reimbursements, for up to 50% of costs. They can be used for a wide variety of activities, but costs considered to be normal operational expenses (business as usual) will not be covered.

46. A funding ceiling of $20,000 per business per July-June financial year applies to the total aggregated amount of funding awarded through both ENF and Enterprise Development Grants – Capability Building (EDG-CB).

47. For companies to be eligible they must prove that they are export ready via a committed and capable (C&C) check. ‘Export ready’ means having the capacity and capability to handle orders when overseas buyers are interested. All companies who are medium or high growth would have gone through this process and will have a client manager assigned to them.

48. The ENF operational documents state the following areas of assistance are eligible for assistance:

1. Market Development. The following areas are available for assistance under market development:

    i. Market research/new market investigation: domestic and international markets.

    ii. Marketing plans: this includes the development of a marketing strategy for the Enterprise Network and/or its activity/project.

    iii. International trade fair participation: this includes rental of stand space, stand design, exhibition costs, interpreters, furniture/furnishings hire and freight/insurance costs for product samples.

    iv. Enterprise Network marketing material: this includes the development and production of marketing material for the Enterprise Network.

2. Accessing International Experts: ENF funding can be used to increase New Zealand businesses' exposure to international best practice and to facilitate capability building though accessing international experts via inbound and outbound missions that focus on:

    v. developing strategic partnerships, acquiring knowledge and gaining leadership to assist the development of internationally competitive niches and industries

    vi. accessing and leveraging world class management and innovative international best practice and trends

    vii. extending companies' business, technological and market knowledge through exposure to leading international thinking and to technology and associated trends.

3. External Advice: EN funding can be used to co-fund the engagement of external advice and expertise in the areas of:

    viii. Strategic business development

    ix. Financial viability planning

    x. Strategic design advice

    xi. Feasibility studies

    xii. Business and operational excellence

    xiii. Systems evaluation and development – operational management evaluation and improvement.

    xiv. Environmental management systems

    xv. E-commerce and e-business strategies

    xvi. Business Mentoring

xvii. Management and Technology-based Training: NZTE will co-fund fees up to a maximum of $3,000 (GST inclusive) for each business in the network each year.

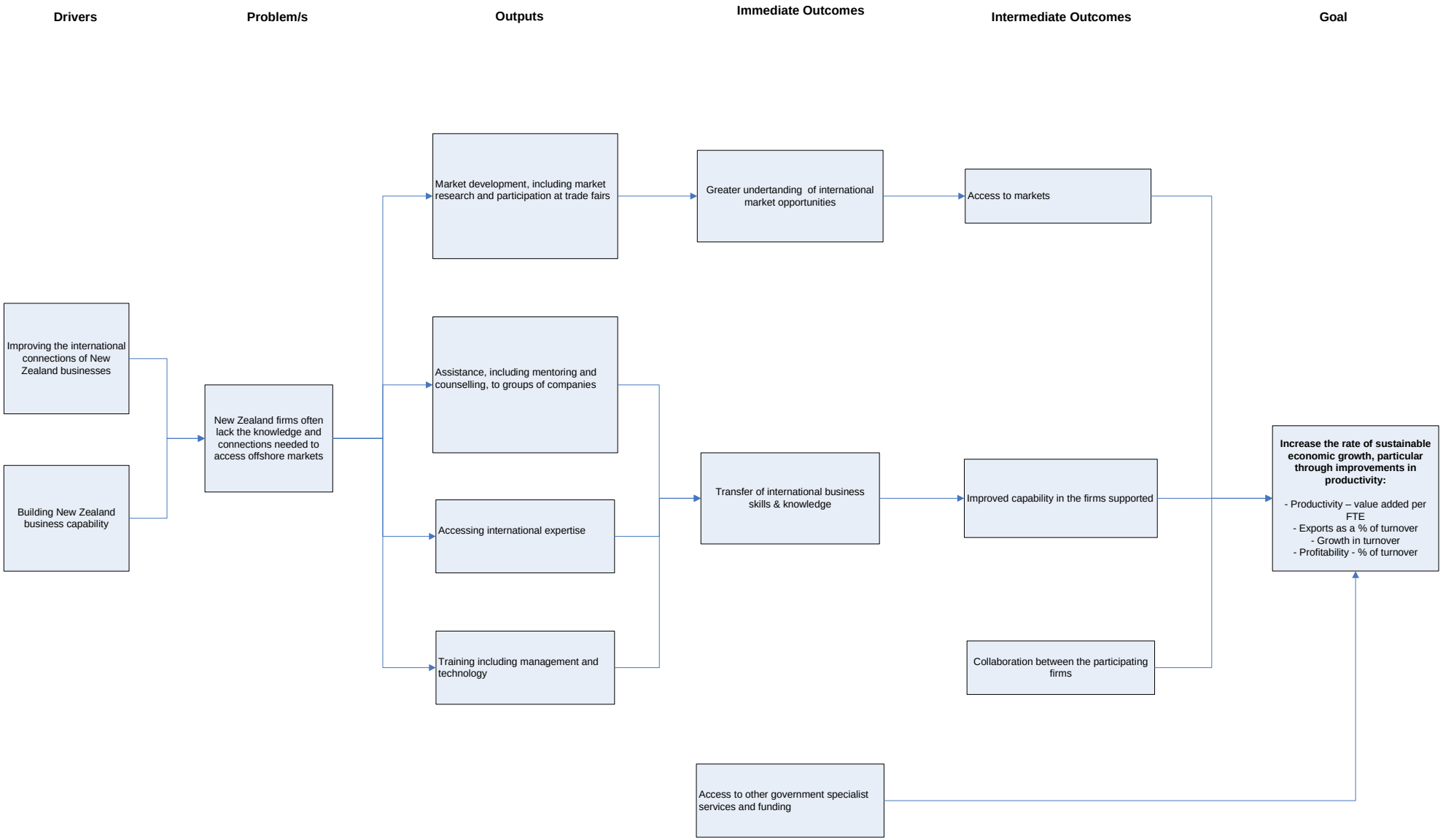
xviii. Product Development.

Intervention Logic

49. Below is the intervention logic for ENF.

Enterprise Networks

The objective of Enterprise Networks is to improve the business performance of groups of at least three NZ companies



Part Two: Findings on Implementation

Enterprise Networks team and process

50. The team responsible for ENF within NZTE is the Networks and Groups team (the ENF team). This is an eight person team, including the programme manager who leads it.

51. For each financial year the ENF team receives a list of eligible activities from the Sector Team, selected to fit with NZTE's sector strategy. The ENF programme manager ensures the activities can be fitted within the overall ENF budget.

52. Prior to 2004/05 the ENF team would then canvass firms to attend or be engaged in the activities, selecting them from NZTE's database. Firms could be included who were not yet clients but who had applied for an ENF grant.

53. Post 2004/05 the activities are invite-only. The client manager or sector manager responsible for the ENF activity selects firms from their client lists and forwards them to the ENF team. The ENF team checks them against the criteria for eligibility. The ENF team may decline firms for an ENF activity but it may not decline the ENF activity itself.

54. Post 2004/05 the firms who access the ENF are to be medium to high growth potential and they are usually intensively working with a client or sector manager. As a result firms with client managers from the Business Evaluation Team, who do not work intensively with clients but have a 'light touch' relationship, are unlikely to access the ENF.

55. NZTE reimburses eligible expenses on receipt of an invoice from firms, and does not fund any activities up-front, including trade fair enlistment deposit costs.

Operationalisation of Enterprise Networks eligible activities

56. NZTE's operational documents for ENF do not perfectly reflect NZTE's actual operationalisation of ENF: the difference is in the type of activities funded by NZTE under ENF. The remaining objectives in the documents, and the criteria to be used, match actual operationalisation.

57. NZTE awards ENF grants for activities or events it has classified as:

    - international trade fair participation,
    - conference
    - inward and outward missions
    - marketing

58. The figures pertaining to these activities are given in part three Findings on Delivery.

Assessment of firms

59. While Sector teams select firms for ENF, the ENF team assesses whether they are in fact eligible. It uses criteria on: robustness of proposal; financial and organisational stability of individual companies and the network; the ability of the individual firms and the network to implement the activity; the level of need of government funding; and the value add to existing activities.

Part Three: Findings on Delivery

60. NZTE uses two databases for ENF data: one is maintained by the programme manager and contains totals allocated per network and per event, numbers of firms attending, sector and offshore location of event; the other database is NZTE's pivotal database of data lodged against individual firms.

61. 80% of the pivotal data on ENF clients does date the networks they participated in, and as what dates there are show that the data extends back to 2000, it is impossible to calculate totals assisted since 2003, or yearly. Thus for most analysis (and unless otherwise stated) the evaluation relies on the data of the ENF programme manager.

Total allocations and yearly allocations

62. From 2003 to April 2005, Enterprise Networks has allocated a total of $9,627,952.

63. Totals for each financial year are:

    4. 2003-04: $4,153,046

    5. 2004-05: $3,368,294

    6. 2005-06 (to April): $2,106,612

Total Budget Jul 05 - Jun 06	
Expenditure	**000's**
Personnel	428
Travel	15
Occupancy	1
Professional & Outsourced	12
Business Development/Training Contracts	-
Telecommunications	2
Marketing	-
Computer	-
Capital Charge/Insurance	-
Other	3
Enterprise Networks	2,667
Sector/GIF/Other Projects	-
Depreciation	-
Forex Gains and Losses	-
Total Expenditure	3,127

Total operational cost of delivery

64. The total operational cost for delivery of ENF per annum is $0.460M. Cost per participant is $380.4

Total co-funding paid to firms

65. When ENF was administered as a grant programme, for 2003/04 and some of 2004/05, records in pivotal of amounts allocated and paid to firms were not kept. Subsequent to its administration as operational funding in 2004/05 NZTE has kept records of funding paid to individual firms.

66. Thus Pivotal has records of allocations made since January 2005 and claims paid since October 2005. Since January 2005 ENF has allocated $6,213,079 to firms and since October 2005 paid $4,013,270.

Sum

Month	Grant Paid Total $
OCT 2005	$786,552.41
NOV 2005	$1,375,234.55
DEC 2005	$734,259.19
JAN 2006	$414,796.20
FEB 2006	$181,131.68
MAR 2006	$78,691.85
APR 2006	$137,106.38
MAY 2006	$305,498.15
Total	$4,013,270.41

Total number of participants (including returning firms) and number of individual firms assisted

67. For the 34 months July 2003 to April 2006 the number of participants assisted by ENF is 4365, including firms returning more than once.

68. Total numbers of participants (including returning firms) assisted for each financial year are:

    7. 2003-04: 2443

    8. 2004-05: 1209

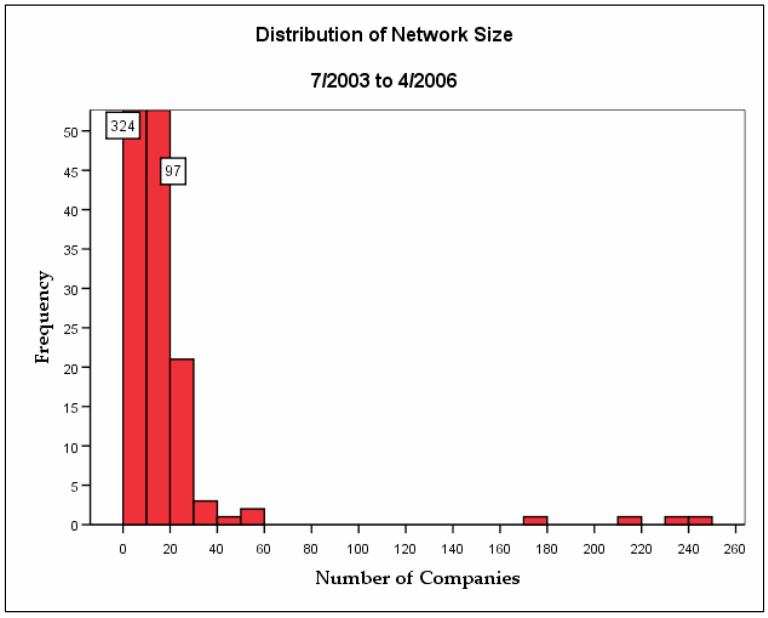
    9. 2005-06 (to May): 713

69. For 2004/05 and 2005/06 the number of unique firms who responded to invitation and completed an application for ENF was 1105.

Total number of networks

70. 429 networks were supported over the 34 months July 2003 to April 2006.

71. The graph below shows the distribution of network size for the 34 months. It shows 75% of all networks were of 10 firms or less. The median network size is 6 firms (so 50% of all networks are of 6 firms or less).



72. At the far end of the distribution tail are four large networks of over 160 firms. These were for a marine network (a marketing activity to develop a marine strategy for the NZ marine sector; for two wine networks, (also marketing activities, both for offshore promotions), and a citrus grower's network, which brought an expert to NZ (via the activity of inbound missions).

73. NZTE lists one network per event or activity, and if firms were in networks already it would be expected at least for some events that there would be more than one network per event, as more than one network of firms would be interested. Having one network listed per event may be due to the way NZTE stores its data, but it may indicate firms are being classified as networks when in some cases they are really just groupings of firms engaged in the same event.

Size of network funding

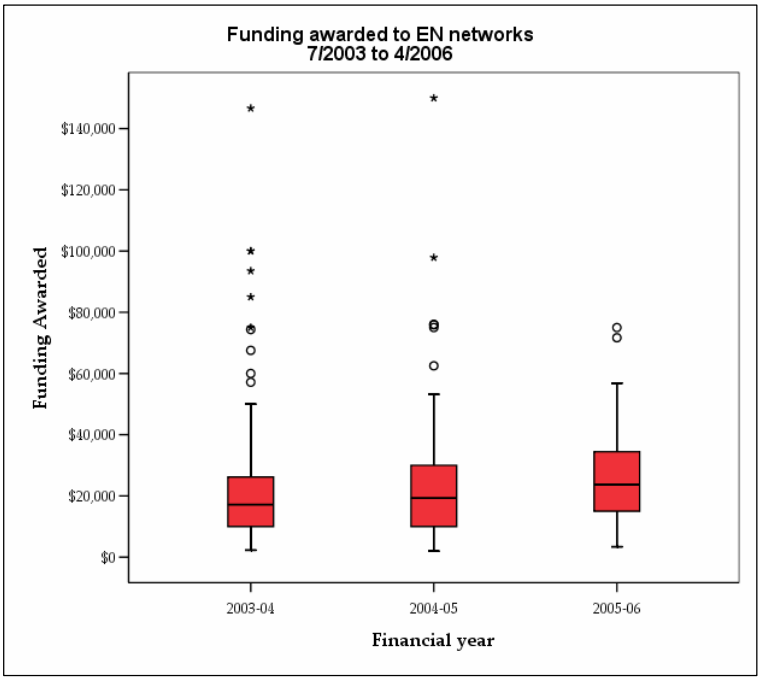
74. The ‘network funding’ is the sum of funds allocated to the firms within the network.

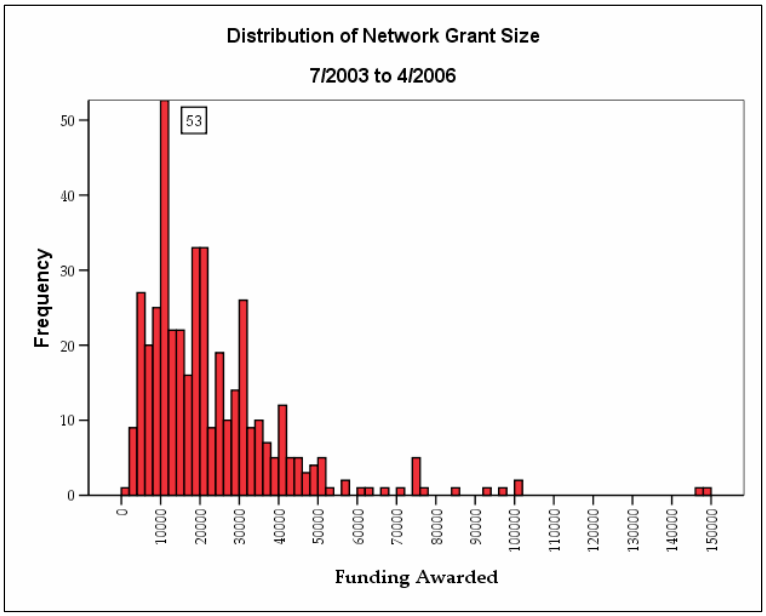
75. For the 34 months July 2003 to April 2006 the median funding size per network is $19,240, with the average being $22,800. The average is slightly higher due to a few larger allocations and due to the left-skewed nature of the distribution. The graph right shows that 90% of allocations to networks are less than $42,000.

76. The larger frequencies of funding amounts of $20,000, $30,000 or $40,000 are an administrative effect of rounding the fund size or due to the maximum amount per firm equalling $20,000.

77. There have been four allocations of over $100,000. These were to 89 firms in total and were for network events offshore for the wood, wine, software and marine sectors.

78. Over 34 months the median amount allocated has remained similar, and there has been a reduction in the number of very large allocations. The graph right shows that the extreme outliers (stars) of allocation size have reduced in number from 2003-04 to 2004-05 and reduced again from 2004-05 to 2005-06.





Overall changes in the delivery of ENF over time

79. In 2004/05 ENF shifted from being within the EDF to within Sector Facilitation, and funding shifted from grant funding to operational. This section shows there have been changes in delivery as a result. This section gives the overall changes; a further discussion of the changes is also given in the sections covering sector, activity and offshore destinations of ENF clients.

80. Over 34 months of delivery there have been decreases in the numbers of activities funded (or ENF 'events'), the numbers of networks, sums awarded, and in the numbers of participants and new firm assisted. These decreases can be explained in part by a reduction in funding allocated to the EN by NZTE when it transferred EN from the EDF to Sector Facilitation.

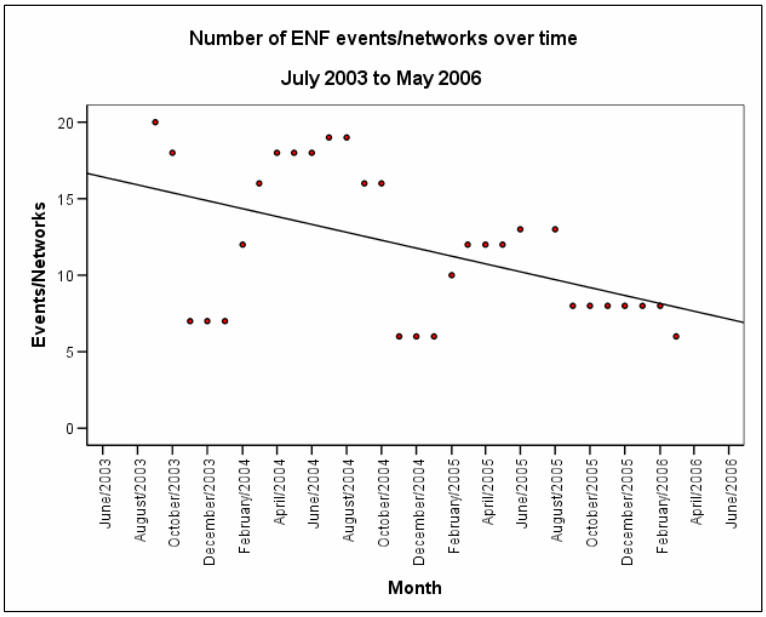
81. In 2004/05 the appropriation for ENF was reduced from its 2003/04 total of $4.13M to $3.0M, which is a drop of 27%. The actual decrease made by NZTE for the 2004/05 year was 18%. However in that time there was a 25% reduction in events, and the number of participants assisted decreased around 50%.

82. From 2004-05 to 2005-06 (comparing each July to April year), while the amount appropriated to ENF remained the same ($3.0M) the amount funded and numbers of participants dropped a further 12%, and number of events and networks a further 23%.

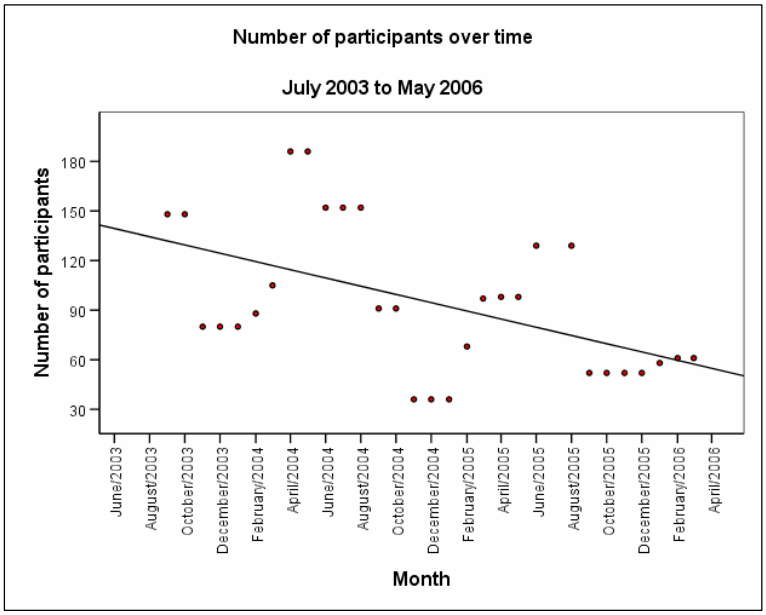
83. This decrease may be part of a re-alignment of strategy following the shift of ENF to Sector Facilitation (where the new strategy meant there should be a decrease in activities and participants, rather than simply a different selection of activities and participants).

84. A look at the graphs shows the changes in numbers of firms, networks and amounts allocated. All graphs within this section show rolling medians, used to smooth the data and reveal its trend, and have a line to show the trend. This means the makers or dots are medians of groups of months, and so there are fewer markers or dots on the graphs than actual events or firms. NZTE data records all firms engaged in each activity as one network, so the numbers of activities and numbers of networks are the same. For this section, activities (events) and networks are shown on the same graph.

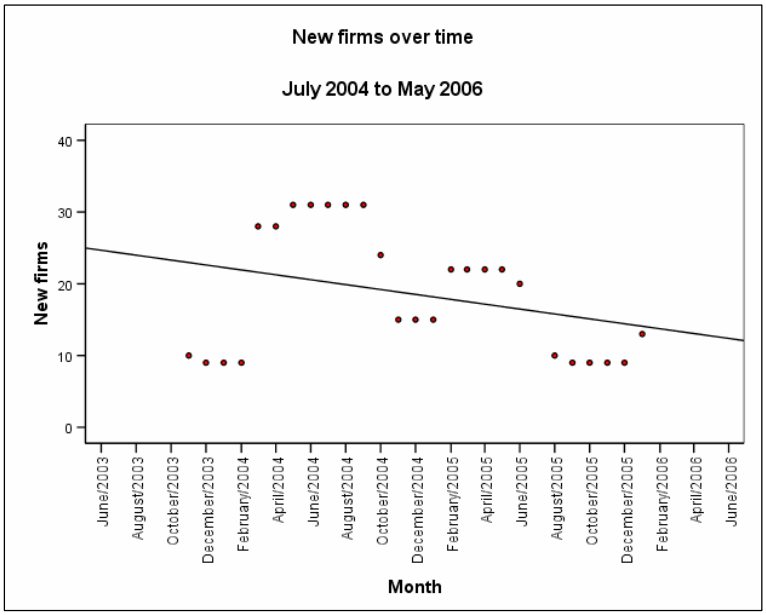
85. The graph right shows the decline in numbers of events, and so networks, per month over time. It had dropped from a median of around 17 to a median of 9 a month.



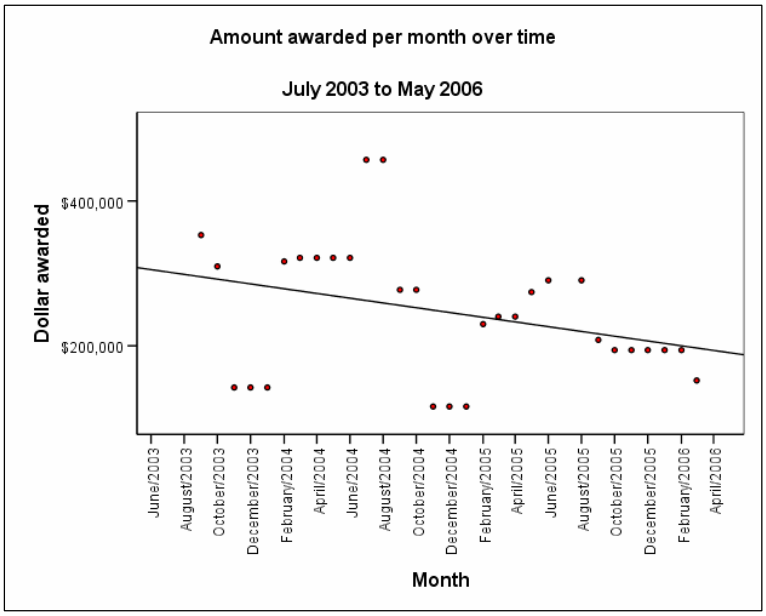
86. The graph right shows the decline in overall numbers of firms assisted and in the number of new firms assisted each month over time. The graph middle right shows the median number of firms per month has halved, dropping from nearly 150 to roughly 60.



87. The graph right shows the median number of new firms entering ENF has declined from roughly 25 a month to just less than 20.

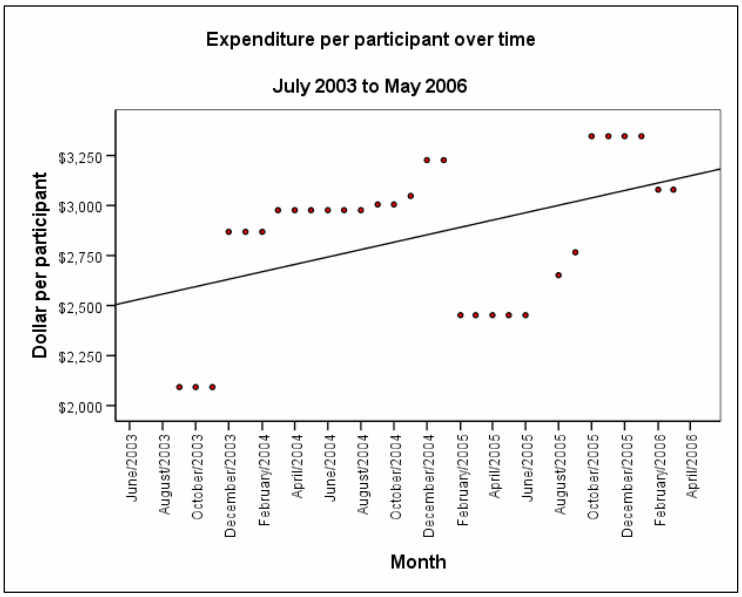


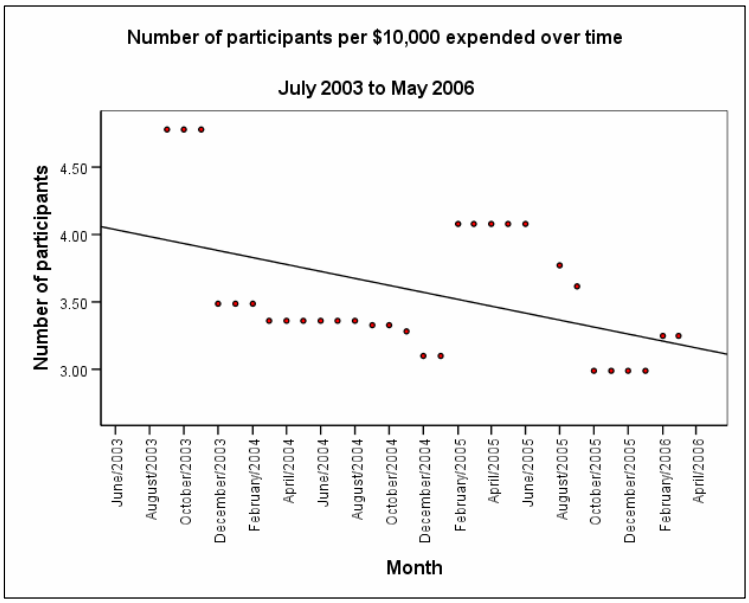
88. The graph right shows the decline in the median total allocated per month, dropping from roughly $300,000 to $200,000 a month.



89. Over time the amount allocated per firm has increased. This is shown below in the graph below left where the trend is upward, from $2,500 in 2003 to over $3000 in 2006. This is due to the total numbers of firms declining at a greater rate than the decline in funding. So perhaps those remaining firms assisted could request larger amounts and be accepted. Thus the average per firm increased.

90. The graph below right shows the corresponding downward trend in number of firms per dollar, shown in the graph as per $10,000. The number has decreased from 4 in 2003 to 3 in 2006.





91. In summary, there has been a decline in delivery of the ENF beyond that due to the $1.13M decrease in funding- due to some aspect of current operationalisation by NZTE. The ENF as a sector tool, and over time, is assisting fewer returning and fewer new firms, fewer networks and assisting them attend fewer events.

92. One solution may be to extend the client base of ENF, perhaps by allowing clients of the Business Evaluation Team to access the fund.

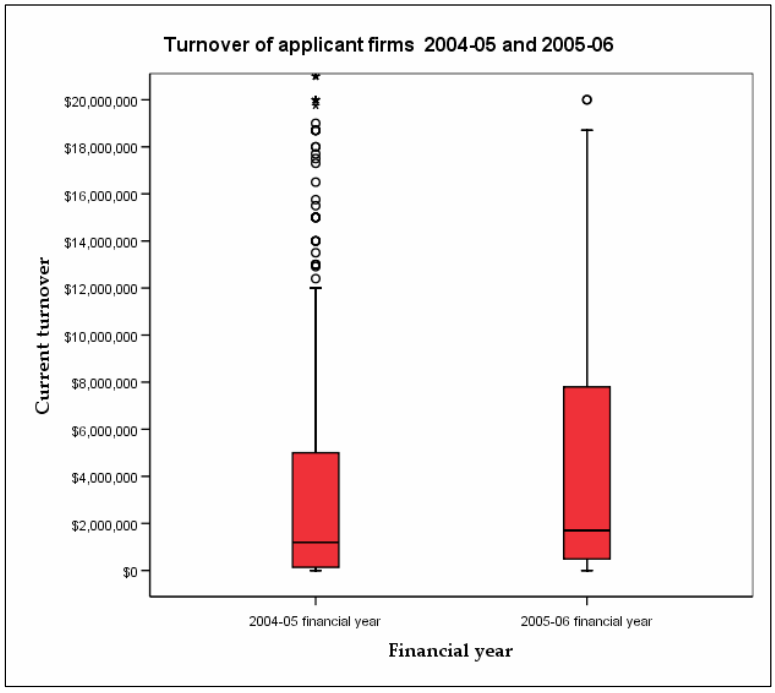
Analysis of participant firms

Other NZTE grants

93. Roughly 119 ENF clients have been awarded EDF (EDG-CB) grants (13%), 26 have been awarded MDAS (EDF-MD) grants (3%). 94 ENF clients have been awarded GSF grants (10%).

Turnover and FTE

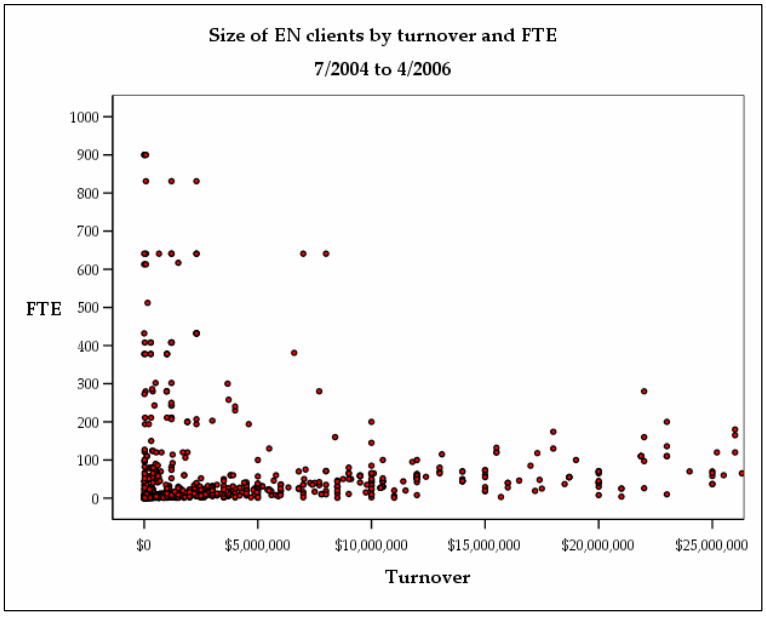
94. The evaluation has data on current turnover for all ENF firms for 2004/05 and 2005/06.



95. For these years 75% of EN firms have a turnover of less than $5.85M and the median turnover is $1.25M. A quarter of ENF firms have a turnover of less than $0.23M. 10% of clients are $25M or higher and 2% are $100M plus.

96. NZTE will include firms in a network who do not receive funding but who can assist smaller firms, and its likely the larger firms are performing this function.

97. The graph below right shows the spread of turnover size for ENF clients for each financial year. The boxes show 50% of the population and the whiskers (or lines) extending out show largest and smallest values that are not considered outliers.



98. Using the graph to compare 2004-05 and 2005-06 financial years on turnover, the range for the top quartile spread in 2005-06 is slightly bigger, and the whisker contains firms with turnover considered outliers for the previous year.

99. This shows that in 2005/06 NZTE is assisting more firms with turnover greater than $4M than in 2004/05. The proportions within the median

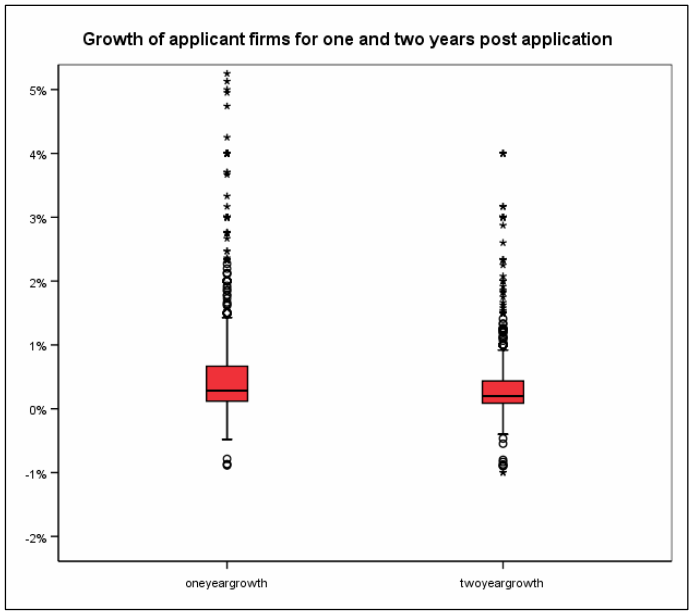
and lower quartile remained roughly the same: the median in 2005-06 is only slightly higher. So ENF assists similar numbers of low turnover firms.

100. The scatter graph right is of FTE and turnover size of ENF clients. The unusual shape of the scatter graph, where larger firms do not have correspondingly large FTE, is due to many of those firms not giving NZTE their FTE size. The graph shows that most ENF clients are of an FTE of less than 100 and turnover less than 5M.

Growth

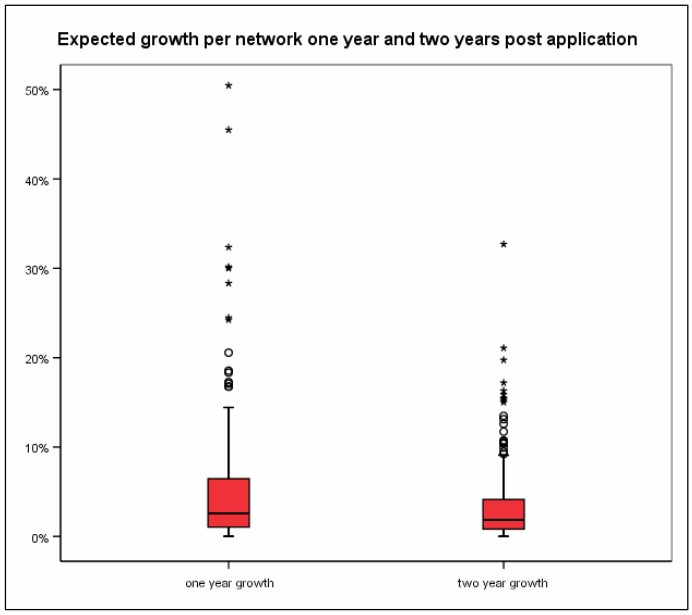
101. ENF applicant firms must state their projected turnover.

102. Most firms anticipated a similar turnover for the following two years, and thus show close to zero growth. The graph right shows the spread of expected growth, with 50% of firms expecting less than 1% growth.



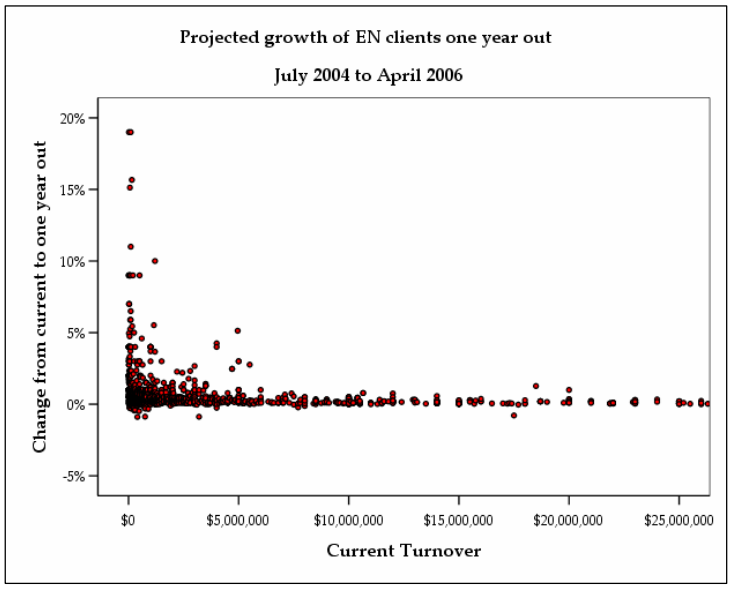
103. Contrary to NZTE's operational objectives, ENF firms are not declaring that they expect medium or high growth.

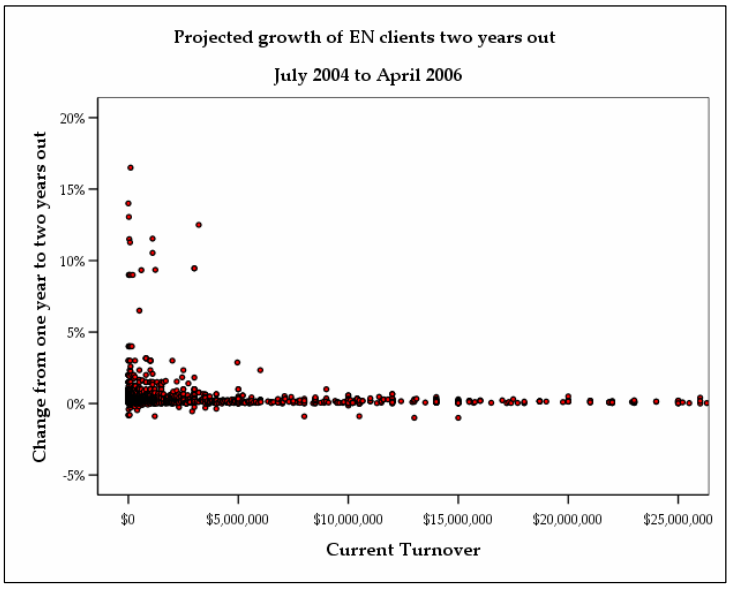
104. The dilemma facing any firm is that if they declare they *expect* high or medium growth, then they would not need assistance from the government. It may be that firms declare they expect low growth in order to qualify for the fund. Yet a forecast of low growth is what one would expect for a firm with potential who lacks the capability to achieve the growth- and so having low growth means they would be good candidates for assistance. To solve this dilemma the fund must select a proxy criterion (perhaps a latent variable) for growth potential, and not use expected growth.



105. The graph right shows the combined expected growth of networks (found by summing the expected growth of the member firms). This shows the median growth rate is less than 5%, and nearly all networks expect a combined growth of less than 20%. If 20% is the cap for medium growth, then networks show an expected medium growth rate. However 50% are sitting at 5%, seemingly much less than one would expect a medium growth rate to be.

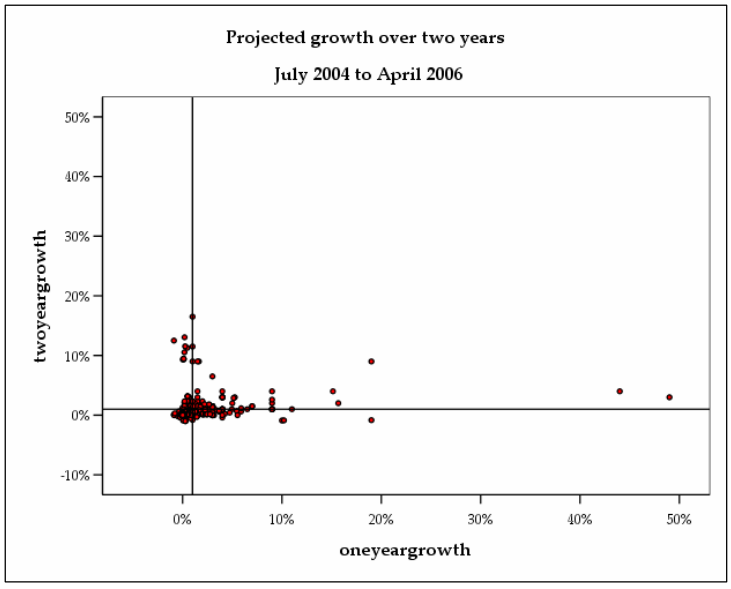
106. The graphs below show expected firm growth by turnover size, and show expected growth is low across the range of turnover size, but those who do expect higher growth are smaller in turnover size.

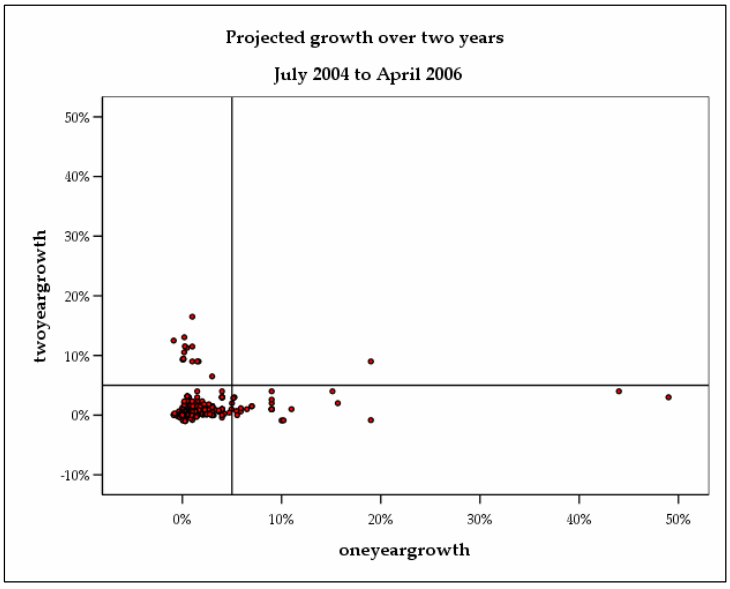




107. Firms have low expectations of sustaining growth. The two graphs below show expectations of sustained growth: they are the same graph but for the lines showing specific a growth rate: the two lines on the graph left are at 1%; and on the graph right are at 5%.

108. The graph left shows roughly half expect to see growth over 1% for two years. The graph right shows only one expects to see growth higher than 5% over two years.



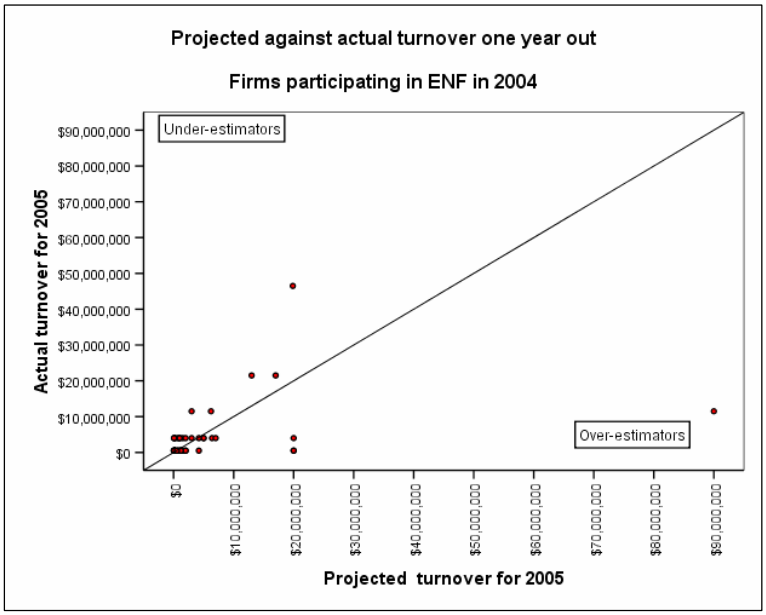


Actual and expected turnover

109. The evaluation used the survey data (gathered for assessing outcomes of ENF, see part four) to examine actual growth, and to test whether projected and actual turnover were as expected by firms or whether firms had done better than expected, or worse than expected.

110. 54% of firms remained in the same turnover band over three years. 18% moved to a larger band. The majority of ENF firms are neither medium nor high growth, where medium growth and higher is defined as a sustained increase in turnover sufficient to move the firm up turnover bands.

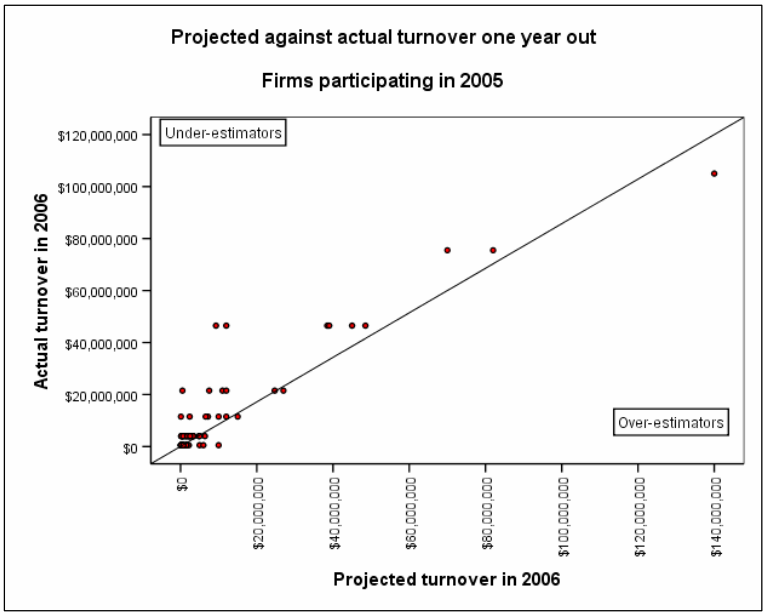
111. Firms who did better than expected under-estimated their growth, and are shown in the top half of the graphs as 'under-estimators'; firms who did worse than expected over-estimated their growth, and are shown in the bottom half of the graphs as 'over-estimators'.



112. The survey asked for turnover per annum in ranges, and respondents had to specify within which range they lay for each year, so the evaluation used the mid-point of the ranges of turnover as estimates of actual turnover. This is why some markers are in a straight line, as the midpoint for a range is the same for all within that range. This also means these graphs are estimates only of the firms' performance.

113. Not all firms entered both their expected turnover and turnover in the survey, so the graphs show those for whom there is data on both.

114. The graphs are split between firms engaged in an ENF activity in 2004, and in 2005. For firms attending an event in 2004, the graph right shows that firms are fairly evenly split between over-estimating and under-estimating their expected turnover.



115. A look at firms attending events in 2005 shows more under-estimated their expected turnover than over-estimated it.

116. Thus either the firms are conservative in estimating their

expected turnover, or there were unanticipated events which impacted on firms by splitting them between doing better and worse than expected. Both years of data suggest suggests expected turnover is not a reliable performance measure for the selection of firms, and data on past performance should be used instead.

Under-estimation and ENF outcomes

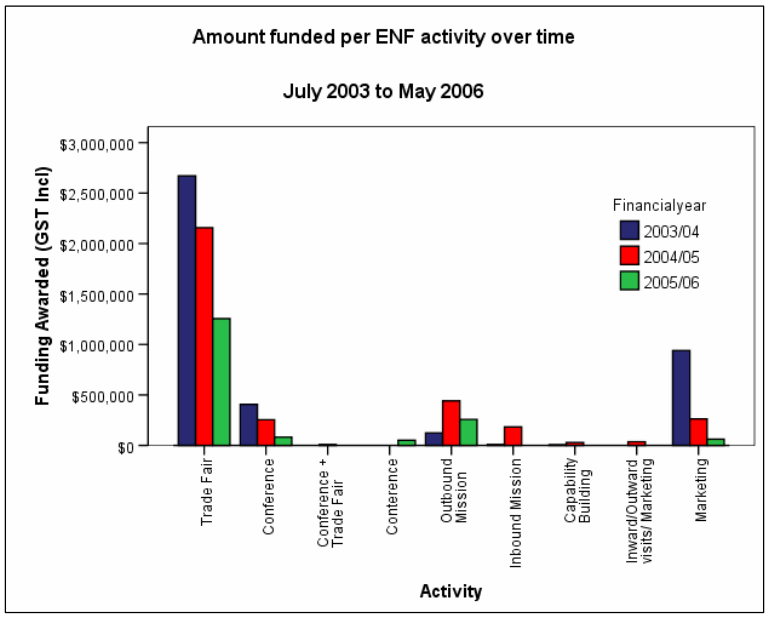
117. The evaluation tested whether there was any association between firms who underestimated their turnover and who gained in offshore sales or turnover from engaging in the ENF activity. This is reported in part four- outcomes. The evaluation found no association, indicating prediction of turnover is not a reliable indicator of performance, or whether firms would gain from engaging in an ENF event.

Type of Activity funded by ENF

118. Over its three years NZTE has not used ENF to fund all activities listed as available in its operational documents but has instead focused on four main areas of activity: trade fairs, conferences, inbound and outbound missions, and marketing. Trade fairs have been the dominant activity of the ENF, absorbing $6M of the total $9.6M expended in the 34 months to May 2006. Over 34 months of delivery, trade fairs is the single biggest activity by participant numbers, with 44% of ENF participants (in 34 months 1,958) being engaged in trade fairs.

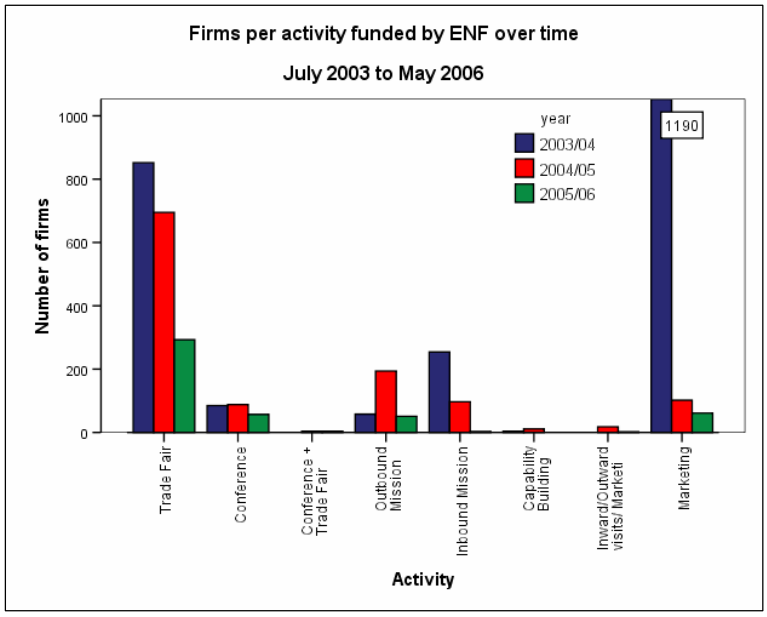
119. In 2003/04 the ENF funded two capability building activities but has not funded any subsequently.

120. 2004/05 showed an increase in the focus of ENF on trade fairs, by virtue of a large reduction in marketing- in activities, participants and funding. Marketing had been the second biggest activity in 2003/04, by funding, but the largest by participant numbers. There were 1190 participants engaged in marketing activities in 2003/04, but roughly 100 in 2004/05; marketing funding dropped from $0.940M to $0.262M, a 72% decrease. Marketing activities decreased by 82%.



121. While remaining the focus of the ENF, there was a slight decrease in the number of trade fairs funded from 2003/04 to 2004/05 (25%), shown in the drop from the height of the trade fairs blue bar of 2003/04 to the height of the trade fairs red bar 2004/05, in the graph top right.

122. The graph bottom right shows a corresponding decrease of 18% in the number of firms attending trade fairs, yet it remains the single biggest activity for that year, with the majority (695) of participants.



123. Some of the other activities increased from 2003/04 to 2004/05, while remaining less than trade fairs. Outbound missions increased (by 340%) with a corresponding increase in the numbers of firms engaged in outbound

missions (of 234%). Inbound missions increased (by 200%), however the number of firms engaged in inbound missions decreased (by 62%).

ENF by Sector

124. For 2004/05 and 2005/06 (to May) 40% of all ENF firms are also engaged in Sector Projects (as defined by NZTE, as a list of projects and the clients engaged in them). The remaining 60% of firms are engaged in events selected by the Sector team, but have not participated in a Sector Project. For these firms the events they were engaged in may or may not have a NZTE presence, such as a stand (if a trade fair), or a NZTE representative attending.

125. In 2004/05 the sectors Food & Beverage (FAB), Education (EDU) and Creative & Services (CAS) allocated the largest amounts of funding. Wood (WBI) the least. From 2003/04 to 2004/05 there have been changes in the amount funded per sector, shown in the table and graph below.

OLAP Cubes

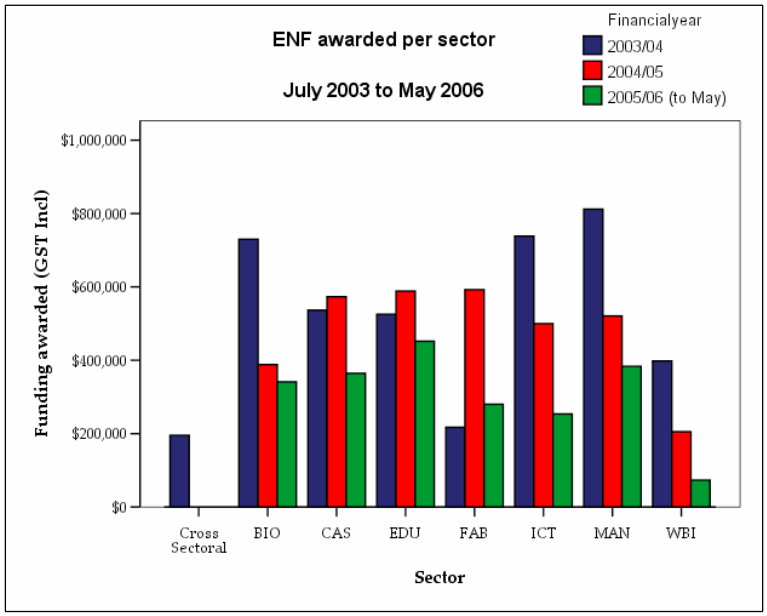
Sum

		Financial year			
	Sector	2003/04	2004/05	2005/06	Total
Funding Awarded (GST Incl)	Cross Sectoral	$195,544			$195,544
	BIO	$729,771	$388,131	$341,083	$1,458,985
	CAS	$536,413	$573,194	$364,311	$1,473,918
	EDU	$525,325	$588,590	$451,758	$1,565,672
	FAB	$217,198	$592,446	$279,902	$1,089,546
	ICT	$738,721	$499,941	$253,687	$1,492,348
	MAN	$812,050	$520,740	$383,523	$1,728,448
	WBI	$398,025	$205,251	$73,198	$676,474
	Total	$4,153,046	$3,368,293	$2,147,462	$9,680,936

126. Bio-tech (BIO), ICT, Wood (WBI), and Manufacturing (MAN) have decreased in funding (by 47% for Bio-tec, 36% for Manufacturing, 35% for Wood and 32% for ICT).

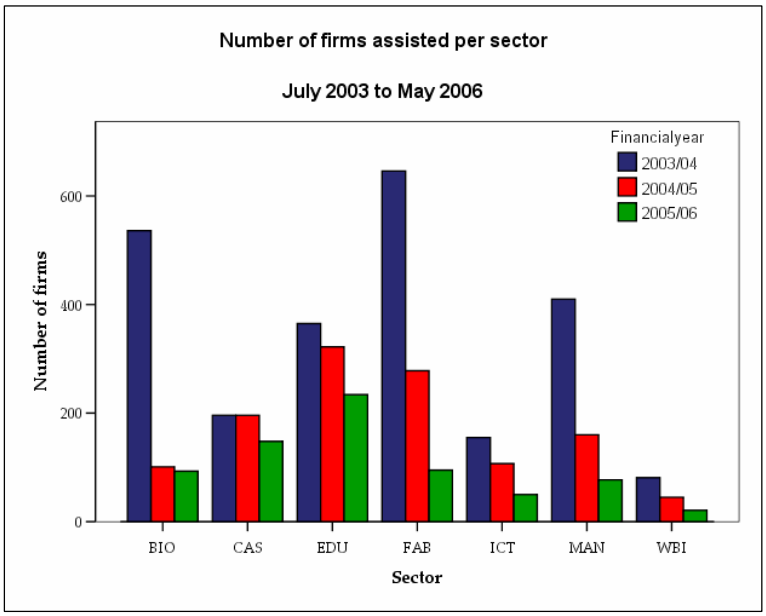
127. Creative and Services (CAS) increased by 7%, Education (EDU) by 12% and Food and Beverage (FAB) by 172%.

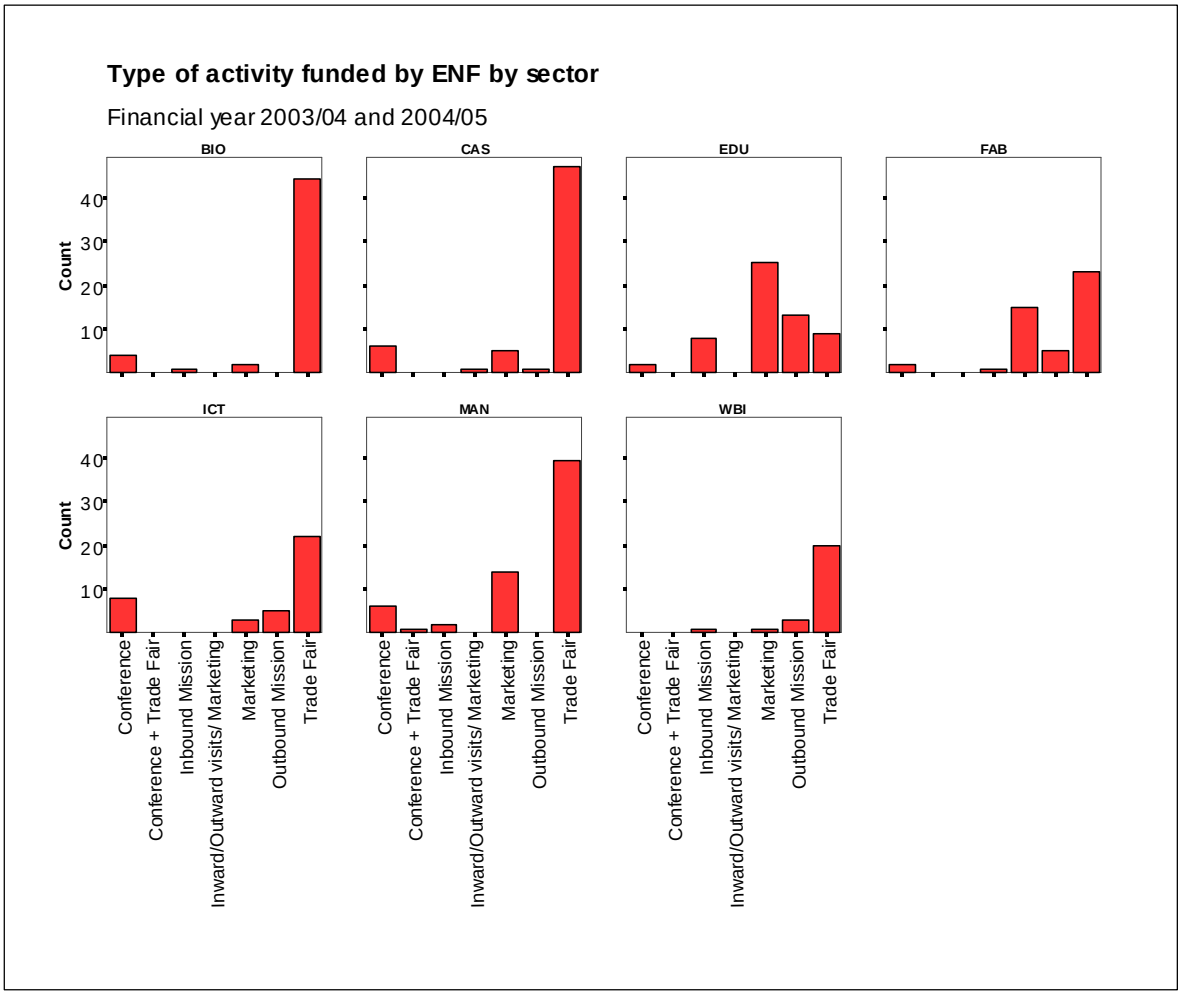
128. In 2003/04 there was an amount of 'cross-sector' funding ($195K) which has not been repeated.

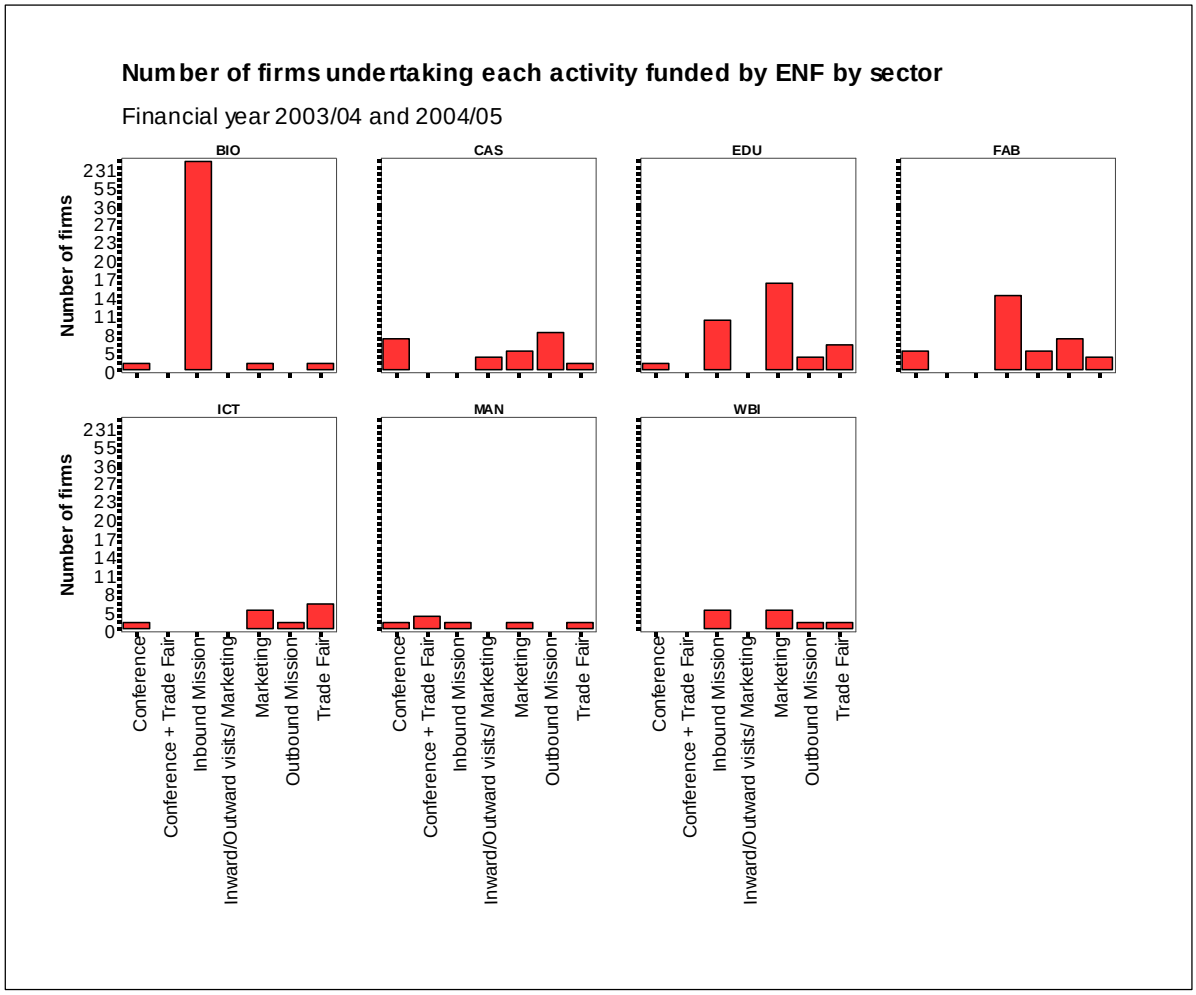


129. The graph top right shows that numbers of firms assisted per sector have decreased across all sectors, although not to the same degree. Bio-tech has decreased by 81%, Manufacturing by 61%, Food by 57%, Wood by 44%, ICT by 31%, Education by 12%, and Creative by 3%.

130. The graphs below and next page show per sector the activities funded; and the numbers of firms engaged in activities per sector. Trade fairs are the most frequent of all activities used by sectors and are at least half of all activities for all sectors, except for Education (EDU) and Food & Beverage (FAB) where they are roughly 30%.



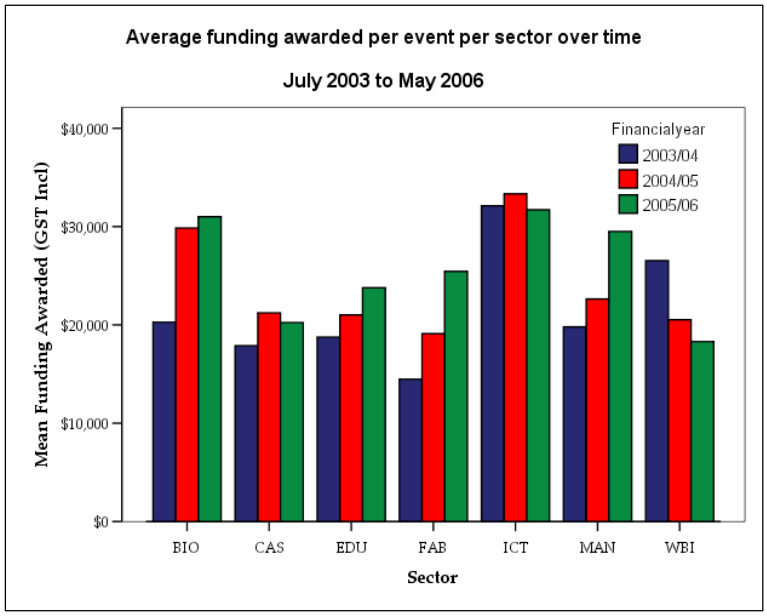




131. Bio-tech (BIO), Wood (WBI) and Creative & Services (CAS) rely the most heavily on trade fairs, with around 75% of activities being trade fairs; however most Bio-tec sector firms are engaged in inward bound missions (where an expert is brought to NZ). Marketing and Outbound Missions are second and third most important for most sectors.

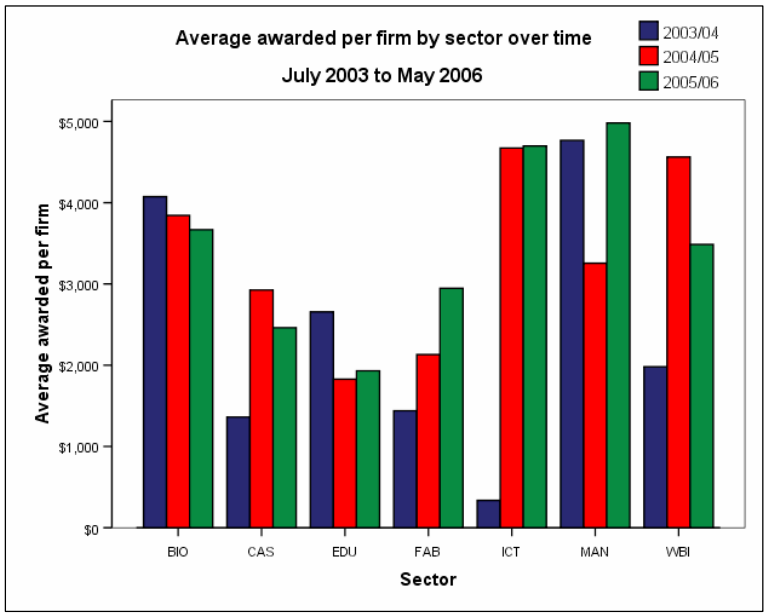
132. The average amount awarded per event in 2004/05 was between 20,000 and 33,000 for all sectors.

133. The graph right shows the average amount awarded per event increased from 2003/04 to 2004/05 across all sectors except Wood (WBI). Bio-tec (BIO) had the largest increase (of 47%), and ICT the least (4%). Wood (WBI) decreased by 23%.



134. The graph top right shows the average awarded per sectoral firm has changed unevenly across all sectors from 2003/04 to 2004/05, with the greatest change occurring within the ICT sector. The average amount awarded per participant in ICT increased by 1289%.

135. Creative (CAS) increased by 114%, and Wood (WBI) increased by 130%. Food (FAB) increased by 48%



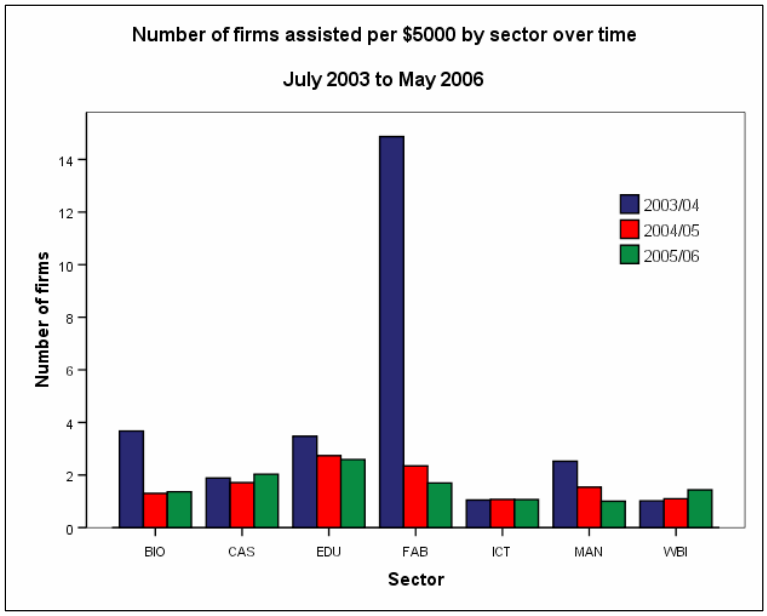
136. Education (EDU) decreased by 31%, and Bio-tec (BIO) decreased by 6%.

137. The changes suggest a general increase in the amount funded per event has not been matched with an even increase across sectors in the amount funded per firm.

138. The number of firms per dollar has remained similar, except for Food (FAB). The graph below right shows for the other sectors the number of firms assisted per $5000, and this remains fairly consistent across the financial two years.

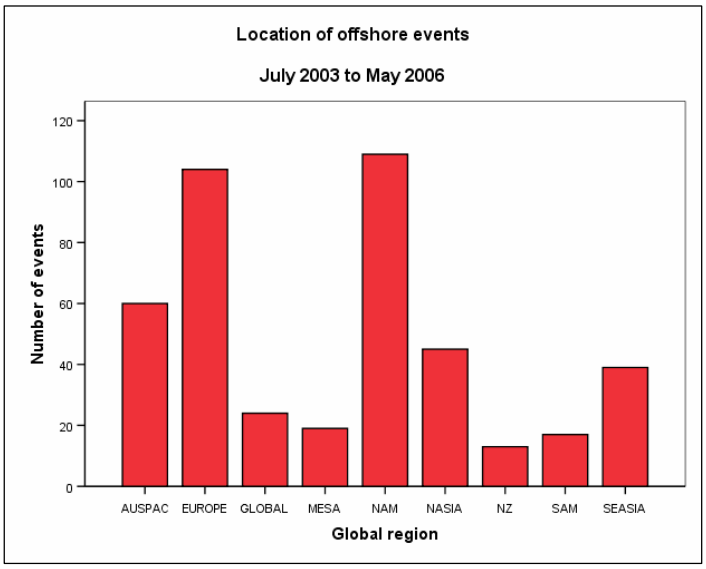
139. The biggest change from 03/04 to 04/05 is for the Food & Beverage sector (FAB) which assisted nearly 15 firms for every $5000 in 2003/04, but in 04/05 is within the range of the other sectors. The large number in 2003/04 is a function of the large number of firms assisted (over 600; shown in the graph middle, paragraph 89) and the small amount of funding allocated (roughly $200,000; shown in the graph top, paragraph 87).

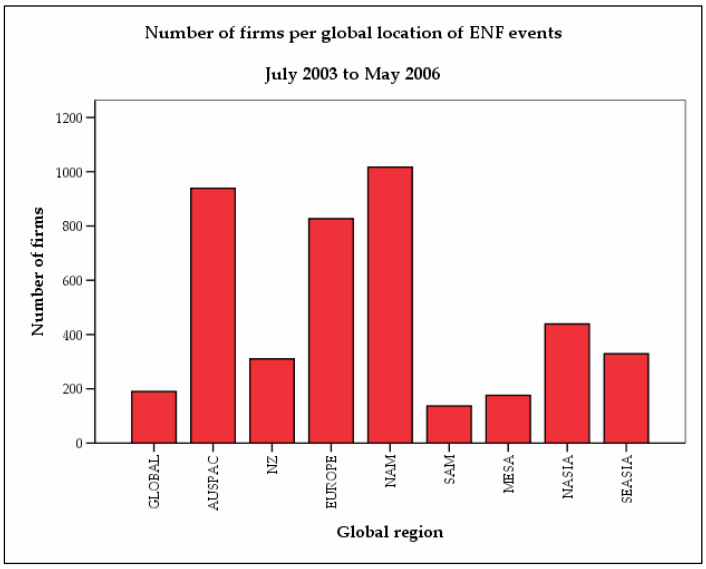
140. For 2004/05 all sectors lie between 1 and 3 firms per $5000.



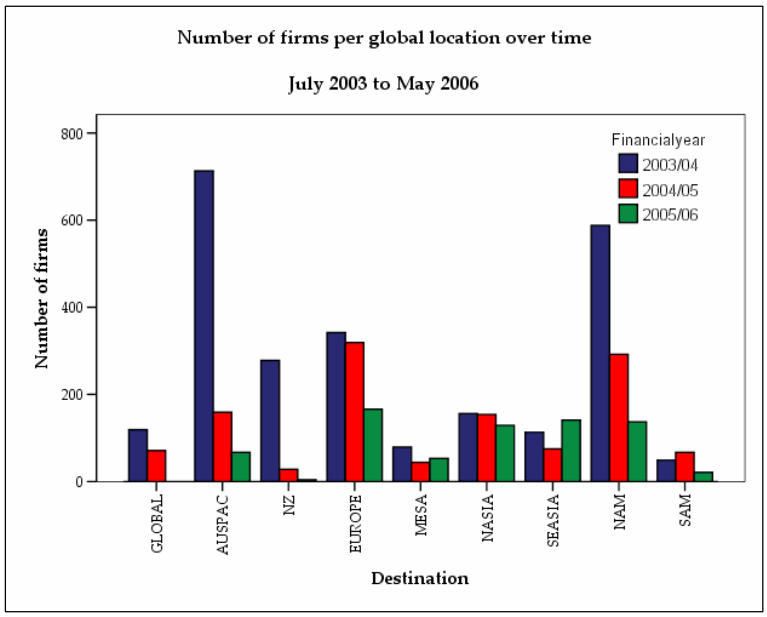
Global destination of ENF Networks

141. For the 34 months July 2003 to May 2006, most offshore network events occurred in Europe or North America (NAM). The third most common destination was Australia and the Pacific (AUSPAC). Most firms who went offshore went to Australia and the Pacific, followed closely by Europe and North America (NAM). The graphs below show totals for the 34 months of delivery.

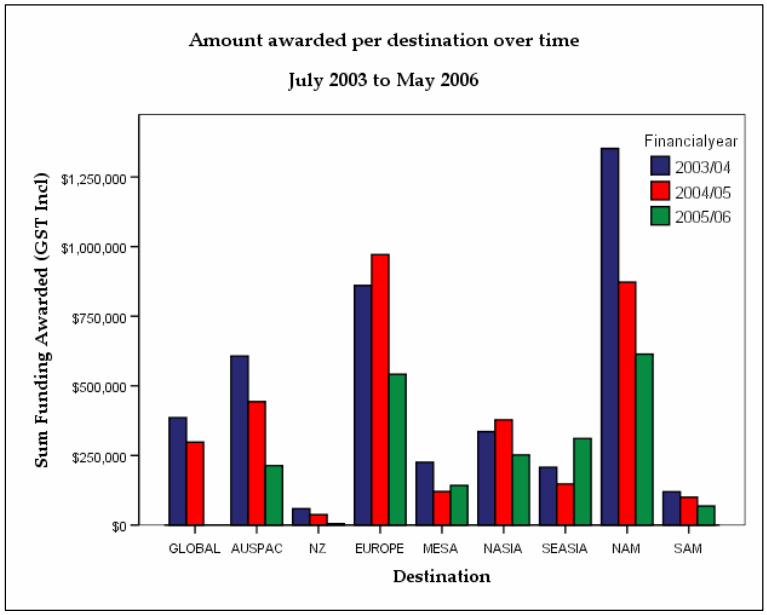




142. A look at destinations over time shows NZTE's choice of location of offshore events has changed. The graph below right shows that in 2003/04 most firms went to Australia and the Pacific or North America, but in 2004/05 most went to Europe or North America. From being the most common destination in 2003/04, Australia is now equal with North Asia (NASIA). Events held in New Zealand have also decreased to being the least common location in 2004/05.

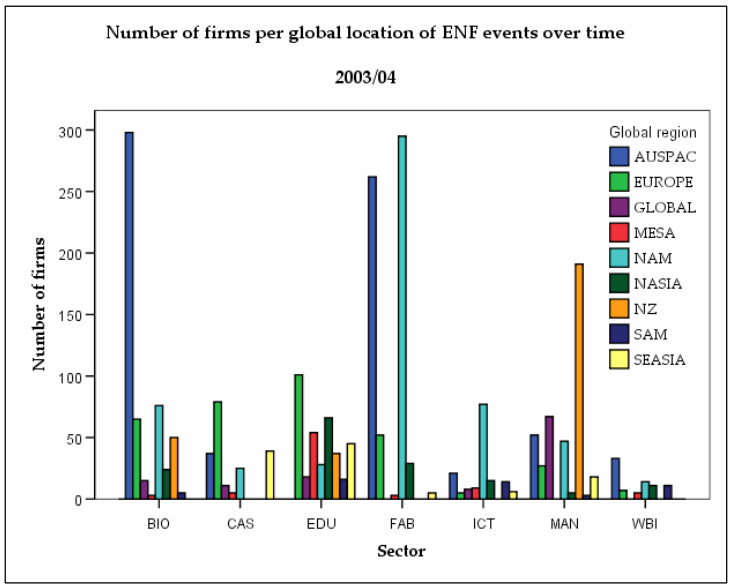


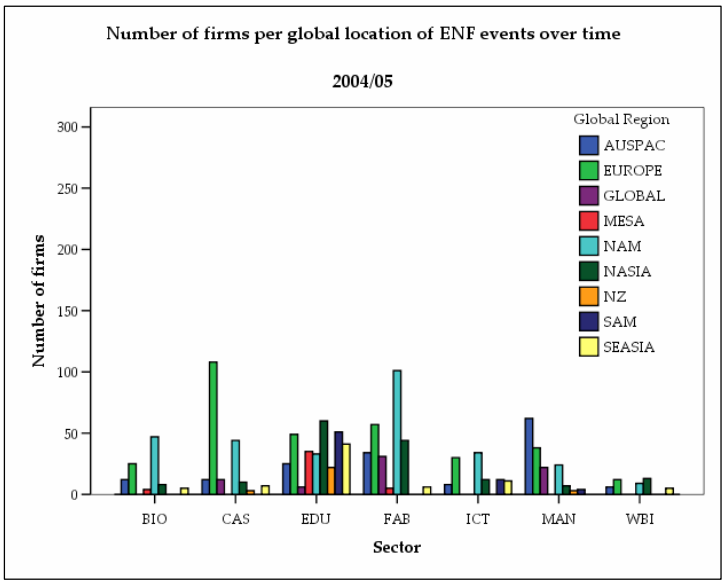
143. In 2003/04 most funding went on events in North America or Europe, and they remained the highest in 2004/05, although North America reduced somewhat, dropping from $1.35M in 2003/04 to $872,287 in 2004/05. Funding allocated to events in Europe increased to $971,478. Australia and the Pacific dropped from $607,024 in 2003/04 to $443,178 for 2004/05.



144. A look at the two graphs below shows the choice of locations within sectors. In 2003/04, shown in the graph below left, locations were even across sectors apart from Bio-tec (BIO) and Food (FAB) which heavily favoured Australia and the Pacific (AUSPAC) or North America (NAM). Manufacturing supported a large number of events within New Zealand.

145. In 2004/05, shown in the graph below right, there was a large drop in numbers sent to Australia and the Pacific within Bio-tec (BIO) and Food (FAB). The Food sector (FAB) also decreased in numbers of firms sent to North America (NAM). Manufacturing removed almost entirely its focus on New Zealand based activities. The remainder of the locations across sectors remained roughly similar.





Part Four: Findings on Outcomes

Methodology

146. In order to determine outcomes of the ENF the evaluation undertook a simple random sample of firms receiving ENF assistance between July 2004 and December 2005.

147. The evaluation treated the population as both of clients and of the engagements for which they received funding, so the targeted population included firms who had assistance for more than one engagement. This gave a targeted population size of 1142, with a sample size chosen to give a margin of error of 5% for estimates of proportions. This gave a minimum sample of 296. However firms could only be sampled once. The evaluation surveyed 311 firms and received replies from 236, giving a response rate of 75%.

148. Education sector activities were removed from the targeted population as the clients are typically schools and universities and the evaluation chose to focus on outcomes of firms.

149. Due to the high response rate estimates of the sample are estimates of the population, thus findings from the survey can be generalised to the population of all ENF clients receiving assistance between July 2004 to December 2005.

150. In analysis of associations between characteristics of firms and outcomes, the relationship is found using the statistical test: 'chi-square test of independence'. The Chi-square test is a statistical procedure to test for the existence of an association between two categorical variables. An example of such a comparison would be the variable 'choice of network' (possible answers are 'by NZTE' or 'by firms') and 'effects of the interactions with other firms' (possible answers are 'an improvement' or 'no effect'). The Chi-square test provides a significance or p-value for the comparison: small values of the p-value mean that a significant association has been found. For the purposes of this evaluation a significance level of 5% (p=0.05) is used (this corresponds to the standard 95% confidence level), and any test with a p-value less than 0.05 as taken as evidence for an association.

Outcomes investigated

151. The ENF as implemented by NZTE has funded networks to attend only trade fairs, outward and inward missions, or onshore strategy development meetings. The survey has therefore only looked at the impact of these 'events' on firms.

152. The evaluation sought to determine whether an ENF event:

    1. improved firm turnover

    2. improved offshore sales

    3. gained the firm new clients

    4. improved knowledge of firms' offshore markets' customer preferences, regulatory requirements or competition

5. increased the extent of firms' financial investment, the value of contracts for offshore manufacture or the extent of distribution arrangements

6. resulted in innovations in good and services, in operational processes, in business or management processes or strategies, or in sales or marketing methods

7. resulted in collaboration between firms

8. whether any collaboration impacted on the firms' offshore markets development or sales, innovation capability or business practices

9. whether any collaboration impacted on firm turnover

153. The evaluation also asked firms whether they felt that without the grant they would have achieved the outcomes in other ways, whether they would have attended the same event without a grant, whether they planned to attend another offshore event, and whether they would attend with a network or alone.

Findings

154. The ENF has increased the offshore sales of one in every two firms it sent offshore. Nearly half saw turnover increases. ENF enabled the majority of firms to learn about their offshore customers' preferences, and offshore competition. Roughly half learnt more about the regulatory requirements of their target offshore markets.

155. However the networking component of the ENF seems to have had less of an impact. Roughly a third saw the network improve their offshore sales, their innovation capability, business practices or turnover. Only roughly a fifth interacted with their network across a range of areas prior to the ENF event, and roughly a fifth during and after, showing for nearly all firms, engagement in ENF events with a group of firms does not by itself foster a network.

156. The evaluation also found firms who had chosen their own network were significantly more likely to see improvements from collaboration in terms of their offshore market development, their innovation capability or their business practices, than those firms for whom NZTE had chosen the network. Firms who had chosen their own network were significantly more likely than those firms for whom NZTE had chosen the network to see the effects of collaboration translate into improvements in turnover.

157. These findings suggest the mechanisms NZTE set in place to achieve the networking component of this programme are not fostering groups of firms into networks. While the evaluation did not ask firms whether there had been an NZTE presence at the event they were engaged in, NZTE has confirmed not all events supported by ENF have an NZTE presence, and this may be a factor in this networking issue.

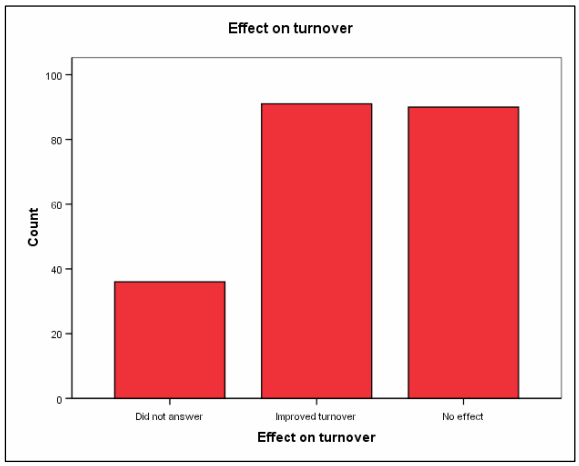
158. During the survey the evaluation found that a few firms are on file as having been part of a network when they themselves were not aware of it. An example is an agent of a number of firms naming his client firms as part of his network, and attending an event selling their goods on their behalf with assistance from NZTE, but the client firms are quite unaware of the assistance (although they knew they were represented in that market by their agent). They themselves never went to the event. While they may know the agent is selling their goods at the offshore event, and may gain in

sales from it, they are not part of a network as the policy rationale intended, and the ENF is not fostering their networking.

159. The following are details of the estimates of proportions of all ENF firms assisted from 2004/05 to December 2005 seeing outcomes as a result of the event they attended.[1]

Turnover

160. 47% of firms had improved turnover. 44% saw no impact. 2% said it decreased their turnover. [2]



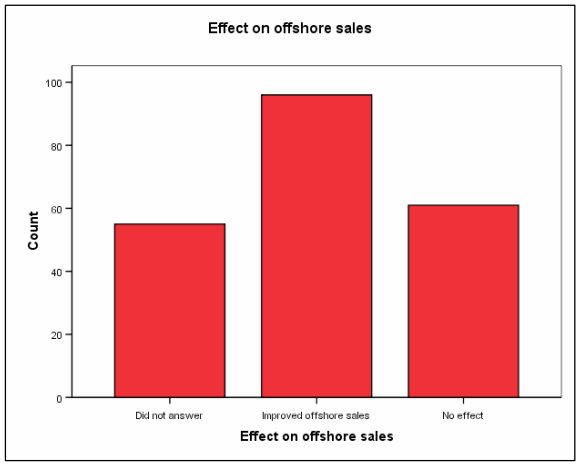
161. Of the 47%, 36% saw a moderate increase in turnover and 10% saw it increase a great deal.

Offshore sales

162. 50% of firms saw improved offshore sales, and gained new clients. 25% gained sales in new cities and 21% in new countries. 30% of firms saw no impact on offshore sales.

Collaboration

163. Firms were asked whether interactions with their network members resulted in gains in offshore market development, innovation capability and business practices, and whether these in turn impacted on turnover.



164. 38% gained improvements in their offshore market development and sales as a result of their network. Of this figure, 30% said it had improved moderately and 8% said it had improved a great deal. 35% said the network had had no such effect.

165. 32% gained improvements in their innovation capability as a result of their network improve, with 50% not.

166. 38% gained improvements in their business practices, and 44% did not.

167. For 38% of firms the network resulted in improved turnover. For 43% of firms it had no effect on their turnover.

---

[1] Due to high response rate, estimates of the sample are estimates of the population.

[2] The remaining percentage in each question are those who did not answer the question.

168. Less than 20% of firms engaged with their network prior to attending an ENF event. The event did not result in a real increase in the extent to which firms within the networks engaged with each other: the percentages engaging with each other before, remained similar for engaging with each other after the event. For the majority, attending the event with a group of firms did not foster a network. (The evaluation defined a network as a grouping of firms that benefits the member firms).

Learning

169. 78% of firms saw an improved understanding of customer preferences in their offshore markets. 12% saw no such effect.

170. 45% of firms saw an improved understanding of regulatory requirements in their offshore markets. 44% said the event had had no such effect.

171. 75% of firms saw an improved understanding of their offshore competition. 15% said the event had not had any such effect.

Investment, contracts, distribution arrangements

172. 27% of firms used ENF events to increase their financial investment in offshore firms. 60% did not see any such result.

173. 33% of firms saw an increase in the value of their offshore manufacturing contacts. 54% did not.

174. 56% of firms said the event led to extended distribution arrangements offshore. 33% said the event had not.

Innovation

175. 26% of firms reported as a result of the event having implemented new products or services, 28% said they had no plans to. 23% had implemented new operational processes, with 40% saying they had no plans to. 23% had implemented new organisational or managerial processes or business strategies, structures or routines, 36% said they had no plans. 29% had implemented new sales or marketing methods with 27% reporting no plans.

176. Between 20% and 30% of firms reported having planned to implement the above innovations within five years. Between 1% and 4% reported intending to implement the innovations beyond five years time.

Attendance without NZTE funding

177. 51% of firms said it was unlikely they would have attended the event without NZTE funding. 11% said it was very likely they would have, and 16% rated the likelihood they would have attended without funding as ‘medium’. There was no significant difference in proportions of firms seeing positive outcomes in offshore sales between those who would have attended without assistance and those who would not have.

Achieving benefits without attending the event

178. 40% of firms stated they would have used other means to achieve improvements in learning (as given above under 'learning,' paragraphs 169 to 171), if they could not have attended the event. 38% of firms said they would not have.

179. 42% of firms stated they would have used other means to achieve improvements in their distribution arrangements (as given above in 'Investment' paragraphs 172 to 174); 55% said they would not have.

180. 36% said they would have used other means to achieve the changes in innovation (as given above under 'innovation,' paragraphs 175 and 176) if they could not have attended the event, 35% said they would not have.

Analysis of findings on turnover and offshore sales

181. The evaluation looked to see if there was an association between firms underestimating their expected turnover (firms must state their expected turnover in their application forms) and gaining in offshore sales or turnover following an ENF event. An association may strengthen the claim the firm gained in offshore sales; an absence would indicate that firms are poor predictors of expected turnover (as a lack of an association would indicate those who over-estimated their turnover achieved improvements due to the event at the same rate as those who under-estimated their turnover).

182. The evaluation sorted expected turnover into the same bands as used in the survey, and classified those whose expected turnover was in lower bands than given for the relevant year in the survey, as 'under estimators;' that is, their turnover for the year was higher than they had expected it to be.

183. For those who attended an event in 2004 the evaluation looked at their 2005 turnover and compared it to the projected one year out turnover, from their application for a 2004 event. For those attending in 2005 the evaluation looked at their 2006 turnover and compared it to projected one year out turnover from their application for a 2005 event. The evaluation then tested whether there was an association between proportions of firms who were under estimators and firms who gained in offshore sales or turnover.

184. For firms attending events in 2005 it found no association with gains in turnover or offshore sales and under estimating turnover, a chi-square test of independence gave a p-value of p=.422 for offshore sales and p=.860 for turnover. For 2004 attending firms it found no association with under estimating and gains in turnover: a chi-square test of independence gave a p-value of p= 0.344.

185. For 2004 attending firms testing association between underestimating turnover and having gains in offshore sales it found an association significant at the 10% level, with a p-value of p=0.091, which shows a very tentative association between firms underestimating turnover and claiming gains in offshore sales. However the test had low expected cell counts, (0.7) violating one of the necessary assumptions of the test for it to be reliable.

186. These findings do not entail there was no improvement in sales or turnover beyond what was expected, but that firms with discrepancies in actual turnover from

predicted turnover and firms without discrepancies are as likely as each other to have had gains in sales or turnover. This suggests firms are poor predictors of future turnover, including whether they would gain from attending an ENF event.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	8.013[a]	4	.091
Likelihood Ratio	8.592	4	.072
Linear-by-Linear Association	.061	1	.805
N of Valid Cases	46		

a. 5 cells (55.6%) have expected count less than 5. The minimum expected count is .70.

Crosstab

			Effect on offshore sales			
			Did not answer	Improved offshore sales	No effect	Total
estimators2004	Within predicted ban	Count	1	14	8	23
		Expected Count	2.0	13.0	8.0	23.0
		% within estimators2004	4.3%	60.9%	34.8%	100.0%
	Under estimator	Count	0	7	1	8
		Expected Count	.7	4.5	2.8	8.0
		% within estimators2004	.0%	87.5%	12.5%	100.0%
	Over estimator	Count	3	5	7	15
		Expected Count	1.3	8.5	5.2	15.0
		% within estimators2004	20.0%	33.3%	46.7%	100.0%
Total		Count	4	26	16	46
		Expected Count	4.0	26.0	16.0	46.0
		% within estimators2004	8.7%	56.5%	34.8%	100.0%

187. The evaluation tested whether there was any relationship between gains in turnover or offshore sales and those firms who said it was unlikely they would attend without NZTE funding. A relationship, whereby those firms who achieve gains are also those firms who would not have gone anyway, would suggest NZTE funding is a critical factor in ENF outcomes.

188. A Chi-square test of significance found no relationship, shown by the tables below having similar numbers across the categories of effects on offshore sales or turnover for those who said attendance anyway was highly likely or quite unlikely (low). This suggests both firms who stated they would not go, without assistance, and firms who stated they would go, without assistance, are equally likely to achieve gains in sales or gains in turnover. Also, firms who stated they would not go, without assistance, are as likely to *not* achieve gains, as those firms are who would have gone anyway, without assistance.

189. Assisting firms who would have gone anyway is a cost which reduces the overall benefit of the ENF, and any possible reduction in these costs, with a screening tool which detects those who would go anyway, is appropriate.

Crosstab

			Likelihood of attendence without NZTE funding			
			High	Low	Medium	Total
Effect on turnover	Improved turnover	Count	13	47	22	82
		Expected Count	11.8	52.5	17.7	82.0
		% within Effect on turnover	15.9%	57.3%	26.8%	100.0%
	No effect	Count	9	51	11	71
		Expected Count	10.2	45.5	15.3	71.0
		% within Effect on turnover	12.7%	71.8%	15.5%	100.0%
Total		Count	22	98	33	153
		Expected Count	22.0	98.0	33.0	153.0
		% within Effect on turnover	14.4%	64.1%	21.6%	100.0%

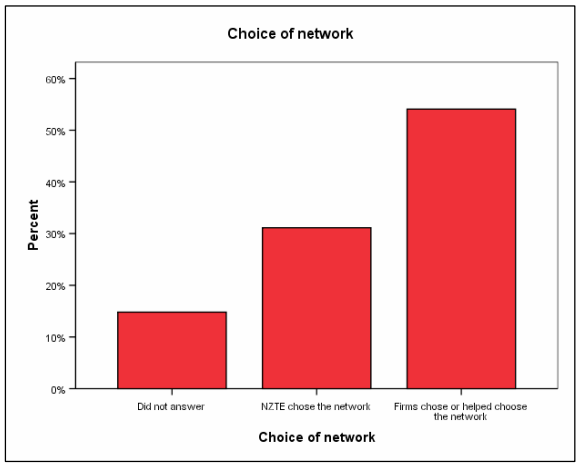
Crosstab

			Likelihood of attendence without NZTE funding			
			High	Low	Medium	Total
Effect on offshore sales	Improved offshore sales	Count	14	59	22	95
		Expected Count	13.7	60.8	20.5	95.0
		% within Effect on offshore sales	14.7%	62.1%	23.2%	100.0%
	No effect	Count	8	39	11	58
		Expected Count	8.3	37.2	12.5	58.0
		% within Effect on offshore sales	13.8%	67.2%	19.0%	100.0%
Total		Count	22	98	33	153
		Expected Count	22.0	98.0	33.0	153.0
		% within Effect on offshore sales	14.4%	64.1%	21.6%	100.0%

Analysis of findings on collaboration

190. Either NZTE, or firms themselves, choose the network with which firms attend an event. In total 54% of firms chose or helped choose the network, and NZTE made the choice for 31% of firms.

191. The evaluation looked to see if there were any associations between choice of network and outcomes of the collaboration (see appendix for tables). It found a significant association between the proportion of firms choosing their network and each outcome of collaboration, except for effect on business practices, for which there was no association. A chi-square test of independence gives a p-value for each of the significant findings of p<.05.



192. The evaluation found that firms who chose their own network, or were involved in the choice, were more likely to see, as a result of the network, improvements in market development and sales, and their innovation capability. This means that one can be confident that firms choosing their own network will usually also see improvements in the above areas.

193. The evaluation also found a significant association between proportions of firms choosing their network and impact on turnover of the network. A chi-square test of independence gives a p-value of p<.05. Thus the evaluation found that firms who chose their own network, or were involved in the choice, had much higher rates of seeing, as a result of the network, improvements in turnover. This means that one can be confident that firms choosing their own network will usually also see improvements in turnover.

194. Networks chosen by NZTE had much lower rates of seeing improvements in turnover, or seeing improvements in any of the areas of offshore market development, innovation or business practices. Rates of firms reporting no effects were even for both types of choice.

195. The evaluation recommends network selection be firm-led as much as is possible, as NZTE is less likely to make a beneficial selection than firms themselves and is as likely as firms to select a network which does not result in improvements in the areas of offshore market development, innovation or business practices or in turnover. The finding may be due to firms not already in networks also being firms who are poor at networking, and so placement in a network does them no benefit, but this suggests that some assistance in networking capability is required for these firms, which NZTE may be able to deliver.

Analysis of findings on learning

196. The evaluation looked to see whether there was any association between gains in turnover or offshore sales, and learning from attendance of an ENF event (see appendix for tables). In particular it looked to see whether firms gaining in turnover or

offshore sales were also those who had, following the ENF event, learnt about their markets, in terms of customer preferences, competition, and regulatory environment.

197. The evaluation found only one significant association: between those firms who learnt about their customer preferences and those who gained in offshore sales. A Chi-square test of independence gives a p-value of $p<0.5$. Those who increased in understanding of customer preferences were also those who gained in offshore sales.

198. For the remainder, Chi-square tests of independence gives for each a p-value of $p>0.1$. Gains in offshore sales and turnover don't necessarily come with learning about competition or regulatory environment, and vice versa.

Appendix One: Tables

Tables of participant numbers, activity counts and funding per activity over time

OLAP Cubes

companiesno
Sum

typeoffunding		Financialyear 2003/04	2004/05	2005/06	Total
				176	176
Capability Building		4	11		15
Conference		85	88	15	188
Conference + Trade Fa			4		4
Conterence				6	6
Inbound Mission		254	97		351
Inward/Outward visits/ Marketing			18		18
Marketing	0	1190	102	17	1309
Outbound Mission	5	58	194	97	354
Trade Fair		852	695	411	1958
Total	5	2443	1209	722	4379

OLAP Cubes

Funding Awarded (GST Incl)
Sum

	$441,516
Capability Building	$33,067
Conference	$741,958
Conference + Trade Fa	$6,900
Conterence	$50,190
Inbound Mission	$190,599
Inward/Outward visits/ Marketing	$36,228
Marketing	$1,263,960
Outbound Mission	$833,423
Trade Fair	$6,083,094
Total	$9,680,936

OLAP Cubes

Sum

	typeoffunding		Financialyear 2003/04	2004/05	2005/06	Total
Funding Awarded (GST Incl)					$441,516	$441,516
	Capability Building		$5,240	$27,827		$33,067
	Conference		$406,378	$254,117	$81,462	$741,958
	Conference + Trade Fa			$6,900		$6,900
	Conterence				$50,190	$50,190
	Inbound Mission		$7,712	$182,887		$190,599
	Inward/Outward visits/ Marketing			$36,228		$36,228
	Marketing	$0	$940,206	$262,554	$61,200	$1,263,960
	Outbound Mission	$12,135	$123,305	$440,942	$257,041	$833,423
	Trade Fair		$2,670,204	$2,156,838	$1,256,052	$6,083,094
	Total	$12,135	$4,153,046	$3,368,293	$2,147,462	$9,680,936

Table of number of activities per sector for each financial year

OLAP Cubes

N

Sector	typeoffunding	Financialyear 2003/04	2004/05	2005/06	Total
BIO				9	9
	Conference	3	1		4
	Inbound Mission	1			1
	Marketing	2			2
	Trade Fair	30	12	2	44
	Total	36	13	11	60
CAS				18	18
	Conference	3	3		6
	Inward/Outward visits/ Marketing		1		1
	Marketing	4			5
	Outbound Mission		1		1
	Trade Fair	25	22		47
	Total	32	27	18	78
EDU				18	18
	Conference	1	1		2
	Inbound Mission		8		8
	Marketing	24	1		25
	Outbound Mission	2	11		13
	Trade Fair	2	7		9
	Total	29	28	18	75
FAB				11	11
	Conference		2		2
	Inward/Outward visits/ Marketing		1		1
	Marketing	10	5		15
	Outbound Mission	1	4		5
	Trade Fair	4	19		23
	Total	15	31	11	57
ICT				9	9
	Conference	5	3		8
	Marketing	3			3
	Outbound Mission	2	3		5
	Trade Fair	13	9		22
	Total	23	15	9	47
MAN				13	14
	Capability Building	1	1		2
	Conference	2	4		6
	Conference + Trade Fa		1		1
	Inbound Mission	1	1		2
	Marketing	10	4		14
	Trade Fair	27	12		39
	Total	41	23	13	78
WBI				4	4
	Inbound Mission	1			1
	Marketing	1			1
	Outbound Mission		3		3
	Trade Fair	13	7		20
	Total	15	10	4	29
Total				82	83
	Capability Building	1	1		2
	Conference	14	14		28
	Conference + Trade Fa		1		1
	Inbound Mission	3	9		12
	Inward/Outward visits/ Marketing		2		2
	Marketing	55	10		66
	Outbound Mission	5	22		27
	Trade Fair	118	88	2	208
	Total	196	147	84	429

Table of funded awarded per sector for each financial year

OLAP Cubes

Sum

		Financial year			
	Sector	2003/04	2004/05	2005/06	Total
Funding Awarded (GST Incl)	Cross Sectoral	$195,544			$195,544
	BIO	$729,771	$388,131	$341,083	$1,458,985
	CAS	$536,413	$573,194	$364,311	$1,473,918
	EDU	$525,325	$588,590	$451,758	$1,565,672
	FAB	$217,198	$592,446	$279,902	$1,089,546
	ICT	$738,721	$499,941	$253,687	$1,492,348
	MAN	$812,050	$520,740	$383,523	$1,728,448
	WBI	$398,025	$205,251	$73,198	$676,474
	Total	$4,153,046	$3,368,293	$2,147,462	$9,680,936

Table of ENF firms by sector in each financial year

OLAP Cubes

Sum

		Financial year			
	Sector	2003/04	2004/05	2005/06	Total
Firms	Cross Sectoral	48			48
	BIO	536	101	93	730
	CAS	202	196	148	546
	EDU	365	322	234	921
	FAB	646	278	95	1019
	ICT	155	107	54	316
	MAN	410	160	77	652
	WBI	81	45	21	147
	Total	2443	1209	722	4379

Table of mean funding awarded to each network event by sector in each financial year

OLAP Cubes

Mean

		Financial year		
	Sector	2003/04	2004/05	2005/06
Funding Awarded (GST Incl)	Cross Sectoral	$39,108.80		
	BIO	$20,271.42	$29,856.21	$31,007.58
	CAS	$16,762.91	$21,229.39	$20,239.52
	EDU	$18,114.64	$21,021.06	$23,776.72
	FAB	$14,479.87	$19,111.17	$25,445.61
	ICT	$32,118.28	$33,329.41	$28,187.40
	MAN	$19,806.10	$22,640.87	$29,501.78
	WBI	$26,535.00	$20,525.13	$18,299.52

Table of count of firms travelling to each global destination and total amount awarded by destination for each financial year

Sum
Sector: Total

		Financial year			
	Destination	2003/04	2004/05	2005/06	Total
Number of firms	AUSPAC	713	159	67	939
	EUROPE	348	319	166	833
	GLOBAL	119	71		190
	MESA	79	44	57	185
	NAM	588	292	137	1017
	NASIA	156	154	129	439
	NZ	278	28	4	310
	SAM	49	67	21	137
	SEASIA	113	75	141	329
	Total	2443	1209	722	4379
Funding Awarded (GST Incl)	AUSPAC	$607,025	$443,178	$213,362	$1,263,565
	EUROPE	$860,304	$971,478	$541,402	$2,373,184
	GLOBAL	$385,968	$297,658		$683,626
	MESA	$225,495	$120,773	$142,448	$500,851
	NAM	$1,352,299	$872,287	$613,885	$2,838,471
	NASIA	$335,700	$377,858	$251,758	$965,316
	NZ	$58,688	$37,588	$5,000	$101,275
	SAM	$119,710	$99,904	$68,571	$288,185
	SEASIA	$207,858	$147,569	$311,037	$666,464
	Total	$4,153,046	$3,368,293	$2,147,462	$9,680,936

Table of total count of offshore events

Global destination

	Frequency	Percent
AUSPAC	60	14.0
EUROPE	104	24.2
GLOBAL	24	5.6
MESA	19	4.4
NAM	109	25.3
NASIA	45	10.5
NZ	13	3.0
SAM	17	4.0
SEASIA	39	9.1
Total	430	100.0

Tables of outcomes

Crosstab

			Effect on innovation capability		
			Improved	No effect	Total
Choice of network	NZTE chose the network	Count	18	42	60
		Expected Count	23.8	36.2	60.0
		% within Choice of network	30.0%	70.0%	100.0%
	Firms chose or helped choose the network	Count	44	52	96
		Expected Count	38.2	57.8	96.0
		% within Choice of network	45.8%	54.2%	100.0%
Total		Count	62	94	156
		Expected Count	62.0	94.0	156.0
		% within Choice of network	39.7%	60.3%	100.0%

Crosstab

			Effect on business practices		
			Improved	No effect	Total
Choice of network	NZTE chose the network	Count	23	37	60
		Expected Count	27.3	32.7	60.0
		% within Choice of network	38.3%	61.7%	100.0%
	Firms chose or helped choose the network	Count	48	48	96
		Expected Count	43.7	52.3	96.0
		% within Choice of network	50.0%	50.0%	100.0%
Total		Count	71	85	156
		Expected Count	71.0	85.0	156.0
		% within Choice of network	45.5%	54.5%	100.0%

Crosstab

			Effect on offshore market development & sales		
			Improved	No effect	Total
Choice of network	NZTE chose the network	Count	24	36	60
		Expected Count	31.2	28.8	60.0
		% within Choice of network	40.0%	60.0%	100.0%
	Firms chose or helped choose the network	Count	57	39	96
		Expected Count	49.8	46.2	96.0
		% within Choice of network	59.4%	40.6%	100.0%
Total		Count	81	75	156
		Expected Count	81.0	75.0	156.0
		% within Choice of network	51.9%	48.1%	100.0%

Crosstab

			Effect on offshore sales		
			Improved offshore sales	No effect	Total
Understanding of customer preferences	No effect	Count	7	14	21
		Expected Count	12.8	8.2	21.0
		% within Understanding of customer preferences	33.3%	66.7%	100.0%
	Increased understanding	Count	86	45	131
		Expected Count	80.2	50.8	131.0
		% within Understanding of customer preferences	65.6%	34.4%	100.0%
Total		Count	93	59	152
		Expected Count	93.0	59.0	152.0
		% within Understanding of customer preferences	61.2%	38.8%	100.0%

Crosstab

			Effect of collaboration on turnover			
			Did not answer	Improved turnover	No effect	Total
Choice of network	NZTE chose the network	Count	0	20	39	59
		Expected Count	.4	27.8	30.8	59.0
		% within Choice of network	.0%	33.9%	66.1%	100.0%
	Firms chose or helped choose the network	Count	1	53	42	96
		Expected Count	.6	45.2	50.2	96.0
		% within Choice of network	1.0%	55.2%	43.8%	100.0%
Total		Count	1	73	81	155
		Expected Count	1.0	73.0	81.0	155.0
		% within Choice of network	.6%	47.1%	52.3%	100.0%