

Review of the Knowledge Exploitation Fund Following Transfer to the WDA Final Report

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Executive Summary

The Knowledge Exploitation Fund (KEF) was established in 2000 to encourage entrepreneurship and innovation in higher and further education institutions in Wales. In 2003 responsibility for KEF was transferred from National Council ELWa to the Welsh Development Agency (WDA). This Review was commissioned by the WDA to inform the strategic direction, management and administration of KEF following the transfer.

The Terms of Reference for the study were to review and make recommendations on:

The future focus of KEF and what activities will best achieve the most positive long term impact on the Welsh economy.

How KEF should operate in terms of business academic collaboration in light of the Entrepreneurship Action Plan for Wales and the Innovation Action Plan for Wales, and other UK government reviews.

How the WDA can ensure that the project is accessible and appropriate for HE and FE institutions.

How the future delivery of KEF can be managed and administered to most effectively achieve its objectives.

How KEF can best be integrated within the WDA.

The future staffing and structure of the KEF team.

The Review process has included desk research, 50 consultation interviews carried out with a wide-range of interested and informed parties within Wales (in May and June 2004), and a structured discussion and feedback process with the WDA.

A range of UK and Welsh strategic documents were identified as part of the Review. These documents highlight the importance of innovation and entrepreneurship as drivers of competitiveness. In Wales this is reflected in Welsh Assembly Government (WAG) strategic action plans for both entrepreneurship and innovation. Within this strategic context, HE and, to a lesser extent, FE are viewed as an important components of the knowledge base.

The announcement on the 14th July 2004 that the WDA (and ELWa/WTB) is to be brought within the direct control of the Welsh Assembly Government by 2006 raises a number of issues for the Review and the integration of KEF. In particular, the announcement heightens the importance for the WDA in contributing to the satisfaction of existing and emerging WAG policy commitments including the Nexus Task and Finish Group report and the manifesto commitment to a 'Knowledge Bank'.

KEF has been organised according to two phases, the first covering the 2000-2002 period, and the second covering the 2003-2006 period. At the end of its first phase, KEF refocused its activity around three strands (termed goals).

Goal 1

'To ensure a cultural change towards innovation and entrepreneurship within HE and FE institutions through activities designed to create, value and promote innovations with a view to commercialisation innovation developments.'

Goal 2

'To raise entrepreneurship and innovation skill levels, confidence and ability both of staff and students in further and higher education institutions.'

Goal 3

'To accelerate the successful application of knowledge and the commercialisation of ideas and products developed in institutions capacity in the region.'

The KEF Programme is in receipt of EU funding support for its activities. This consists of 5 interlinked approvals including 4 ESF approvals and 1 ERDF approval.

Goal 1 – Objective 1 and Objective 3 ESF funded approvals (Entrepreneurship and Innovation)

Entrepreneurship strategies

Innovation Strategies

Entrepreneurship champions

Goal 2 – Objective 1 and Objective 3 ESF funded approvals (Entrepreneurship and Innovation)

Sector specific training consortia

e-training network

Entrepreneurship training for students

Innovation master classes for institution staffs

Science and technology training for institution staffs

Goal 3 – ERDF funded

Patent and Proof of Concept

Research collaborations

Technology transfer networks

Technology transfer Centres

Incubators

Innovation Champions in FE

Enterprise Scholarships

In Phase 1 the KEF Programme has largely achieved and, in several cases, exceeded its targets. Impressive results were achieved in the areas of collaborative projects with SMEs and patents/trademarks copyright registered. In only one area, that of entrepreneurship training did KEF fail to deliver the targets set.

The performance of the Entrepreneurship Scholarship programme is worth highlighting. A survey in 2004 found that some 289 start-up businesses have been supported since the start of Phase 1, with important contributions in value to the Welsh economy (£8.3 million), and job creation (471 full-time equivalents) achieved.

However, despite meeting many of its targets the consultations revealed that KEF is widely perceived as a problem. Although its goals and objectives are widely applauded delivery is perceived as unsatisfactory. Some of this dissatisfaction has clearly been caused by uncertainties resulting first of all by management difficulties at ELWa and subsequently by the lengthy transfer of responsibilities to the WDA.

The Review found that there is sympathy and understanding for the delivery problems faced by KEF team, particularly a shifting institutional environment leading to a lack of strategic guidance and oversight as well as the need to establish adequate monitoring and audit procedures. Consultees generally accept that although there are differences in focus and approach that need to be resolved, the WDA is seen as a logical and appropriate home for KEF.

As a result of the Review, six critical issues are identified that will define the success or otherwise of the WDA's integration and delivery of KEF and the wider delivery of knowledge exploitation activities in Wales. These need to be dealt with quickly and firmly and are: -

1. Clarifying the strategic position of WDA regarding HE and FE
2. Deciding on the strategic and operational ethos behind KEF
3. Funding process and delivery of KEF
4. Defining the commitment to entrepreneurship and innovation
5. Establishing and maintaining communication
6. Rebuilding trust and delivering funding

The WDA is faced with a number of choices in integrating KEF and setting the future direction of the programme. These represent two broad axes of choice relating to both the degree of integration or

visibility of KEF within the WDA, and the strategic position of the WDA regarding FE and HE.

The Review has concluded that on the question of the degree of integration or visibility of KEF within WDA, KEF should be totally integrated within WDA. On the second parameter, the strategic position of WDA regarding FE and HE, there is a need for further review that can only take place with the involvement of WAG, HEFCW and ELWa.

The Review therefore recommends a phased approach that will allow the WDA to:

Rebuild trust and deliver funding in line with time constraints

Address important strategic and operational demands in the area of HE/FE role in economic development

Anticipate organisational and strategic imperatives that have more recently emerged in Wales

The Review recommends actions in a number of crucial areas:

Communications

Delivery and organisation

Strategy

An additional set of issues and broad considerations are discussed since they imply policy and strategy decisions that rely, to a significant extent, on policy decisions that are outside the scope of this review.

These additional issues cover, inter alia, the forthcoming absorption of WDA into WAG and the existing and emerging WAG policy commitments, the need for a strategic and organisational realignment of the WDA to meet this challenge in the area of knowledge exploitation and the opportunity presented by the WAG's policy commitment to a 'Knowledge Bank' in Wales.

Recommendations are presented as either Phase 1 (to December 2004) or Phase 2 (to July 2005)

Specific recommendations arising from this Review are:

Communication recommendations:

Recommendation 1.1

Nominate a senior WDA director to be charged with leading the communication effort with the institutions.

Recommendation 1.2

Give senior HEI/FEI figures active involvement in scheduling and decisions.

Recommendation 1.3

Conclude contract negotiations with institutions quickly and with a degree of flexibility.

Recommendation 1.4

Explain and illustrate the strong rationale for KEF's insistence on a single, robust IPM system.

Recommendation 1.5

Target the communication effort at two levels – VCs and Principals and ILO or Entrepreneurship Champions.

Recommendation 1.6

Appoint WDA 'key contacts' for HE and FE institutions throughout Wales.

Recommendation 1.7

Produce a statement of objectives and expectations from the WDA regarding its relationships and remits with both HE and FE institutions – a 'compact'.

Delivery and organisation recommendations:

Recommendation 2.1

Amalgamate Goal 3 KEF activities with existing WDA programmes giving the respective WDA programme managers responsibility for delivery.

Recommendation 2.2

Review each activity to determine need for budget or target downsizing.

Recommendation 2.3

Place Entrepreneurship Champions, and Entrepreneurship and Innovation Strategies into a short term 'holding' position.

Recommendation 2.4

Maintain delivery of the Enterprise Scholarship scheme within the WDA EAP team without major adjustments.

Recommendation 2.5

Leadership of the ESF training-related activities within WDA should be placed with the WDA EAP team.

Recommendation 2.6

The training activities contained within the KEF programme collectively and individually require detailed review by the WDA.

Recommendation 2.7

The WDA T&I team should lead the review of the innovation related training activities

Recommendation 2.8

The reviews need to take into account the short term ESF funded training activity (up until December 2005) and also the post 2005 position of these activities.

Recommendation 2.9

Ensure that the required audit trail for the Objective 1 and 3 funded programmes is in place.

Recommendation 2.10

Consolidate the WDA's understanding of the strategic and operational needs of SMEs and larger companies in respect of their access to knowledge assets and knowledge exploitation.

Recommendation 2.11

Agree with both ELWa and HEFCW the mainstreaming of some existing KEF activities post 2005.

Recommendation 2.12

Further integrate WDA knowledge exploitation activities to provide the sharper customer focus necessary to deliver strategic projects and supports in partnership with HE and FE institutions.

Recommendation 2.13

Consider the inclusion of other related activities such as Technology Commercialisation Centre, Help Wales, Know How Wales, the Finance Wales Feeder Fund and Pre-investment support into operational thinking within WDA to avoid duplication and maximise impact for clients.

Strategy recommendations:

Recommendation 3.1

Engage WAG, ELWa and HEFCW in a structured review of the strategic roles and operational remits that each body holds vis-à-vis HE and FE.

Recommendation 3.2

The review recommended above should urgently seek to clarify and differentiate the concepts of ‘core activities’ and ‘strategic projects’.

Recommendation 3.3

Agree the extent of the remit that the WDA holds in respect of skills and enterprise education, particularly in relation to the FE sector.

Recommendation 3.4

Mainstream within the WDA on a more selective and strategic basis knowledge exploitation strategy supports to allow those HE and FE institutions capable of so doing to contribute further to economic development objectives.

1.Introduction

The Knowledge Exploitation Fund (KEF) was established in 2000 to encourage entrepreneurship and innovation in higher and further education institutions in Wales. The Higher Education Funding Council for Wales and the National Council for Education and Training for Wales initially managed KEF.

Following the Welsh Assembly Government elections in 2003, however, responsibility for KEF was transferred from the Education portfolio to the Economic Development portfolio. As a result the Welsh Assembly Government decided to transfer responsibility for managing KEF to the Welsh Development Agency (WDA).

This Review was commissioned by the WDA to inform the strategic direction, management and administration of KEF following the transfer. In this respect the review draws on an analysis of both the existing structure of KEF and the ‘needs’ of Welsh HE/FE in relation to entrepreneurship and innovation. This review, however, does not represent an evaluation of past activity. Instead, the emphasis is on ‘scoping out’ the future strategic direction of KEF within the WDA.

The Report begins by outlining the review methodology adopted (2). This is followed by an analysis of the strategic policy context in which KEF operates (3). The Report continues by outlining the key features of KEF, including its strategic goals (4). This is followed by a review of critical issues for KEF (5) and a short description of the options for integration of KEF that have been considered (6). The recommendations to emerge from the Review (7) and a suggested phasing (8) are then presented and finally a summary of the main conclusions is provided (9).

2.Methodology

The Review sought to develop recommendations according to the Terms of Reference specified by the WDA:

The future focus of KEF and what activities will best achieve the most positive long term impact on the Welsh economy

How KEF should operate in terms of business academic collaboration in light of the Entrepreneurship Action Plan for Wales and the Innovation Action Plan for Wales, and other UK government reviews

How the WDA can ensure that the project is accessible and appropriate for HE and FE institutions

How the future delivery of KEF can be managed and administered to most effectively achieve its objectives

How KEF can best be integrated within the WDA

The future staffing and structure of the KEF team

To address these issues a programme based around three work packages (WPs) was designed. The first work package began with a desk-based analysis of the current KEF situation and policy drivers, including EU programme bids, KEF publications, and previous evaluations/surveys. In addition, the desk research also comprised a review of the strategic context for KEF. Here, Welsh, UK and EU

documents were identified, primarily in the area of knowledge exploitation, technology transfer, entrepreneurship, higher and further education. This desk-based analysis was further complemented by a series of scoping interviews with WDA personnel. The aim, here, was to discuss key KEF issues and expectations.

The second work package (WP2) was based around a wide-ranging consultation with KEF stakeholders from organisations such as HEFCW, ELWa, Welsh Assembly Government, a sample of Welsh HE and FE institutions, and the Private sector (including, where possible, representative bodies and recipients of KEF funding where possible). These interviews typically lasted between one and one and a half hours and were largely undertaken on a face-to-face basis. Each consultation examined a number of core issues concerning synergy, delivery philosophy and strategy.

The third work package (WP 3) incorporated a series of interactive reporting stages. The KEF team itself received a briefing on the main issues and perspectives arising from the Review allowing them to respond to and clarify points of detail that arose. This was followed by an initial workshop involving CMI and the WDA/KEF Project Team. This allowed CMI to present a series of options for the future of KEF. Following this meeting CMI were encouraged to use two of the options as the basis for further development of recommendations. These newly developed options, along with recommendations, were subsequently presented at a second workshop containing a wider and more senior range of WDA management. The subsequent discussion and feedback have provided the basis for CMI to produce the final conclusions and recommendations set out in this report.

3.Strategic Policy Context

In order to establish the strategic context for KEF a desk review of important UK and Welsh policy documents was undertaken. The main focus of this Review was to identify relevant UK and Welsh priorities/themes for knowledge transfer and knowledge exploitation, and the role of the English RDAs in business-university collaboration. Documents reviewed include:

UK documents:

HE White Paper: The Future of Higher Education, 2003

Science and Innovation Investment Framework 2004-2014

DTI Innovation Report, 2003

Lambert Review of Business-University Collaboration, 2003

Wales documents:

A Winning Wales: The National Economic Development Strategy of the Welsh Assembly Government, 2004 update

Reaching Higher: Higher Education and the Learning Country – A Strategy for Higher Education in Wales, 2002

Knowledge Economy Nexus: Role of Higher Education in Wales

Wales For Innovation, 2003

The Entrepreneurship Action Plan for Wales, 2002-2003 Review

Future 3rd Mission Funding Arrangements in Wales, 2004

3.1 Knowledge exploitation as a driver of competitiveness

The importance of innovation and entrepreneurship as drivers of competitiveness is well recognised by the strategic documents reviewed above. In the Welsh context this is reflected in the creation of separate strategic action plans for each theme. Within this broadly supportive strategic context, HE and, to a lesser extent, FE are viewed as important components of the knowledge base. Wales for Innovation, for example, sets out a priority for ‘maximizing the economic development impact of our universities and colleges’. Likewise, the Entrepreneurship Action Plan emphasises the role of HE and FE in ‘educating future entrepreneurs’.

The Knowledge Economy Nexus: Role of Higher Education in Wales identifies the key role of HE within the knowledge economy in relation to four important areas:

Direct wealth contribution with universities often being important businesses in their own right;

Graduate output, which is the life blood of a knowledge-driven economy;

Knowledge transfer-commercialisation which ensures that university knowledge can be exploited effectively in the market place;

Cultural influences linked to excellence in teaching, scholarship and research, through which self-confidence and the ‘can do’ attitude of a community can be enhanced.

Despite this progress the Knowledge Economy Nexus argues that ‘the links between these strands need further strengthening’. Dimensions of this challenge can be found in a number of the areas discussed below.

3.2. Business-university collaboration

Increasing collaboration between business and industry has received considerable attention as a mechanism for knowledge exploitation. At the UK level, for example, the Lambert Review has made a number of proposals, including:

A greater role for the RDAs in facilitating knowledge transfer in the regions;

A new funding stream for business-relevant research, along with increased and improved ‘third stream’ funding for knowledge transfer;

Universities to develop a code of governance and to demonstrate good management and strong performance in return for a lighter regulatory touch from government and the Funding Councils;

Development of model contracts and a protocol for IP to speed-up negotiations;

Encouraging new forms of formal and informal networks between business people and academics, including the establishment of a business-led R&D employers' forum;

Universities to provide more information on student employability, and businesses to take a greater role in influencing university courses and curricular.

In Wales the importance of business-industry collaboration is given similar prominence in strategic documents. A Winning Wales for example, establishes a priority to 'Increase existing collaboration between universities and colleges and companies in Wales – in research, graduate training, product development, international networking and rapid communications'. It also makes reference to the need to 'develop the right kind of climate for business start-ups and risk taking in Wales'. A similar prioritisation is evident in Reaching Higher, which calls for 'more and closer links built with business – and greater use of research capacity to support business and to reflect its needs'.

One of the most recent strategic statements on the role of HE in the knowledge economy is provided by the Assembly Government's Knowledge Economy Nexus: Role of Higher Education in Wales. This calls for KEF to provide a collaborative research stream, and ensure that its activities contribute towards a continuum of support based around stages of the knowledge exploitation process. Seven recommendations are offered:

To raise significantly the awareness in high value-added companies throughout the world of Welsh research excellence – whether in universities, companies or institutions like IGER;

To ensure that collaborative opportunities, which will enhance the excellence of our research base and that are in line with market-place drivers, are identified, developed and seized;

To ensure that companies in Wales have ready access to good university expertise within a reasonable travelling distance and that the international contacts of our academics are used to full business advantage;

To ensure that all the parts of our national innovation system are intimately involved in its future, holistic development and help to assess major collaborative opportunities;

To help maximise the direct commercialisation of our university knowledge/expertise;

To increase greatly the awareness in all walks of life of the importance of generating implementable new ideas;

To measure better the strength of the knowledge economy in Wales.

3.3. Co-operation between RDAs and HE/FE

An important theme in the UK-level strategic policy documents concerns the position of the RDAs in relation to knowledge exploitation in HE. Although this documentation largely concerns the English RDAs, the discussion is relevant to the Review of KEF. Much of the initial impetus for this discussion was provided by the Higher Education White Paper. This called for, amongst other things, RDAs to take responsibility for ‘galvanising the business community to work harder to make best use of the opportunities offered by higher education; and to play a particular role in helping small and medium-sized enterprises articulate their needs, and make links with higher education’.

The Lambert Review also considered the role of RDAs, arguing that RDA targets should place greater emphasis on building bridges between business and universities. More generally, it also recommends that, patterns of regional support should be shifted away from job creation schemes towards more value-added programmes, including collaborative R&D projects with universities. Key criteria specified include:

investment should be driven by demonstrated support from business;

regional investment should complement national innovation priorities;

public support should not directly subsidise industry’s near-market research.

It is recognised, however, that although, ‘the RDAs are well placed to promote business-university collaboration...they need the capacity and links to national programmes to do this most effectively’ (Science and Innovation Investment Framework 2004).

3.4. HE/FE knowledge exploitation and the WDA

The Review also considered the position of HE and FE knowledge exploitation in the context of the WDA’s own strategic documents such as its Business Plan 2004-2007 and recent Action Plan. The Business Plan, for example, identifies Wales’ Higher Education Institutions as important strategic partners in the innovation process (p. 10). It does not, however, view Higher or Further education as one of its core customers. These customers are specified as businesses, communities and people. Only one reference to FE was identified in the Business Plan, in connection with KEF. A similar picture emerges in the Agency’s recent Annual Report.

The announcement on the 14th July that the WDA (and ELWa/WTB) is to be brought within the direct control of the Welsh Assembly Government by 2006 raises a number of issues for the integration of KEF. In particular, the announcement heightens the potential importance for the WDA in contributing to the satisfaction of existing and emerging WAG policy commitments including the Nexus Task and Finish Group report and the manifesto commitment to a ‘Knowledge Bank’. Similarly, the arrangements

envisaged for England as far as the RDAs and the Higher Education Funding Council for England (HEFCE) deserve a ‘Welsh response’.

4.Key Features of KEF and Progress

KEF was launched in 2000 with the aim of providing support for the transfer of knowledge, skills and ideas from FE and HE institutions to industry in order to stimulate the knowledge economy of Wales. KEF seeks to address this challenge by working to change HE and FE attitudes towards entrepreneurship and innovation. Funded by WAG and European Structural Funds, KEF focused its initial activities on five ‘strands’ of activity. These include:

- Entrepreneurship
- Training and consultancy services
- Staff development
- Commercial exploitation
- Technology transfer

KEF was managed (prior to its transfer to the WDA) by the National Council of ELWa and HEFCW, and overseen by a steering group comprising representatives of HEFCW, National Council ELWa, WDA, WAG, FE and HE institutions. Within ELWa/HEFCW the KEF team was led by the KEF Director.

KEF has been organised according to two phases, the first covering the 2000-2002 period, and the second covering the 2003-2006 period. At the end of its first phase, KEF refocused its activity around three strands (termed goals). The current goals and their associated delivery activities are outlined below (see annex II for specific delivery targets):

The current (Phase 2) KEF Programme is in receipt of European funding support for its activities. This consists of 5 interlinked approvals including 4 ESF approvals and 1 ERDF approval.

4.1.KEF Goals

Goal 1

Objective 1 and Objective 3 ESF funded approvals (Entrepreneurship and Innovation)

‘To ensure a cultural change towards innovation and entrepreneurship within HE and FE institutions through activities designed to create, value and promote innovations with a view to commercialisation innovation developments.’

Entrepreneurship strategies

Innovation Strategies

Entrepreneurship champions

To address these aims and objectives, KEF has established a number of delivery mechanisms. Each institution, for example, is supported in their development of an entrepreneurship and innovation strategy to improve awareness, increase impact within the curriculum and build the level of skills and expertise within institutions. These strategies have been achieved through the work of the KEF Entrepreneurship Champions employed in each institution.

In addition to strategies designed to change culture this goal also provides support for HE/FE institutions to collaborate with activities of the Entrepreneurship Action Plan, as well as facilitating awareness raising through events and the promotion of the KEF website.

Goal 2

Objective 1 and Objective 3 ESF funded approvals (Entrepreneurship and Innovation)

‘To raise entrepreneurship and innovation skill levels, confidence and ability both of staff and students in further and higher education institutions.’

Sector specific training consortia

e-training network

Entrepreneurship training for students

Innovation master classes for institution staffs

Science and technology training for institution staffs

Key delivery mechanisms within this goal include the provision of training for entrepreneurship to 8,000 students in Welsh institutions, the development of new training programmes for innovation at all levels, and provision of Master Classes in entrepreneurship and innovation for academic staff.

Further activities include support for company innovation through eight sector specific training consortia, and an all-Wales e-training initiative. KEF also seeks to increase the level of commercial consultancy and training for Welsh companies undertaken by institutions.

Goal 3

1 ERDF funded programme

‘To accelerate the successful application of knowledge and the commercialisation of ideas and products developed in institutions’ capacity in the region.’

Patent and Proof of Concept

Research collaborations

Technology transfer networks

Technology transfer Centres

Incubators

Innovation Champions in FE

Enterprise Scholarships

Key delivery recommendations within this goal include the development of ‘Proof of Concept’ support for the commercialisation of products developed in HE and FE institutions, and the promotion of HE/FE graduate business starts through the Entrepreneurship Scholarship programme.

Other key activities include:

the provision of incubation services and development of centres of expertise and knowledge transfer;

support for collaborative R&D projects between institutions and/or companies;

support for technology transfer networks clustered around the knowledge transfer centres;

appointment of up to five Innovation Champions to provide support to clusters of FE institutions in the development of commercialisation processes for FE;

4.2. Progress of KEF towards its objectives

Although it has not been an objective of the Review to conduct a detailed evaluation of KEF, monitoring data provides a useful indication of progress made by KEF. At the end of KEF’s first phase of operation,

for example, achievements were as follows:

Table 1: Phase 1 Targets and Progress

Activity	Target for 31/03/03	Achieved by 31/12/02	% achieved
Entrepreneurship champions	38	38	100%
Students receiving entrepreneurship training	10,000	4,750	47.5%
Entrepreneurship scholarships	200	200	100%
Companies assisted	3,310	3,508	106%
Employees assisted	6,900	8,691	126%
Lecturers trained	570	611	107%
Companies advised on innovation/R&D	1,000	902	90%
Collaborative projects with SMEs	100	192	192%
Patents/Trademarks copyright registered	15	29	193%
New firms created in high tech areas	20	27	135%
Technology transfer centres updated	10	10	100%
Environmental technology transfer projects supported	22	28	127%

These figures suggest that in Phase 1 KEF has largely achieved and, in several cases, exceeded its targets. Indeed, particularly impressive results were achieved in the areas of collaborative projects with SMEs and patents/trademarks copyright registered. In only one area – entrepreneurship training – did the programme fall substantially below the targets set.

In addition to monitoring data, KEF’s commercialisation activity (Goal 3) has been subjected to independent evaluation at the end of Phase 1. This work concluded that KEF demonstrates:

Good alignment between KEF and relevant policies and programmes of WAG;

Effective programme management, particularly in relation to marketing and database functions;

Significant increase in institutional capabilities;

A wide range of benefits to participating SMEs (including greater awareness of institutional capabilities, better commercial links, specific problem solving, and cases of improved business performance);

Important within-institution benefits focusing on more flexible, responsive cultures and more positive attitudes towards innovation;

Strong evidence of continuing demand from SMEs throughout the period of operation for commercialisation;

Good performance in relation to spending allocated funds;

Opportunities for improving guidance to institutions, feedback on unsuccessful applications and assistance to institutions in developing effective applications.

A degree of confusion in the minds of institutions and SMEs about relationships with other programmes within Wales

Surveys have also been undertaken on a key aspect of KEF's entrepreneurship activities - the Entrepreneurship Scholarship programme. The 2004 survey, for example, found that some 289 start-up businesses have been supported since the start of Phase 1, with important contributions in value to the Welsh economy (£8.3 million), and job creation (471 full-time equivalents) achieved. By charting the progress of the Scholars over a number of years it is demonstrated that Scholar businesses are progressing well, indeed the programme is able to boast a total of 17 Scholars with turnovers greater than £100,000 (indeed one Scholar reported a turnover of £1 million). These outputs, it is reported, have been delivered at a relatively low cost per job.

5. Critical Issues for KEF

It was always clear that a review of the strategic position of KEF would only make sense if the position of its new 'host' organisation was also taken into consideration. Therefore the Review identified a number of critical issues for the KEF Programme and, more widely, for the WDA notably arising from the wide-ranging consultation interviews carried out in May and June 2004.

Rather than report the full detail of the consultation responses which were carried out with an assurance of confidentiality, the responses have been synthesised into six critical issues that will define the success or otherwise of the WDA's integration and delivery of KEF and the wider delivery of knowledge exploitation activities in Wales. These are:

Clarifying the strategic position of WDA regarding HE and FE
Deciding on the strategic and operational ethos behind KEF
Funding process and delivery of KEF

Defining the commitment to entrepreneurship and innovation
Establishing and maintaining communication
Rebuilding trust and delivering funding
Each of these critical issues is dealt with in turn.

5.1. Clarifying the strategic position of WDA in relation to HE and FE

One of the main findings from the consultations was the lack of clarity, amongst HE and FE institutions, regarding the WDA's intentions in respect of the sector. This ambiguity does not provide a strong basis on which to maximise the future impact of KEF funding. As a consequence, the transfer of KEF to the WDA provides an important opportunity for the Agency to clarify its position and increase its strategic commitment to the sector where necessary.

Some key questions will need to be addressed in this respect. These include:

What does the WDA expect of the institutions and what can they expect of the WDA?

What are the respective roles of WDA and HEFCW and are these sufficiently transparent and well communicated?

Is the WDA solely a funder of strategic projects leaving HEFCW to invest in long term HE infrastructure and capacity?

Does the WDA have a clear remit regarding skills and training?

Does the WDA remit extend to the KEF customer base (HE and FE institutions as primary beneficiaries, followed by SMEs as secondary beneficiaries)?

Addressing these questions is clearly a task for the WDA. However, determining the Agency's position in relation to these issues is complicated by important changes in the policy context, notably the publication of the WAG's Nexus report, and the WAG commitment to establish a 'Knowledge Bank', as well as enhancing arrangements for entrepreneurship scholarships. These contextual developments suggest that the WDA will not only need to determine its position in relation to KEF, but also in respect of other active or impending changes. Other related issues include the short-term nature of most KEF programmes connected to Objective 1 and 3, and the recently completed functional and budget transfer of activities between the WDA and ELWa/HEFCW.

Clarifying the WDA's position in relation to the HE and FE sector is a key decision that will affect the manner in which KEF activities are ultimately integrated into the Agency; it also has implications for other complementary WDA programmes. In broad terms the WDA will need to determine whether it:

accepts a strategic remit and responsibility for 3rd mission HE/FE activities and support; or

adopts a strategic project-oriented approach to engagement with HE/FE; or

offers a combined package of both general strategic and operational support as well as strategic project-oriented supports.

The Review findings suggest strongly that the emerging policy and forthcoming organisational position of the WAG/WDA should be taken into account. This implies that the WDA will need to be more strategically engaged with both HE and FE in respect of knowledge creation and exploitation than it has been in the recent past, or implied by recent discussions with HEFCW regarding 3rd Mission.

Further, the WAG's policy commitment to a 'Knowledge Bank' in Wales should be considered as an opportunity for WDA to integrate KEF and, at the same time, bring existing WDA programmes alongside in a more coherent strategic commitment to the 'knowledge economy'. However, the Review indicates that the HE and FE institutions need to be actively engaged in a dialogue to ensure that they are comfortable with enhanced strategic engagement by the WDA.

5.2. Deciding on the strategic and operational ethos behind KEF

The balance between the Goals and the nature of project support was examined in the consultations. The results, here, suggest that the current breadth of KEF programmes is considered by many to be too thinly spread resulting in a limited impact. Further, the consultations with both HE and FE revealed that KEF has not embedded itself at a significant strategic level in most HEIs.

In particular, HE institutions do not perceive KEF to be a strategic resource, and they have found it difficult to fit many KEF activities, notably Entrepreneurship Champions and entrepreneurship training for students within their structures and staffing. HEIs have also tended to obtain most funding from, or give most attention to, Goal 3 activities that are largely project based.

In relation to KEF goals and their relevance to HE and FE, the findings of the Review suggest that despite some significant cases of progress, particularly in those institutions starting from a 'low' knowledge exploitation base, culture change (Goal 1) is likely to remain a priority across the FE sector in particular since this sector started from a lower base than many HE institutions.

FE institutions, however, tend to experience difficulties in relating and responding to the KEF innovation agenda (notably Goal 3) - largely because of the particular needs and characteristics of its SME customers. A more appropriate role for FE institutions may involve raising levels of enterprise awareness rather than promoting innovation activity. Conversely, it is unrealistic to expect KEF to change the deeply rooted departmental/academic culture in most HEIs. Most HE institutions, however, have shown themselves to be efficient acquirers of 'commercialisation' project funding (Goal 3) and have structures and systems that are designed for such a purpose.

The conclusion reached by the Review is that while it is likely that the ethos for HE activities will remain essentially project based, the WDA should assess its own needs, or rather its SME clients' needs, and then develop a strategic project-based approach to the HE sector. This should allow the WDA to act as a procurer of strategic investments in partnership with the HE institutions and HEFCW where appropriate.

The appropriate underlying ethos for FE activities is less clear given the wide but variable range of knowledge exploitation capabilities and capacities in the sector. Clearly the additional resource available via Entrepreneurship Champions at FE institutions has been very important and should now move rapidly to become a mainstream position. Post-2006, culture change activities and enterprise training at FEI (and HE institutions) will require different funding streams and it seems that if these are to continue within the WDA 'portfolio' they should be incorporated into the WDA's EAP agenda.

FE institutions should not, however, be excluded from funding for strategic project investments that meet the needs of SMEs in their area. However, the client benefit benchmark for such investments, in terms of need, additionality and quality, should be clearly established and maintained by the WDA.

5.3.Funding process and delivery of KEF

The Review findings suggest that both HE and FE institutions would prefer a KEF delivery process that is based on 'need' rather than an equal or a crude geographically-determined allocation. This would seem to be consistent with the strategic emphasis placed on the needs of SMEs by the WDA which implies that the needs of SMEs should be paramount rather than the geographic location of the institution.

The consultations with HE and FE institutions further revealed that KEF funding streams are perceived as too small, involve time scales that are too short, and are too rigid in application and scope. In addition, a reliance on project funding undermines the ability of FE/HE to mainstream activities and is a disincentive in many ways. To achieve mainstreaming, however, the WDA needs to seek active buy-in by ELWa and HEFCW.

Institutions argued for KEF funding to: be allocated on a longer-term basis (2-5 years); offer greater flexibility for HE/FE institutions to allocate funding between entrepreneurship and innovation; take account of FE funding timescales; and be simplified with less frequent bidding rounds. However, it is not practical to seek major changes to the underlying delivery ethos at this stage since there is only limited time remaining for delivering existing KEF activities. It should, however, be made clear to institutions that the delivery of short term funding will soon be replaced by a more strategic, SME needs-based funding approach post-2005.

5.4.Defining the commitment to entrepreneurship and innovation

The emphasis, within KEF, on entrepreneurship and innovation has clearly served a purpose in the

acquisition of Objective 1 and 3 funding and the strategic context into which KEF was born (EAP, RTP, IAP and so on). During the Review considerable discussion (mostly within the WDA) has focused on whether KEF should remain separate or be integrated into the existing entrepreneurship and innovation activities.

A number of arguments were put forward. On one hand, it was suggested that both operational and conceptual differences exist between entrepreneurship and innovation within KEF and HE/FE institutions. Maintaining separation between KEF and the current innovation and entrepreneurship agendas within the WDA was therefore favoured. Conversely, it was argued that the distinction between entrepreneurship and innovation is an artificial one, and risks 'pigeonholing' FE in an 'entrepreneurship box'. Furthermore, the separation of entrepreneurship and innovation could potentially dilute KEF and exacerbate existing communication problems.

However, the Review strongly suggests that the distinction between entrepreneurship and innovation does not appear to be important for institutions. Indeed, institutions are primarily concerned with the delivery of funding to their commercialisation/training activities and/or their enterprise training and education. Furthermore from an SME perspective it is likely that the distinction is even less important.

In light of these conclusions it seems difficult to see why the WDA should be excessively concerned with the distinction between entrepreneurship and innovation, particularly after 2005 when the European funding argument for separation will cease to exist.

5.5. Establishing and maintaining communication

Communication within the KEF programme is perhaps the greatest area of criticism arising from the Review. While the KEF team forcefully pointed out that the transfer of KEF to the WDA presented difficulties in maintaining effective communication, consultees in the HE and FE sector felt that still more could have been done. In particular, many consultees reported first hand examples where information or guidance had been sought, but had either failed to materialise or was subsequently contradicted. Furthermore, the timing of communication concerning KEF was described as infrequent and unreliable. As a consequence, many consultees felt that this area of KEF activity demonstrates a lack of trust by KEF in the institutions.

It is imperative that the WDA implement a communication process that reassures the HE and FE sector regarding the continuation of 'KEF funding' and future WDA objectives for the sector. This will provide a catalyst for the implementation of an effective communication process, and the basis for a partnership that brings HE and FE personnel onto KEF programme management and project decision-making activities.

"Brand" is always an important feature of a communication process. Consultees put forward conflicting views with regard to the identity of KEF as a separately branded programme. This seems to coalesce around two clear positions:

‘Keep KEF as a transparent brand that has value and will reassure FE/HE, or

‘Get rid of KEF, it is a tainted brand’

The ring fencing of KEF as a separately identified programme or funding stream is an issue for the KEF team, HE/FE and for WAG - all for different reasons. For the KEF team ring fencing KEF was viewed as important for delivery and EU accounting purposes. For HE/FE ring fencing was expected to maintain the visibility of funding and would prevent possible future budget shifts. Finally, from WAG’s perspective, ring fencing KEF would contribute towards transparency and the ability to demonstrate policy commitment.

Therefore, while the KEF brand may not be important in the WDA context, it will be vital that the Agency is able to refer to its ‘knowledge exploitation activities’ to confirm its continuing commitment to such activities to assure both the HE/FE sector and WAG. It will also be important that WDA finance systems are able to monitor and report on KEF funding streams over the short term for EU purposes.

5.6.Rebuilding trust and delivering funding

Given the delays in committing project funding, exacerbated by the transfer of KEF to the WDA, the backlog of project funding applications and decisions represents a strong concern to the HE and FE institutions and a significant burden for the KEF team. Additional management resource is already being provided through joint WDA/KEF collaborations.

On the basis that the best means to ensure long term trust is to achieve short-term delivery, the WDA’s commitment to delivery to the HE/FE institutions needs to be very clearly stated. The focus on delivery will also benefit from the assignment of WDA EAP and Technology and Innovation managers to work alongside the existing KEF team to take responsibility for the delivery of KEF Objective 1 and 3 programmes.

The Review suggests that HE and FE institutions view KEF decision-making and the associated timetables as unclear and poorly communicated. There is an added concern for the HE and FE institutions given the need for them to plan well in advance for the post December 2006 funding of KEF activities. This will require the communication and achievement of clear timetables for decision-making. It will also require immediate dialogue with ELWa and HEFCW regarding the mainstreaming of a number of activities for HE and FE from outside WDA budgets in the medium- and long-term.

Finally, despite strong arguments raised by the KEF team, there is a widely held perception that KEF project management is ‘heavy handed’. In particular, the administration and monitoring systems (including contracts and Internet Project Monitoring [IPM] system) are regarded as particularly burdensome. These factors, from the HE and FE perspective, are indicative of a lack of trust on the part of KEF.

The current contractual negotiations provide an opportunity for the WDA to demonstrate ‘good faith’ by adopting a degree of flexibility in its approach. Furthermore, the important ‘audit related’ reasons for insistence on the IPM system will need to be communicated to institutions at a senior level (by the senior WDA Director), as part of the trust-building process.

6.Options Considered for Integration

The WDA is faced with a number of choices in integrating KEF and setting the future direction of the programme. Two broad axes represent these choices:

The strategic position of WDA regarding FE and HE, and

The degree of integration/visibility of KEF within WDA

Within each axis the WDA is faced with a number of choices.

In determining the future strategic position of the WDA in relation to both the HE and FE sector for example, the WDA could seek to fully engage at both an operational and strategic level. . By following this approach, the WDA would be accepting the importance of the sector as a whole and would seek to work closely with HE and FE on raising both capacity and delivery of all institutions in the area of innovation and entrepreneurship.

Alternatively, the WDA could adopt a more ‘arms length’ relationship with HE/FE, and act solely as a procurer or funder of individual projects. This, for example, is similar to its traditional method of working with HE (and to a lesser degree FE) in projects such as CETICs and WSP.

One interpretation of the optimum degree of integration/visibility for KEF within the WDA, involves a decision by the WDA to maintain KEF as a ring-fenced entity within the Agency, although only over the short term. This would effectively, incorporate KEF as a separate department within the WDA.

Alternatively, the WDA could fully integrate KEF in a manner that would render it ‘invisible’ as a ‘brand’, while maintaining a focus on knowledge exploitation activities. KEF activities would, therefore, be ‘distributed’ to existing departments (EAP and T&I) within the Agency.

Clearly, the two parameters allow a range of possible outcomes to emerge.

Using these parameters at the initial interim workshop with the WDA/KEF project team four possible scenarios were presented. These are outlined below in Figure 1 below.



Four Possible Options For KEF

Figure 1: Four Possible Options for KEF

The WDA/KEF project team provided a clear response at the initial workshop and subsequently through other discussions and correspondence. The clear message received from the WDA on the question of the degree of integration or visibility of KEF within WDA was that KEF must be totally integrated within WDA.

In contrast, the feedback from the WDA/KEF project team was less clear in relation to the second parameter, the strategic position of the WDA regarding FE and HE. This was perhaps unsurprising given the relatively fluid strategic context within which the Review and discussions took place. The preferred outcome was considered to be somewhere along the parameter but with uncertainty as to what this might mean in practice.

Further and more detailed recommendations were developed and presented to a later workshop attended by the WDA/KEF Project team and other WDA management. As a result of that presentation and subsequent feedback received, the recommendations that follow have been prepared.

7.Recommendations Arising From the KEF Review

The recommendations arising from this Review are dealt with under three headings: Communication, Delivery and Organisation, and Strategy. This will allow the WDA to focus on the recommendations under each heading and will allow the interdependencies between these recommendations to be more easily identified and acted upon.

A further set of issues and broad considerations are discussed without specific recommendations attached to them since they imply policy and strategy decisions that rely, to a significant extent, on policy decisions that are outside the scope of this Review.

Initially the recommendations are presented under each of the three headings and in the following chapter (chapter 8) they are presented with the time dimension as part of a three phase set of recommendations.

7.1.Communication recommendations

One of the most consistent criticisms of KEF identified during this Review has been the poor communication between KEF and the various institutions. This is an important issue that must be dealt with urgently. In order to demonstrate to the institutions that the WDA is taking their concerns and criticisms seriously, it is imperative that a senior WDA director is immediately nominated and charged with leading the task of communicating with the institutions on a regular and consistent basis.

Recommendation 1.1

Nominate a senior WDA director to be charged with leading the communication effort with the institutions.

Further common criticisms of KEF reflect the perceived lack of involvement of HEI and FEI staff in the KEF process and the perceived lack of trust in the accountability and procedures adopted by the institutions for the management and delivery of KEF. For example, evidence of a lack of trust is cited in the form of the disputes and disagreements regarding the contractual arrangements underpinning the KEF programmes; as well as the disquiet surrounding the IPM system.

Two main recommendations are offered in this respect: firstly, senior HEI/FEI figures should be invited to take an active involvement in the scheduling of delivery milestones and targets within the KEF programme; secondly, the WDA should conclude any outstanding contract negotiations with institutions quickly and, where necessary, with a degree of flexibility.

On the former point, although the KEF team report that such involvement is common, the WDA needs to be seen to be refreshing this involvement and communicating this process more effectively. On the second point it is understood that the contractual disputes are currently being resolved through a more conciliatory and flexible approach.

Recommendation 1.2

Give senior HE/FE figures active involvement in scheduling and decisions.

Recommendation 1.3

Conclude contract negotiations with institutions quickly and with a degree of flexibility.

In addition, the senior WDA Director given the role of communicating with HE and FE institutions should focus, in particular, on explaining the strong rationale for KEF's insistence on a single, robust IPM system for all its programmes. This does not appear to have been given sufficient priority and focus in the past and has evidently led to misunderstanding and conjecture, rather than an understanding by the institutions of the overriding need to avoid overly bureaucratic and damaging audit procedures that would be deemed necessary in the absence of a single robust monitoring system.

Recommendation 1.4

Explain and illustrate the strong rationale for KEF's insistence on a single, robust IPM system.

As well as dealing with the operational details of delivering the KEF programmes, the communication conveyed by the WDA should focus on the strategic importance that the WDA places on knowledge exploitation in general and the relationship between WDA and HE and FE in particular. Therefore communication should be targeted at two levels; firstly at Vice Chancellor and Principal level and secondly at ILO or Entrepreneurship Champion level.

In the case of FE, it may be possible to focus the senior level communication through the institutions' representative body, Fforwm. In the case of HE, there is no equivalent body and therefore greater individual communication effort may be necessary.

The role of the Entrepreneurship Champions may be usefully developed in this important area. Each institution has such a person and role, even in those instances where this role is split with other members of staff or other institutional roles; they represent a vital point of contact for the KEF programme.

The WDA should embrace these individuals and use them more proactively as a channel of communication with the institutions. For example, recent networking activities led by the WDA EAP team with Entrepreneurship Champions have been widely complimented by the Entrepreneurship Champions themselves. If the role entitled 'Entrepreneurship Champion' is to be retained and mainstreamed the WDA must involve themselves more actively with the Entrepreneurship Champions.

Recommendation 1.5

Target the communication effort at two levels – VCs and Principals and ILO or Entrepreneurship Champions.

This Review identified a variety of differing types of relationship between the WDA and individual HE and FE institutions. It seems clear that this variation is a contributing factor to the lack of trust that is a feature of the relationship between Wales' prime economic development body and its knowledge generating assets. There is a need for the WDA to develop the capacity to act as an enabler or 'translator' assisting SMEs and other companies to gain benefit directly from the HEI and FEI sector.

A key element in this enabling or translator role should feature the appointment by the WDA of 'key contacts' (or, 'account managers', as proposed in the WAG Nexus Report) to build and maintain relationships with HE and FE institutions. The impracticality of appointing individual 'key contacts' to each institution in Wales is obvious and therefore the WDA should adopt a 'clustering' or 'sub-regional' approach giving each 'key contact' a number of institutions on which their attentions can be focused. This approach has worked successfully in the past, notably with the Wales Spinout manager roles.

Recommendation 1.6

Appoint WDA 'key contacts' for HE and FE institutions throughout Wales.

Furthermore, it is recommended that the 'key contacts' should play a leading role in establishing greater clarity in the relationship between WDA and institutions by developing a statement of objectives and expectations from the WDA regarding its relationships and remits with both HE and FE institutions.

Over time this statement could evolve into a 'compact' between WDA and institutions either on an individual, regional or topic basis. A compact is a potentially useful device in this respect since it implies an agreement or mutual undertaking between two or more equal parties incorporating both expectations and responsibilities, and forming the basis for strengthening the trust and partnerships between the WDA and institutions.

It should be noted, however, that any such statement or compact cannot be developed or concluded until there is a consensus view concerning the strategic role and remit of the WDA and HE and FE institutions in respect of knowledge exploitation in Wales. This is addressed below in more detail under Strategy Recommendations.

Recommendation 1.7

Produce a statement of objectives and expectations from the WDA regarding its relationships and remits with both HE and FE institutions – a 'compact'.

Delivery and organisation recommendations

While communication at a senior level is vital to rebuilding trust with the institutions, it is clearly not sufficient. It is also necessary for the WDA to deliver, particularly in the short term, against the KEF programme.

Awareness by the institutions of the limited time remaining for much of the KEF programme to be committed (December 2005) has clearly been a factor in the frustration with KEF that is freely expressed by the institutions. There is a real fear that EU funding, seen as a once-off opportunity, will be lost unless KEF is able to deliver quickly and efficiently.

Following consideration of the delivery options that may be available to achieve rapid delivery of the KEF programmes, it is concluded that a number of steps are required in order to achieve delivery. These include difficult decisions regarding management responsibilities: the continuation or cessation of different elements of the KEF programme; and the integration of KEF programme activities with other WDA activities and integration of WDA activities themselves.

With the rapidly diminishing time available to deliver the EC funded KEF programmes it would be highly risky to limit responsibility for delivery to the current KEF staff alone. The very positive collaborations that are already taking place between the KEF team and other WDA programme managers has been noted. However, the most efficient response to the need for the rapid and efficient delivery of KEF programmes would be for a number of KEF activities, mostly Goal 3 ERDF programmes relating to innovation, to be amalgamated with existing WDA programmes giving the respective WDA programme managers responsibility for delivery.

Within this group of activities is included:

Patent and Proof of Concept

Research collaborations

Technology Centres

Incubators

Technology Networks

There seems to be no reason why these activities should not be substantially delivered within the timescale available, given the additional management resource and a fresh management perspective that amalgamation with WDA programmes would bring.

It is important to acknowledge that during the course of the Review a number of practical objections to this approach have been put forward. For example, a decision to disband the KEF team could reduce the morale of the current staff and managers; or the existing WDA programme managers may lose focus on their own primary programme responsibilities.

Firstly however, the morale of the KEF team would be more severely damaged by the pressure that would be placed on them alone for delivery in a short time scale; and secondly the WDA programme managers concerned should be more than capable of absorbing and delivering KEF programmes alongside their existing activities given adequate support from the current KEF team.

In addition, the Review found that these activities were considered by the institutions to be most readily accessible. In fact, as far as Patent and Proof of Concept and Research collaborations were concerned, there was a common complaint regarding 'backlogs' in processing applications already submitted. A first vital step should be an in-house review of each activity and the current position regarding targets and timescales in case it may be necessary to reduce targets and therefore apply to WEFO for a reduction in the scale of the budget etc.

Recommendation 2.1

Amalgamate Goal 3 KEF activities with existing WDA programmes giving the respective WDA programme managers responsibility for delivery.

Recommendation 2.2

Review each activity to determine need for budget or target downsizing.

The Review suggests strongly that there are a number of KEF programmes (mostly Goal 1) that do not require such drastic action since they have effectively already been delivered. These include the support for Entrepreneurship Champions and the Entrepreneurship and Innovation Strategy supports.

While it is important not to diminish their relevance or importance in both delivery and management terms, have either already been delivered or have successful delivery processes already in place. In the short term, these programmes can be placed in a 'holding' position that will allow the WDA management to focus their efforts on those KEF programmes that are still far from their delivery targets. A 'holding' position implies that these activities should, for the next 4-6 months, be placed under the management of a programme manager who can deal with day-to-day issues and, more importantly, be in a position to knowledgeably contribute to discussion of the long term strategic relevance of these activities within WDA.

Recommendation 2.3

Place Entrepreneurship Champions, and Entrepreneurship and Innovation Strategies into a short term 'holding' position.

Recent surveys of the Enterprise Scholarship scheme suggest that this programme is achieving impressive results in terms of both the volume of new business starts and jobs created as a result of the KEF funding support.

This programme is a key feature of the role of the Entrepreneurship Champions who have established a strong operating method that should not, in our view, require major changes within the time frame of the existing European funding regime. In addition, Entrepreneurship Champions and the Finance Wales Spin out managers have built up good relationships at the local level although local delegation of approvals for the scholarships may further improve delivery of this important element of the KEF programme.

The future of the Enterprise Scholar scheme needs to be reviewed on a long-term basis in the context both of the WDA Entrepreneurship Action Plan and the Finance Wales commitment to spin out activities. It is already proposed that Finance Wales have a representative on the liaison group that would combine discussions on G2E, KEF and WSP together. In the short-term however, the WDA should make arrangements to maintain delivery of the scheme without major adjustments.

As with the Goal 1 activities, the existing linkages and the similarity of intent between the Enterprise Scholarships and the WDA's G2E and High Growth Starts programme, both led by the EAP team, suggests that the WDA's EAP team is the most appropriate management location for the Enterprise Scholarships for the remainder of the programme.

Recommendation 2.4

Maintain delivery of the Enterprise Scholarship scheme within the WDA EAP team without major adjustments.

The KEF Programme contains a number of ESF funded activities that contribute to the overall objective of KEF through the delivery of training activities. In particular these are contained within Goal 2 of the programme.

These activities include:

Development of new training material for institutions

Sector specific training consortia

e-training network

Entrepreneurship training for students

Innovation master classes for institutions' staffs

Science and technology training for institutions' staffs

These activities are funded through 4 ESF applications: separate Innovation and Entrepreneurship strategies for both the Objective 1 and Objective 3 programmes. (Goal 1 activities are also funded through these 4 ESF approvals). Although the remit of this Review did not require a detailed consideration of these activities it is recommended that these activities need to be further reviewed by the WDA, in respect of both their delivery up until December 2005 and the post December 2005 position. From a strategic viewpoint, however, it is possible to offer a number of tentative recommendations.

Firstly, given that these activities encompass 4 ESF programmes and, in respect of their training related activities, require an understanding and familiarity with skills and training disciplines, it is recommended that leadership of these activities within the WDA should be placed within the WDA EAP team.

The rationale for this recommendation is as follows:

The EAP team already has the requisite skills and training disciplines and experience while the T&I team by and large does not;

The EAP team has existing connection with the Entrepreneurship Champions at the institution level and has already made good progress in gaining their trust;

A number of the KEF activities are aimed at achieving similar targets as the EAP team including entrepreneurship training, development of entrepreneurship training materials and the use of electronically delivered training materials;

This solution will avoid the need to divide the ESF funded programmes between different WDA departments.

Although a number of innovation-related training activities exist in this group of activities, (for example, science and technology training, and innovation master classes for FE managers) that fall outside the normal EAP remit, these activities remain at a comparatively early stage of delivery. They also appear to be amongst the KEF activities that are most likely to be vulnerable to being abandoned at this stage of the funding programme.

It was noted during the Review that the institutions were particularly critical of the innovation training activities. For FE institutions, the target innovation levels set within KEF are regarded as too high for the purposes of most of their SME clients, while for HEIs there is a clear feeling that such training for ILOs and Commercial Managers is ‘patronising’ given the investments that HE institutions have made and the commercially experienced staff that have been recruited by most institutions. As a result, these activities are not likely to be strong candidates for mainstreaming by the WDA in the medium term and would not be greatly missed if the WDA decided to drop them from the KEF programme in the short term.

Secondly, the training activities contained within the KEF programme generally require detailed review by the WDA. The following programme of internal reviews is recommended:

Sector specific training consortia		Review by WDA EAP
e-training network		Review by WDA EAP
Innovation master classes for institution staffs		Review by WDA T&I (in conjunction with WDA EAP)
Science and technology training for institution staffs		Review by WDA T&I (in conjunction with WDA EAP)

This review programme assumes that the KEF activity, entrepreneurship training for students, which seems to be most closely related to and coherent with the overall EAP objectives, will be delivered and managed by the WDA EAP team (alongside the complementary Enterprise Scholars scheme).

It is recommended that the WDA T&I team should review the innovation related training activities in

the first instance, given that they have the required subject knowledge and remit within the WDA. A decision on whether and how to achieve delivery of these activities up until December 2005 can then be made firstly on a strategic basis and secondly on a practical delivery basis.

Thirdly, the reviews need to take into account not only the short term ESF funded activity (up until December 2005) but also the post-2005 position of these activities. However, the post-2005 element of the reviews will be significantly affected by the clarification of the WDA's skills and training remit that is recommended below.

Recommendation 2.5

Leadership of the ESF training-related activities within WDA should be placed with the WDA EAP team.

Recommendation 2.6

The training activities contained within the KEF programme collectively and individually require detailed review by the WDA.

Recommendation 2.7

The WDA T&I team should lead the review of the innovation related training activities.

Recommendation 2.8

Review the short term ESF funded training activities (up until December 2005).

An important element of these recommendations is that the WDA should ensure that the required audit trail for the Objective 1 and 3 funded programmes is in place within the WDA. It is understood that this is a common and accepted practice that will assuage concerns regarding the 'break-up' of KEF activities within the WDA.

Recommendation 2.9

Ensure that the required audit trail for the Objective 1 and 3 funded programmes is in place.

The Review identified concern among the institutions and others over a potential conflict between the respective needs of the WDA and KEF target beneficiaries. A number of interviewees argued that the WDA's prime 'customers' are Welsh SMEs and other businesses whereas the prime 'customers' of KEF are the institutions - with SMEs viewed as downstream beneficiaries of the institutions. Although it is desirable to reconcile these differing target groups, intellectually in practice it is less straightforward.

To ensure that the knowledge exploitation activities of KEF are fully consistent with WDA objectives, regarding delivering services and support to SMEs and other Welsh based businesses, it is vital that there is a clearly defined understanding of the strategic and operational needs of SMEs and larger businesses in respect of their access to and exploitation of knowledge assets. This can be critically matched to the capacities and capabilities of HE and FE institutions in Wales and an agenda for action can be developed to guide the WDA in its medium and long term strategic projects and supports to be delivered from, and in partnership with, the institutions.

It is understood the WDA routinely monitors client needs. This information needs to be collated, analysed and presented in terms that are specific to the knowledge exploitation needs of SMEs and larger businesses.

Recommendation 2.10

Consolidate the WDA's understanding of the strategic and operational needs of SMEs and larger companies in respect of their access to knowledge assets and knowledge exploitation.

A critical aspect of the delivery of the KEF activities, within the available timescale is to clearly establish the post-2005 options for continuation or 'mainstreaming' of certain KEF activities. There are a number of considerations here that will need to be discussed and agreed upon with ELWa and HEFCW, in particular, but also more generally as a result of deliberations by the WDA concerning the range of activities that it itself wishes to mainstream.

Mainstreaming discussions with ELWa and HEFCW should focus on the Goal 1 activities, notably the role and usefulness of the Enterprise and Innovation Strategy supports, while including the Entrepreneurship Champion roles. In particular, since the contracts for the Entrepreneurship Champions expire in July 2005 they will need to be 'mainstreamed' by the institutions according to their own strategies and budgets.

The post-2005 position for Goal 2 activities, which typically contain a strong training or skills element, will be subject to the outcome of discussion regarding the extent to which the WDA has a remit for training or skills. The future role of ELWa within a new WAG context will need to be part of this consideration.

Goal 3 activities, including PPOC and Research collaboration support, may be appropriately mainstreamed within the WDA's current Technology and Innovation programmes, post-2005. However, this is not entirely straightforward and will clearly depend on the outcome of a strategic review of the WDA's role and remit vis-a-vis HE and FE in Wales.

Recommendation 2.11

Agree with both ELWa and HEFCW the mainstreaming of some existing KEF activities post 2005.

Concurrent with the implementation of the above recommendations it is logical that the WDA knowledge exploitation activities should be further focused in order to provide the sharper customer service necessary to deliver strategic projects and supports in partnership with HE and FE institutions.

It is a matter for the WDA to consider the extent to which its organisational shape may need to change in order to effect such integration; however, some structural changes will be inevitable for full benefit of such service integration to be achieved.

In addition to those programmes initially integrated with KEF activities in the short term, it would be advisable to consider whether the process could, for example, be extended to include the integration of the Wales Spinout programme currently located in Finance Wales and the management of the WDA's Technium investments.

Similarly, it would be logical that the activities of the Technology Commercial Centre, Help Wales, Know How Wales and the Finance Wales Feeder Fund and Pre-investment support programmes could also subsequently be brought into a more coherent and effective knowledge exploitation focus within the WDA.

Recommendation 2.12

Further integrate WDA knowledge exploitation activities to provide the sharper customer focus necessary to deliver strategic projects and supports in partnership with HE and FE institutions.

Recommendation 2.13

Consider the inclusion of other related activities such as Technology Commercialisation Centre, Help Wales, the Finance Wales Feeder Fund and Pre-investment support into operational thinking within WDA to avoid duplication and maximise impact for clients.

The structure and groupings identified in Annex IV are meant for illustration only. The intention is to illustrate the areas where the WDA could achieve greater clarity and focus at an early stage while absorbing and delivering the KEF programme and meeting the strategic expectations of the policy statements and strategies set out in the Strategic Context above. It should be noted however that the Review has not included a detailed examination of all of the existing WDA activities concerned. Rather it is based on an understanding of the broad objectives and operating practices of the programmes.

7.3. Strategy recommendations

Discussions between WDA and HEFCW have taken place regarding their respective roles and remits in

relation to the HE sector, following on from the WAG decision to transfer KEF activities to the WDA in May 2003. There is also a long history of collaboration and cooperation between these bodies in respect of Third Mission activities.

Despite these discussions and this history of engagement, the responses gained from the institutions as well as from WAG, HEFCW and within the WDA indicates that there is a lack of clarity in respect of the role that the WDA expects HE and FE institutions to play in furthering the economic development of Wales. The transfer of KEF to the WDA has exacerbated this situation. Although the WDA is widely seen as a potentially appropriate ‘home’ for knowledge exploitation activities, it has not set out its strategy or goals in this area.

An essential first step is for the WDA, at a senior Executive level, to engage with the WAG, ELWa and HEFCW in a structured review of the strategic roles and operational remits that each body holds vis-à-vis HE and FE. The review could take place in the context of the forthcoming absorption of WDA and ELWa into WAG.

Recommendation 3.1

Engage WAG, ELWa and HEFCW in a structured review of the strategic roles and operational remits that each body holds vis-à-vis HE and FE.

At least two key issues need to be resolved during this review: Firstly, the arrangements underpinning the ‘dual funding’ currently provided by HEFCW and KEF for 3rd Mission activities in HE; and, secondly, the remit of the WDA for skills and training and, in particular, the relationship between the WDA and FE institutions. The review will also prepare the ground for more specific discussions between the WDA, ELWa and HEFCW regarding the mainstreaming of a number of KEF activities described above under Delivery and Organisational recommendations above (section 7.2).

With regard to the first issue, the arrangements underpinning the ‘dual funding’ currently provided by HEFCW and KEF for 3rd mission activities in HE, it is understood that a tacit agreement is emerging between the WDA and HEFCW that HEFCW’s limited budget for 3rd Mission activities in HE will be devoted to ‘core’ activities, while the WDA will support ‘strategic projects’ carried out in HEIs. The transfer of KEF activities to the WDA has, in some respects, confused this tacit agreement since many KEF activities, if mainstreamed, could be regarded as ‘core’ while, on the other hand and given the range of Goal 3 activities covered by KEF, the definition of ‘strategic projects’ is very unclear.

Recommendation 3.2

The review recommended above should urgently seek to clarify and differentiate the concepts of ‘core activities’ and ‘strategic projects’.

The second key issue that requires resolution by a structured review of this nature is the extent of the remit that the WDA holds in respect of skills and enterprise education - particularly in relation to the FE sector. In addition however, the future of the KEF Enterprise Scholar funding streams and the enterprise training activities carried out under KEF Goal 2 post 2005 should be a main operational focus.

The WDA Entrepreneurship Action Plan activities may be a suitable long term 'home' for the Enterprise Scholars programme assuming that it continues to deliver results that bear comparison with other EAP new starts activities. However the WDA should only continue with long term support for these activities post-2005 if accompanied by a clearly agreed remit for enterprise education and training in both HE and FE institutions.

Recommendation 3.3

Agree the extent of the remit that the WDA holds in respect of skills and enterprise education, particularly in relation to the FE sector.

Following the structured review, if the WDA is to continue the work of KEF in developing the supply side of the knowledge exploitation equation, it will be necessary for the WDA to continue to provide, albeit on a more selective basis, support for knowledge exploitation strategies that will allow HE and FE institutions to contribute further to economic development objectives.

Such an activity may be regarded as a 'strategic project' (see discussion above) but in that case the selectivity should take into account the potential contribution that an institution could make to knowledge exploitation activities and include a critical assessment of the barriers that may prevent such a contribution. In other words, the support should be bespoke rather than a 'one size fits all' approach and should allow the Enterprise and Innovation Strategy activities to be mainstreamed on a more limited and strategic basis by the WDA.

Recommendation 3.4

Mainstream within the WDA on a more selective and strategic basis knowledge exploitation strategy supports to allow those HE and FE institutions capable of so doing to contribute further to economic development objectives

7.4. Additional strategic issues and considerations

These additional considerations are dealt with here as a broad set of policy considerations rather than as Recommendations since they imply decisions that rely, to a significant extent, on policy decisions that are outside the scope of this Review.

The announcement of the absorption of the WDA into WAG over the time period covered by these

recommendations heightens the importance for the WDA of contributing to the satisfaction of existing and emerging WAG policy commitments including the Nexus Task and Finish Group report and the manifesto commitment to a 'Knowledge Bank'.

The current and emerging WAG policy commitments regarding knowledge exploitation, in support of SMEs and larger companies require a strategic and organisational realignment of the WDA. The arrangements envisaged for England with regard to the RDAs and HEFCE provide relevant benchmarks in a number of respects.

As discussed above, the WDA urgently needs to clarify its position vis-à-vis knowledge exploitation in HE and FE. WAG policy infers that the WDA will need to be more strategically engaged with both HE and FE on knowledge creation and exploitation than it has been in the recent past, or implied by recent 3rd Mission discussions with HEFCW.

Secondly, the WAG's policy commitment to a 'Knowledge Bank' in Wales should, in our view, be considered as an opportunity for the WDA to use the integration of KEF activities as a 'springboard' to bring existing WDA programmes alongside in a more coherent strategic commitment to the 'knowledge economy'.

It is understood that the feasibility and structure of the proposed 'Knowledge Bank' is the subject of a separate review commissioned by WAG itself. The assumptions that have been made here regarding the objectives and activities of a Knowledge Bank are therefore based on an understanding of similar concepts of knowledge exploitation bodies, as well as the interviews with WAG officials that were held as part of this Review.

A number of the recommendations made earlier could prove pivotal in achieving such a strategic realignment including the appointment by the WDA of 'account managers' or 'key contacts' as recommended by the Nexus report to build and maintain relationships with HE and FE institutions; the acquisition of a detailed understanding of the strategic and operational needs of SMEs and other companies in respect of access to knowledge assets and the mainstreaming, within the WDA, of knowledge exploitation strategy supports to allow HE and FE institutions to contribute effectively economic development objectives.

In particular, there may be a need, in a Knowledge Bank, for a greatly enhanced set of 'SME facing' services. These could include geographic or sector/technology 'account managers' to work with a limited group of SMEs or other larger companies which have been objectively identified as key 'knowledge exploiting' companies that are likely to achieve the greatest impact on the Welsh economy.

However, in order to prevent the poor communication and lack of trust that has been associated with KEF, institutions need to be actively engaged in a dialogue with the WDA to ensure that they are comfortable with an enhanced strategic engagement from the WDA.

8. Phasing of recommendations

The Review recommends the adoption of a phased approach that has three objectives allowing the WDA to:

Rebuild trust with the institutions and deliver funding in line with time constraints;

Address important strategic and operational demands in the area of HE/FE role in economic development;

Anticipate organisational and strategic imperatives that have emerged in Wales.

The Review has been conducted in the changing context of a number of significant institutional developments. This has heightened the issue of timing and timescales. The consideration of timescales derives from two main drivers:

The time pressures and considerations surrounding KEF's Objective 1 and 3 funded programmes;

The organisational and institutional changes likely to take place following the announcement of integration of WDA and ELWa into WAG and the potential 'roll-out' of the WDA's own Organisational Design and Development (ODD) exercise during the next twelve months (Although this is currently suspended, some elements of the ODD are likely to be implemented in due course).

It is both necessary and sensible in order to firstly, allow the WDA to focus on urgent short term issues while, secondly, preparing itself and its partners for adjustments to its medium and long term strategic positioning with regard to knowledge exploitation in Wales. The recommendations, therefore, take into account these timescale considerations and are presented with a time dimension.

In order to assist the WDA with implementation of these recommendations they are presented here in three phases covering a 16-month period from September 2004 to December 2005. Phase 1 and 2 recommendations are, of course, the most urgent and, while overlapping to some extent, should be completed in December 2004 and July 2005 respectively.

Phase 3, by contrast, relates to considerations that may be outside of the control of the WDA, given their relationship to the organisational absorption decision taken by WAG in the period since the KEF Review was commissioned.

The timings for each of the proposed Phases are, of course, only indicative and will require more detailed consideration and action planning, if accepted, as the way forward for KEF and the WDA.

8.1. Phase 1 recommendations

Phase 1 of the recommendations has the objective of responding to the most pressing and urgent needs identified in the analysis of critical issues facing KEF and WDA. These are to:

Communicate clearly and consistently with the institutions deliver the current KEF programmes, funded by Objective 1 and 3, to the HE and FE institutions;

Take action to rebuild the trust of the institutions in the knowledge exploitation funding streams; and,

Prepare the ground for future strategic engagements.

It is recommended that Phase 1 recommendations should be taken immediately and should operate for at least the duration of the Objective 1 and 3 funded programmes - i.e. December 2005.

Communications Recommendations

1.1.Nominate a Senior WDA director charged with leading the communication effort with the institutions.

1.2.Senior HE/FE figures given active involvement in scheduling and decisions.

1.3.Conclude contract negotiations with institutions quickly and with a degree of flexibility.

1.4.Explain the strong rationale for KEF's insistence on a single, robust IPM system.

1.5.Target the communication effort at two levels – VCs and Principals and ILO or Entrepreneurship Champions.

Delivery and organisation Recommendations

2.1.Amalgamate Goal 3 KEF activities with existing WDA programmes giving the respective WDA programme managers responsibility for delivery.

2.2.Review each activity to determine the need for budget or programme downsizing.

2.3.Place Entrepreneurship Champions, and Entrepreneurship and Innovation Strategies into a short term 'holding' position.

2.4.Maintain delivery of the Enterprise Scholarship scheme within the WDA EAP team without major adjustments.

- 2.5. Leadership of the ESF training-related activities within the WDA should be placed with the WDA EAP team.
- 2.6. The training activities contained within the KEF programme require detailed review, collectively and individually, by the WDA.
- 2.7. The WDA T&I team should lead the review of the innovation related training activities.
- 2.8. Review the short term ESF funded training activities (up until December 2005).
- 2.9. Ensure that the required audit trail for the Objective 1 and 3 funded programmes is in place.
- 2.10. Consolidate the WDA's understanding of the strategic and operational needs of SMEs and larger companies in respect of access to knowledge assets and knowledge exploitation.
- 2.11. Agree with both ELWa and HEFCW the mainstreaming of some existing KEF activities post 2005 – notably including Entrepreneurship Champions, Entrepreneurship and Innovation Strategies and skills and training activities within KEF.

Strategy Recommendations

- 3.1. Engage with WAG, ELWa and HEFCW in a structured review of the strategic roles and operational remits that each body holds vis-à-vis HE and FE.
- 3.2. The review recommended above should urgently seek to clarify and differentiate the concepts of 'core activities' and 'strategic projects'

8.2 Phase 2 recommendations

Phase 2 of the recommendations have the prime objective of allowing the WDA to implement the strategic role that HE and FE should play in contributing to the WDA's (WAG) economic development objectives.

In addition, Phase 2 recommendations will consolidate the efforts of the WDA to build on the trust established in Phase 1 by the HE and FE institutions. Finally, the delivery of knowledge exploitation activities by the WDA, following integration of KEF activities and programmes, can be further sharpened in both focus and delivery.

Communication Recommendations

- 1.6. Appoint WDA 'key contacts' for HE and FE institutions throughout Wales.

1.7. Produce a statement of objectives and expectations from the WDA regarding its relationships and remits with both HE and FE institutions in the form of a 'compact'.

Delivery and organisation Recommendations

2.8. Review the post 2005 position of the ESF funded training activity.

2.12. Further integrate WDA Knowledge exploitation activities to provide the sharper customer focus necessary to deliver strategic projects and supports in partnership with HE and FE institutions.

2.13. Consider the inclusion of other related activities such as Technology Commercialisation Centre, Know How Wales, Help Wales, the Finance Wales Feeder Fund and Pre-investment support into operational thinking within WDA to avoid duplication and maximise impact for clients.

Strategy Recommendations

3.3. Agree the extent of the remit that the WDA holds in respect of skills and enterprise education, particularly in relation to the FE sector.

3.4. Mainstream within the WDA, on a more selective and strategic basis, support for knowledge exploitation strategies to allow those HE and FE institutions capable of so doing to contribute further to economic development objectives.

8.3. Phase 3 recommendations

The objective of this Phase is to achieve a strategic realignment of the WDA with regard to its remit with HE and FE and to meet some or all of the current or emerging WAG policy commitments regarding knowledge exploitation in support of SMEs and larger businesses. These include recommendations from the Nexus Task and Finish Group report and the manifesto commitment to a 'Knowledge Bank'.

The importance of meeting policy commitments has been heightened by the announced absorption of WDA into WAG, over the time period covered by Phase 3 recommendations.

No specific Recommendations are made in relation to Phase 3.

9. Conclusions

This Review was commissioned by the WDA to inform the strategic direction, management and administration of KEF following the transfer of KEF to the WDA.

Specifically, the Review has examined and makes recommendations regarding the future focus of KEF and its operations in the context of the wider UK strategic interest with business/academic collaboration and the specific Welsh context of the Entrepreneurship Action Plan and the Innovation Action Plan.

The Review makes recommendations regarding the steps necessary for the WDA to ensure the accessibility of the KEF activities and modifications to delivery approaches that will make the activities more appropriate for HE and FE institutions. In the course of this Review, a number of recommendations have been developed regarding the future delivery of KEF and its effective integration within the WDA. Although detailed staffing issues have not been addressed, the Review does make detailed recommendations regarding the structure of the KEF in order to ensure the most positive and appropriate long term impact on the Welsh economy.

Strategic documents reviewed as part of the Review underline the importance of innovation and entrepreneurship as drivers of competitiveness. In Wales this is reflected in WAG's strategic action plans for both entrepreneurship and innovation and within this strategic context, HE and, to a lesser extent, FE are viewed as important components of the knowledge base.

The announcement on the 14th July that the WDA (and ELWa/WTB) is to be brought within the direct control of the Welsh Assembly Government by 2006 raises a number of issues for the Review and the integration of KEF. In particular, the announcement heightens the importance for the WDA in meeting existing and emerging WAG policy commitments including the Nexus Task and Finish Group report and manifesto commitment to a 'Knowledge Bank'.

The KEF Programme has in its Phase 1 largely achieved and, in several cases, exceeded its targets. Impressive results were achieved in the areas of collaborative projects with SMEs and patents/trademarks copyright registered. In only one area, that of entrepreneurship training did KEF fail to deliver the targets set. The performance of the Entrepreneurship Scholarship programme should be noted where some 289 start-up businesses have been supported since the start of Phase 1, with important contributions to the Welsh economy with respect to both value (£8.3 million), and job creation (471 full-time equivalents).

However, despite meeting many of its targets, KEF is widely perceived as a problem. Although its goals and objectives are widely applauded the delivery of KEF is perceived as unsatisfactory. This dissatisfaction is a result of uncertainties caused firstly, by management difficulties at ELWa and subsequently by the lengthy transfer of responsibilities to the WDA.

The Review found that there is sympathy and understanding for the delivery problems faced by KEF team. In particular, the shifting institutional environment is seen as having led to a lack of strategic and operational oversight. Although the WDA is widely perceived as a logical and appropriate home for KEF, it is noted that differences in focus and approach need to be resolved.

The Review identified six critical issues that will define the success, or otherwise, of the WDA's

integration and delivery of KEF and the wider delivery of knowledge exploitation activities in Wales. These need to be dealt with quickly and firmly and are: -

Clarifying the strategic position of WDA regarding HE and FE;

Deciding on the strategic and operational ethos behind KEF;

The funding process and delivery of KEF;

Defining the commitment to entrepreneurship and innovation;

Establishing and maintaining communication;

Rebuilding trust and delivering funding.

The WDA is faced with a number of choices in integrating KEF and setting the future direction of the programme. These represent two broad axes of choice: involving the strategic position of the WDA regarding FE and HE, and the degree of integration or visibility of KEF within the WDA.

The Review recommends a phased approach that will allow the WDA to:

Rebuild trust and deliver funding in line with time constraints

Address important strategic and operational demands in the area of HE/FE role in economic development

Anticipate organisational and strategic imperatives that have more recently emerged in Wales

Specific recommendations arising from this Review are:

Communication recommendations

Recommendation 1.1

Nominate a senior WDA director to be charged with leading the communication effort with the institutions.

Recommendation 1.2

Give senior HE/FE figures active involvement in scheduling and decisions.

Recommendation 1.3

Conclude contract negotiations with institutions quickly and with a degree of flexibility.

Recommendation 1.4

Explain and illustrate the strong rationale for KEF's insistence on a single, robust IPM system.

Recommendation 1.5

Target the communication effort at two levels – VCs and Principals and ILO or Entrepreneurship Champions

Recommendation 1.6

Appoint WDA 'key contacts' for HE and FE institutions throughout Wales.

Recommendation 1.7

Produce a statement of objectives and expectations from the WDA regarding its relationships and remits with both HE and FE institutions – a 'compact'.

Delivery and organisation recommendations

Recommendation 2.1

Amalgamate Goal 3 KEF activities with existing WDA programmes giving the respective WDA programme managers responsibility for delivery.

Recommendation 2.2

Review each activity to determine need for budget or target downsizing.

Recommendation 2.3

Place Entrepreneurship Champions, and Entrepreneurship and Innovation Strategies into a short term 'holding' position.

Recommendation 2.4

Maintain delivery of the Enterprise Scholarship scheme within the WDA EAP team without major adjustments.

Recommendation 2.5

Leadership of the ESF training-related activities within WDA should be placed with the WDA EAP team.

Recommendation 2.6

The training activities contained within the KEF programme collectively and individually require detailed review by the WDA.

Recommendation 2.7

The WDA T&I team should lead the review of the innovation related training activities.

Recommendation 2.8

The reviews need to take into account the short term ESF funded training activity (up until December 2005) and also the post 2005 position of these activities.

Recommendation 2.9

Ensure that the required audit trail for the Objective 1 and 3 funded programmes is in place.

Recommendation 2.10

Consolidate the WDA's understanding of the strategic and operational needs of SMEs and larger companies in respect of their access to knowledge assets and knowledge exploitation.

Recommendation 2.11

Agree with both ELWa and HEFCW the mainstreaming of some existing KEF activities post 2005.

Recommendation 2.12

Further integrate WDA knowledge exploitation activities to provide the sharper customer focus necessary to deliver strategic projects and supports in partnership with HE and FE institutions.

Recommendation 2.13

Consider the inclusion of other related activities into operational thinking within WDA to avoid duplication and maximise impact for clients

Strategy recommendations

Recommendation 3.1

Engage WAG, ELWa and HEFCW in a structured review of the strategic roles and operational remits that each body holds vis-à-vis HE and FE.

Recommendation 3.2

The review recommended above should urgently seek to clarify and differentiate the concepts of ‘core activities’ and ‘strategic projects’.

Recommendation 3.3

Agree the extent of the remit that the WDA holds in respect of skills and enterprise education, particularly in relation to the FE sector.

Recommendation 3.4

Mainstream within the WDA on a more selective and strategic basis knowledge exploitation strategy supports to allow those HE and FE institutions capable of so doing to contribute further to economic development objectives.

Annex I: Consultation Interviews

WDA

Sian Lloyd Jones
Gretel Leeb
Virginia Chambers
Steve Smith
Anthony Armitage
Iain Willox
Susan Morgan
Daniel Jones

Eleanor Knight
Ray Hurcombe
Richard Thompson
Pat Jones
Lee Suthard
Terry Stubbs
Howell Rees
Jarmila Davies

Members of KEF team

HEFCW
Phil Gummett
Roger Carter
ELWa National Council
Richard Hart
HE -Vice Chancellors
Richard Davies - University of Wales Swansea
Roy Evans - University of Wales Bangor
HE - WILOs
Alun Hughes - University of Glamorgan
HE - Entrepreneurship Champions
Caryl Cresswell – Univeristy of Wales Newport
Stuart Woodhead – University of Wales, College of Medicine
Ian Harris - University of Wales Aberystwyth
FE - Principals
Huw Evans – Coleg Llandrillo - Chair of Fforwm
Will Edwards – Deeside College
Glyn Jones – Pembrokeshire College
Bryn Davies – The College Ystrad Mynach
FE - Entrepreneurship Champions
Teresa Jones - Coleg Ceredigion
Cledwyn Davies – Coleg Sir Gar
Elaine Cupitt - Coleg Llandrillo
FE – Other
David Finch - Fforwm

WAG

David Pritchard
Richard Rossington
Ron Loveland

Anna Coleman
Derek Adams

Private sector

CBI – David Roser
FSB - Carey Lewis
Ledwood Ltd- William McClean
Entrepreneurship Scholars - various
David Craddock - University of Wales,
Aberystwyth
Geraint Jones, David Thewlis
and Andrew Glanfield, Cardiff University

Annex II: Targets from KEF Goals

Goal 1 Targets

Entrepreneurship Strategy

Higher Education:

3,380 additional entrepreneurship training opportunities (courses, modules, units, work experience).

All students having the potential to access enterprise support activities.

225 staff trained in entrepreneurship.

Further Education:

5,000 additional entrepreneurship training opportunities (courses, modules, units, work experience).

All students having the potential to access enterprise support activities.

225 staff trained in entrepreneurship.

Innovation strategy

Higher Education:

All institutions implementing agreed IPR policies.

15% increase in workforce development activity.

15% increase in commercial income. 8 training consortia involving FE and HE institutions.

225 staff trained in innovation management.

Further Education:

All institutions implementing agreed IPR policies.

20% increase in workforce development activity.

15% increase in commercial income. 8 training consortia involving FE and HE institutions.

225 staff trained in innovation management.

Goal 2 Targets

Higher Education:

20 innovation training programmes by 2003/6

Further Education

20 innovation training programmes by 2003/6

Goal 3 Targets

Higher Education:

58 Patent and Proof of Concept projects

26 additional incubator spaces

50 collaborative projects

1100 SMEs advised through the technology transfer networks

5 new technology transfer centres

117 high tech jobs created

300 Entrepreneurship Scholarships

Further Education:

5 FE Clusters/Innovation Champions

17 Patent and Proof of Concept projects

24 additional incubator spaces

50 collaborative projects

1,100 SMEs advised through the technology transfer networks

5 new technology transfer centres

80 high tech jobs created

300 Entrepreneurship Scholarships

Annex III: Summary of KEF Activities and Recommendation outcomes

KEF activity	Recommended Phase 1 and 2 position (2004-2005)	Anticipated Phase 3 position (Post-2005)
Goal 1		
Entrepreneurship strategies	Place into a short term 'holding' position.	Mainstreamed by WDA but dependent on outcome of strategic review of WDA and HE/FE

Innovation Strategies	Place into a short term 'holding' position.	Mainstreamed by WDA but dependent on outcome of strategic review of WDA and HE/FE
Entrepreneurship champions	Place into a short term 'holding' position.	Seek funding commitment for mainstreaming from ELWa/HEFCW

Goal 2

Sector specific training consortia	Review by WDA EAP	Dependent on outcome of clarification of WDA remit re skills and training
e-training network	Review by WDA EAP	Dependent on outcome of clarification of WDA remit re skills and training
Entrepreneurship training for students	Delivered through WDA EAP	Possibly mainstreamed by WDA EAP
Innovation master classes for institution staffs	Review by WDA T&I (in conjunction with WDA EAP)	Dependent on outcome of WDA T&I review and outcome of clarification of WDA remit re skills and training but likely to be dropped
Science and technology training for institution staffs	Review by WDA T&I (in conjunction with WDA EAP)	Dependent on outcome of WDA T&I review and outcome of clarification of WDA remit re skills and training but likely to be dropped

Goal 3

Patent and Proof of Concept	Managed by WDA T&I	Mainstreamed within WDA activities
Research collaborations	Managed by WDA T&I	Mainstreamed within WDA activities
Technology transfer networks	Managed by WDA T&I	Mainstreamed within WDA activities
Technology transfer Centres	Managed by WDA T&I	Mainstreamed within WDA activities
Incubators	Managed by WDA T&I	Mainstreamed within WDA activities
Innovation Champions	Review by WDA T&I	Dependent on outcome of WDA T&I review but likely to be dropped

Enterprise Scholarships	Delivered through WDA EAP	Possibly mainstreamed by WDA EAP alongside spin out and high growth starts programmes
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Anex IV: Illustrative Groupings of Knowledge Exploitation Activitiesn

Annex V: Glossary

CETIC Centres of Excellence for Industrial Collaboration

EAP Entrepreneurship Action Plan

ELWa Education and Learning Wales

FE Further Education

G2E Graduating to Enterprise

HE Higher Education

HEFCE Higher Education Funding Council for England

HEFCW Higher Education Funding Council for Wales

IAP Innovation Action Plan

IGER Institute of Grassland and Environmental Research

ILO Industrial Liaison Office

IPM Internet Project Monitoring

IPR Intellectual Property Right

KEF Knowledge Exploitation Fund

ODD Organisational Design and Development

PPOC Patent and Proof of Concept

R&D Research and Development

RDA Regional Development Agency

RTP Regional Technology Plan

SME Small and Medium Sized Enterprise

T&I Technology and Innovation

VCs Vice Chancellors

WAG Welsh Assembly Government

WDA Welsh Development Agency

WEFO Wales European Funding Office

WSP Wales Spinout Programme

WTB Wales Tourist Board