# 1. Wales Ex-ante Assessment – Financial Instrument Stage One Screening (Draft)

#### Introduction

- 1.1 The addendum to the Common Provision Regulation (Council of the European Union, 8<sup>th</sup> June 2012) sets out the purpose of the Financial Instruments (FIs) in the new European Programmes and their ex-ante assessment. It states that the use and approval of FIs should be based on an ex-ante assessment 'which has established evidence of market failures or sub-optimal investment situations, and the estimated level and scope of public investment needs, including the types of financial instruments to be support'.
- 1.2 This note sets out the first step in the ex-ante assessment for the FIs, which is part of an approach which was agreed with WEFO in December 2012. The approach broadly consists of the following stages:
  - Stage One a high level assessment of the suitability and appropriateness of FIs for the range of proposed interventions being proposed for a programme. This would in effect **scope in or out the use of FIs** across the range of possible interventions within an investment programme.
  - Stage Two subject to the outcome of stage one above, the conduct of market assessments for all the types of interventions that were scoped in (or more detailed outline consideration of the appropriateness of FIs).
  - Stage Three following a fuller consideration of the proposed FIs by WEFO and Welsh Government, an assessment of the relevance and
    coherence of the proposed FIs with the programme strategy and other public sector interventions, as well as an initial consideration of the
    potential results and impacts, as well as value for money of the proposed approach.
  - Stage Four the detailed development of the proposed FIs, including a business plan, investment strategy, management plan and State Aid assessment. This stage would be led by Welsh Government or another organisation appointed by it, with the proposed FI(s) requiring independent appraisal prior to the approval of Structural Fund resources.
- 1.3 It was agreed with WEFO that activities which were screened out at stage one might need to be considered at a later stage if circumstances change (a change in policy, the emergence from the European Commission of new FI products, new research, etc).



### **Stage One Screening Approach**

- 1.4 The stage one screening has consisted of a number of tasks, conducted between December 2012 and January 2013:
  - 1) Review of FI and Associated Ex-Ante Assessment Regulations and Guidance. All the relevant EC regulation and guidance have been reviewed.
  - 2) Scoping in and out of potential use of FIs across intervention areas for ERDF, ESF and RDP Programmes. This has included the following tasks:
    - > Defining a set of criteria against which the suitability of FIs will be assessed for each type of intervention (shown below).
    - Discussions with the relevant WEFO programme and priority leads, as well as the Welsh Government policy leads in some instances (listed at the end of the note). These discussions, together with a review of the proposed policy themes across the programmes, have provided a reasonable basis for assessing the use of FIs for each intervention area against the criteria.
    - > A note proposing which interventions should be scoped in or out of further investigation in the context of the potential for FIs.
- 1.5 The criteria used in the screening of FIs included:
  - The **relevance** of using FIs as a form of intervention to address specific priority objectives:
    - Is there a clearly defined activity within the priority which could in principle be addressed by FIs (including specific objectives and associated impacts)?
    - Are there policy reasons why FIs might be desirable compared to other, more traditional forms of intervention (e.g. repayable loans v grants)?
  - The suitability of using FIs as a form of intervention to address specific priority objectives and delivery activities:
    - Could FIs provide an effective means of delivering this activity and hence the associated priority objectives and impacts (in conjunction with or possibly instead of other traditional approaches)?



- Could FIs be delivered in a cost effective manner for this activity (bearing in mind the higher management overhead costs, failure rates and recovery costs associated with FIs)?
- Is there a **track record** of using FIs in these activity areas, which will provide advantages in terms of designing and delivering FIs in the 2014-20 programmes?

#### **Conclusions**

- Overall, we believe that the stage one scoping, including the various aspects of the approach, has provided a robust basis for drawing sound conclusions. In some instances, there is uncertainty about the potential for FIs, often due to issues of the cost-effectiveness of delivery or a lack of clarity on potential delivery mechanisms, or continued uncertainty about the proposed interventions. However, in a number of cases we have proposed that these activities are the focus of further initial investigation at stage two or that a watching brief is maintained as we move into stage 2 and 3. This would leave open the potential for them to be re-introduced if necessary/appropriate at a later stage.
- 1.7 Subject to this point, the analysis has provided a clear message of the focus for stage two. We have split the activities into three categories in the table which follows:
  - Activities which should be the focus of market assessment to inform the full ex-ante assessment
  - Activities which require some further investigation to explore the suitability and appropriateness of their delivery through FIs
  - Activities which, at least at this stage, are judged to be **inappropriate for delivery through FI mechanisms**.
- 1.8 There are a number of key points to note:

#### **ERDF**

- A key priority for market assessment is in the area of access to finance for SMEs, including micro-finance. We do not see a significant opportunity for the use of FIs in start-up activity other than potentially for high-growth or specialist businesses (the needs of which would probably be addressed through other access to finance projects regardless).
- We view there to be little merit in using FIs for enterprise type activities (general business advice, sector development, international trade,



etc.), with there being good reasons for continuing non-FI delivery based interventions and approaches.

- Whilst there is a case for a shift away from the use of grant with start-ups towards repayable forms of finance, FIs are unlikely to be a viable delivery approach due to the high levels of business failure and repayment default.
- A range of possible FIs could be adopted in support of R&D activity and these should be investigated in Stage Two. There is an important role for FIs around R&D activity, especially linked to proof of concept and commercialisation of university and SME R&D. This needs to be a focus of market assessment in Stage Two. However, there is not a pressing case for specific FIs in the higher volume SME innovation demand stimulation activities within this priority theme, although there could be an important role for finance to support the set-up, early growth and expansion of high tech firms which could be addressed through FIs either in this priority theme or the Access to Finance theme.
- There are various opportunities for FIs in the Renewable Energy and Energy Efficiency priority (e.g. Arbed type energy efficiency). However, we would stop short of proceeding to market assessment in many of these possible areas (e.g. micro-renewables, marine energy infrastructure linked to JESSICA type infrastructure fund, etc). Rather, our view at this stage is that there is a need to further investigation the key delivery issues to see if these could be overcome, prior to proceeding to any form of market assessment.
- There remains a case for the use of FIs in the Infrastructure priority, with the possibility of building on the lessons from JESSICA in the current programme to achieve investment in urban development, as well as aspects of transport, ICT and energy related infrastructure. Again, this requires further investigation of the deliverability issues to determine the effectiveness of an FI in this area prior to proceeding to any form of market assessment.

#### **ESF**

• The value and scope to use FIs in the future ESF programme is considered to be limited. There is, however, merit in exploring the links with access to finance support for start-up and micro businesses to ensure it is being adequately addressed between the two programmes. There is also a case for examining the scope to make greater use of loans instead of grants for training in some instances, but only where it is focused on higher level skills, identified skill shortages and R&D priority areas (from the perspective of the firm, employee or individual). However, the deliverability and cost-effectiveness of these approaches is a crucial issue and needs to be explored. Based on our stage 1 assessment, we are of the view that the use of FIs as part of more innovative approaches to employment support does not justify further investigation at this stage.

**RDP** 



• As with the ERDF programme, the RDP has identified activities for which there could be a role for FIs in delivery. However, the limited scale of the likely activity in these cases is likely to make the adoption of FIs unviable in most instances. However, there is merit in exploring the scope to achieve the necessary scale and viability through coordination or aggregation of activity with the ERDF programmes. But we recognise that there are practical challenges to achieving this from a programme management perspective.

## **Next Steps**

1.9 WEFO are asked to comment on the analysis and the conclusions of the paper, as the basis for proceeding to the next stage of the FI ex-ante assessment.



## **ERDF**

# **SME Competitiveness Priority**

| Priority Activity   | Releva  | ance  | Suita  | ability  | Track Record Upon Which  | Overall Conclusions   |
|---|---|---|--|--|--|---|
|   | Clear and Specific Role For FIs   | Specify Policy Priority   | Effectiveness  | Cost-effectiveness   | to Build   |   |
| Access to Finance   |   |   |  |  |  |   |
| Provide access to debt, equity and mezzanine finance in areas of identified market failure through leveraging of private finance. | High. Clear role for supporting SMEs through loans and mezzanine investments and early stage firms with high growth potential (equity). | High. Delivers on objective of ensuring that businesses have access to finance, and moving away from grant based business funding (a policy priority outlined in the Economic Renewal Programme). | Medium. Evidence on VCLFs suggests that economic returns (businesses created, jobs created and safeguarded) provide the strongest rationale for investments made, as net real terms IRRs of Funds are often modest or negative.  Equity Fund returns tend to be concentrated in a few "star performers." | Medium. VCLFs have higher administration costs than grant funds, associated with fund management activities. For JEREMIE in Wales, fund management fees are expected to amount to c.15% of total fund value.  On the other hand, VCLFs generate returns over time as loans are repaid and equity investments are realised.  Need to reflect on latest body of evidence on VFM. | Medium – High. Debt, equity and Mezzanine finance has been managed and delivered by Finance Wales (FW, a subsidiary of the Welsh Government) through the Objective 1 and 2 Programmes (2000-2006) and currently via the JEREMIE Fund (2007-2013).  Since 2009 FW has been delivering JEREMIE, a £150m Fund.  Overall, Wales has a very strong track record and expertise in this area. | Highly relevant, strong track record to build on in Wales through Finance Wales and in particular the existing JEREMIE Fund.  Extent to which recession and credit crisis has significantly changed demand and supply conditions will need to be investigated.  Take forward for further appraisal. |
| Investment in micro-<br>finance investment  | <b>High</b> . A clear role for microloans. Recent evidence  | <b>Medium.</b> Delivers on objective to support   |  | Wales points to various proaches which have been   | Medium. JEREMIE Fund includes a £5m Microloan  | Highly relevant to the Priority and existing track record to  |
| vehicles on   | from the Microbusiness Task   | microbusinesses and a   |  | luation of Wales JEREMIE   | Fund (within the overall   | build on through LIF, JEREMIE   |
| commercial or near-   | and Finish Group identified a   | shift from grant to   | ' '  | identified challenges in   | £60m Loans portfolio).   | and Microbusiness Fund.   |
| commercial terms  | need for microfinance.  | repayable finance in some   | stimulating demand an  | · ·  | , ,  |   |
| where there are   |   | circumstances.  | investment proposals, an   | nd issues with investment  | A £6m microbusiness Fund   | Market failure and potential  |
| market failures, and  |   |   | readiness.   |  | was launched in early 2012   | demand for microloans need  |
| where possible in   |   |   |  |  | and is also being delivered  | to be investigated further.   |



| Priority Activity   | Releva   | ance   | Suita   | bility                   | Track Record Upon Which   | Overall Conclusions   |
|---|--|--|---|--------------------------|---|---|
|   | Clear and Specific Role For  | Specify Policy Priority  | Effectiveness   | Cost-effectiveness       | to Build  |   |
|   | FIS  |  |   |                          |   |   |
| partnership with the  |  |  | These issues would benefit from further investigation.  |                          | by Finance Wales.   |   |
| private sector  |  |  |   |                          |   | Take forward for further appraisal.   |
| Targeted business finance schemes (for key sectors or territorial areas) responding to specific market failures and identified business growth opportunities.                           | Medium. Potentially a role for FIs here.   | Medium. Would support priorities set out in Economic Renewal Programme to support target sectors and regional economies. | predominantly provide grants on a spatially targeted basis. There is limited evidence on impacts and additionality (an evaluation is currently being commissioned). |                          | Low. Local Investment Funds deliver spatially targeted investment.  No explicit sectorally focussed funds in Wales at present.  | Some potential for use of FIs, but limited evidence on effectiveness and geographical/sectoral restrictions create the danger of insufficient scale and hence VFM.  There is a need for further investigation of viability and delivery.  Take forward for further appraisal. |
| Specific, limited and targeted business grant support packages focused on high growth or economically important businesses.   | No role for FIs. Potential for grants that are repayable on the condition of business performance milestones.              | There may be a case for grant based interventions but this runs counter to policy to reduce reliance on grants in Wales. | n/a   | n/a                      |   | The merits of grant mechanisms compared to repayable finance should be explored as part of the wider consideration of access to finance for SMEs.   |
| Support for improving access to Business Angel networks, with potential for coinvestment in areas of market failure, e.g. higher risk but identified as Welsh Government priority areas | Medium. Relevant as a supporting activity alongside direct investment of FIs, and a source of private sector coinvestment. | Medium. Delivers on priority to leverage private sector funding as part of investment in SMEs.                           | Medium. Business Angel n means of drawing in private management expertise for There would be benefit in r evaluation.   | e finance and supporting | Medium. Xenos is the Business Angel network for Wales, established in 1997 as a subsidiary of Finance Wales.  Co-investment fund included in current JEREMIE Fund, which includes business angels as a source of funding. | Relevant as a source of funding for SMEs but possibly not as a specific focus of an FI in this programme.  Actions to encourage business angel activity should be explored as part of the wider consideration of access to finance for SMEs.                                  |



| Priority Activity   | Relevance  |   | Suitability   |                    | Track Record Upon Which | Overall Conclusions   |
|---|--|---|---------------|--------------------|-------------------------|---|
|   | Clear and Specific Role For<br>Fls   | Specify Policy Priority   | Effectiveness | Cost-effectiveness | to Build                |   |
| Entrepreneurship  |  |   |               |                    |                         |   |
| Financial support for start-ups across the economy, offering a tailored package of support to establish new businesses with high growth potential.  | Low. Start-ups are in general better suited to non-repayable grant.              | Medium. There is a general thrust around providing start-ups with access to the suitable forms of finance, which could potentially be provided through FIs. | n/a           | n/a                | n/a                     | Whilst a mix of grant and repayable debt might suit the needs of start-ups, the high failure and low repayment rates typically makes this less appropriate for FIs.  The exception is high growth potential start-ups, seeking larger quantities of finance, although this could be more suitably delivered through more general business angels or early growth equity funds.  Investigated further. |
| Targeted support for existing businesses identified as having growth potential, including support for the development of clusters and supply chains and action to address barriers to growth. | There may be a role for signposting to FIs under the Access to Finance priority. |   | n/a           | n/a                | n/a                     | No direct role for Fls.  Businesses supported through this activity could be signposted to Fls developed under Access to Finance priority.  Not investigated further.   |
| Capacity building activities to support Welsh businesses to access procurement opportunities, both domestically and internationally, e.g. OJEU.   | There may be a role for signposting to FIs under the Access to Finance priority. |   | n/a           | n/a                | n/a                     | No direct role for FIs.  Businesses supported through this activity could be signposted to FIs developed under Access to Finance priority.  |



| Priority Activity  | Relevance  |  | Suita   | bility             | Track Record Upon Which   | Overall Conclusions  |
|--|--|--|---|--------------------|---|--|
|  | Clear and Specific Role For  | Specify Policy Priority  | Effectiveness   | Cost-effectiveness | to Build  |  |
|  | Fls  |  |   |                    |   | Not investigated further.  |
| Advice and support for the internationalisation of businesses (EU and established and emerging global markets), including through exploiting the opportunity for funding transnational activity and exploitation of ICT. | Potentially some role for trade finance but view of WG is that FIs are not suitable, since there is not sufficient demand for repayable finance to support internationalisation.  There may be a role for signposting to FIs under Access to Finance priority. |  | View of WG consultee is that FIs are not suitable mechanisms for encouraging SMEs to internationalise, as it is perceived to have the potential to deter. | n/a                | No track record in using FIs for internationalisation support.  Export Credits Guarantee Department (ECGD) is the UK's Export Credit Agency (ECA).  It provides guarantees, insurance and reinsurance against loss.  Grant support has been used in Wales | No direct role for FIs. There is a strong rationale for retaining grant support where it is available.  Businesses supported through this activity could however be signposted to FIs developed under Access to Finance priority.  Not investigated further. |
| Targeted actions for social enterprises supporting the creation of new sustainable businesses and promoting innovative business models.  | Some relevance, although<br>Social Enterprises are<br>currently supported through<br>Community Investment<br>Fund (CIF) in Convergence<br>Areas.   | Supports priority for sustainable social enterprises, set out in Economic Renewal programme. |   |                    | Community Investment Funds provide loans to social enterprises located in Convergence Areas.  | Limited role for specific FIs, although there may be scope to integrate with other access to finance initiatives within the programme.  Not investigated further.  |
| Support to develop a culture of entrepreneurship, for example by encouraging graduates into selfemployment and targeted support for under-represented groups.  | Limited relevance in first instance, but potential for beneficiaries to link into other schemes if ready.  |  |   |                    |   | Limited role for specific FIs, although there may be scope to integrate with other access to finance initiatives within the programme.  Not investigated further.  |



| Priority Activity      | Releva                      | ance                    | Suita         | bility             | Track Record Upon Which | Overall Conclusions            |
|------------------------|-----------------------------|-------------------------|---------------|--------------------|-------------------------|--------------------------------|
|                        | Clear and Specific Role For | Specify Policy Priority | Effectiveness | Cost-effectiveness | to Build                |                                |
|                        | FIS                         |                         |               |                    |                         |                                |
| The development of     | Limited relevance.          |                         |               |                    |                         | Limited role for specific FIs, |
| new business           |                             |                         |               |                    |                         | although there may be scope    |
| models, including      |                             |                         |               |                    |                         | to integrate with other access |
| new value chains       |                             |                         |               |                    |                         | to finance initiatives within  |
| and marketing          |                             |                         |               |                    |                         | the programme.                 |
| organisation, in       |                             |                         |               |                    |                         |                                |
| particular to          |                             |                         |               |                    |                         | Not investigated further.      |
| facilitate             |                             |                         |               |                    |                         |                                |
| internationalisation.  |                             |                         |               |                    |                         |                                |
| Improving the          | Not relevant.               |                         |               |                    |                         | Limited role for specific FIs, |
| resource efficiency of |                             |                         |               |                    |                         | although there may be scope    |
| businesses through     |                             |                         |               |                    |                         | to integrate with other access |
| the exploitation of    |                             |                         |               |                    |                         | to finance initiatives within  |
| ICT and                |                             |                         |               |                    |                         | the programme.                 |
| implementation of      |                             |                         |               |                    |                         |                                |
| innovative business    |                             |                         |               |                    |                         | Not investigated further.      |
| models.                |                             |                         |               |                    |                         |                                |



# **Research and Innovation Priority**

| <b>Priority Activity</b>  | Relevance  |  | Suitability  |  | Track Record Upon Which  | Overall Conclusions  |
|---|--|--|--|--|--|--|
|   | Clear and Specific Role For FIs  | Specify Policy Priority  | Effectiveness  | Cost-effectiveness   | to Build   |  |
| Innovation for All  |  |  |  |  |  |  |
| Support for commercial innovation and increasing the demand for innovation and knowledge from businesses  Indicative Activities  Support businesses to undertake innovation (e.g. demand-led or eco-innovation) and improve innovation supply chains between businesses and with academia  Piloting of initiatives to test innovative approaches, products or services in areas with commercial potential | Actions proposed in the Strategic Framework for innovation, R&D and technology include: A single finance scheme to support innovation and R&D funding for individuals and businesses  There is a role for FIs in bringing together commercially focussed academic research and business investment, especially within scientific & technology focussed start-ups  More limited potential to support existing businesses with a strong potential for IP to develop innovation from POC into commercialisation  Less potential to stimulate directly the demand for innovation among | The priority seeks to 'encourage a culture of innovation across all sectors (though a focus would be expected on growth sectors), supporting innovative businesses to develop and introduce demand-led innovative products, processes and services  "Access to finance parts of this priority should make use of Financial Instruments like JEREMIE"  The priority also highlights that "Innovative businesses can face particular problems in accessing finance as they are not entering markets in a traditional way or are unknown quantities". | Access to finance is a critical issue for SMEs to engage in innovation as it is essential for translating new ideas into commercial investment propositions. The greatest potential for FIs lies at the final hurdle – where businesses require commercial know-how, market connections and investment in order to commercialise.  Where FIs result new business/HEI partnerships, some businesses require support where engaging with academic R&D teams for the first time | FIs can act as an effective means of bridging the gap in the market for SME finance, especially in the context of a continued undersupply of lending from traditional financial institutions.  FIs (e.g. JEREMIE) have successfully led to significant leveraged investment from outside of Wales  Delivery of equity finance through FIs provides a commercial incentive that can drive increased resource efficiency | The JEREMIE Fund has provided tech transfer and co-investment to tackle the limited flow of equity into early stage investments with the potential for a new product, process or service progress. Investment has tended to be on advanced technologies where intellectual property is involved, guiding through proof of concept and commercialisation and positioning to attract further equity.  The EIB has been funding investments in research and innovation for over forty years but activity has grown sharply from 2000 onwards.  The EIF has focussed investment in tech transfer | There is limited potential for FIs in this priority theme. Given the focus of the priority, with its emphasis on increasing the involvement in innovation and building relationships, traditional grants will continue to be important. This includes activities such as innovation vouchers for SMEs.  There are exceptions where FIs could have merits and may be worthy of further investigation. This includes access to small amounts of debt finance (eg up to £20k) to achieve innovation related business objectives. This should be explored in the next stage of the research.  Other financial needs can be addressed through mainstream access to finance focused FIs. |



#### **Research and Development**

Building and strengthening research and development capacity, and supporting its commercial exploitation

#### **Indicative Activities**

Commercialisation, protection and exploitation of research (including applied research to improve market readiness)

Building research capacity (both physical and people-related), with a focus on areas with potential for developing or strengthening world-class excellence (e.g. identified in Science for Wales)

Access to risk-capital finance and support for the creation and growth of researchintensive and

Actions proposed in the Strategic Framework for innovation, R&D and technology include 'leveraging investment from outside Wales'

Horizon 2020 framework promotes:

- major investments in risk finance and demonstrators for key technologies
- leveraging public and private sources of funding to maximise progress towards the target 3% of GDP investment on R&D

R&D investments should typically be the focus of pure equity as opposed to debt finance which could strangle research teams still in developmental stages

Case for support is greatest among growth businesses operating in hi-tech sectors at stage of POC/have a business plan/knowledge of IP

However, there is also a potential gap in the market for specialised investment and commercial support in

The priority aims to 'increase the capacity for and exploitation of research in Wales'; to develop a 'broader range of UK and international research'; and to 'remove barriers to the creation and growth of research-intensive SMEs'.

"Access to finance parts of this priority should make use of Financial Instruments like JEREMIE"

On top of this, objectives in the Strategic Framework for innovation, R&D and technology include:

- Increasing investment in commercially driven R&D, focussed on the commercialisation of knowledge and IP.
- Maximising the economic impact of academia and business through technology transfer and the creation of a stronger science, engineering and technology base with clear commercial potential.

Access to finance is essential to translating new ideas into commercial investment propositions

Equity investments can give research groups the opportunity to draw on commercial experience of investors

Less of a role for targeting loan finance at R&D investments (especially those early in a developmental stage). Debt could stifle potential growth before it reaches the market.

Cultural differences between knowledge base and commercial investors continue to act as a barrier to genuine collaboration. Potential spin-offs perceive a potential dilution of ownership.

However, support at seed level is lacking in Wales: There is a case for having a higher risk seed capital fund FIs could help early stage/POC research achieve financial sustainability more quickly.

FIS can potentially aid in feeding into a virtuous Innovation Cycle: "The process of discovering or creating new knowledge, of developing it into new economic activities, which in turn spin off new knowledge and new ideas that start the process all over again."

Experience from
JEREMIE suggests that
there are shared issues
across co-investment
and tech transfer and
hence there is a limited
case for separating funds
in these areas

FIs must be geared towards long-term investment rather than short term subsidy

Need to provide clarity about the timing & scale of expected returns, subject larger scale Two relevant finance schemes ran during the 2007-13 programme, including the JEREMIE Fund and a £5m finance scheme for research, experimental development and feasibility

Much of JEREMIE investment has been in life sciences and to a lesser extent in advanced engineering and green technology investing between £100k to £1.4m.

Experience in supply of micro loans is less prominent across all sectors

There is a **good case** for potential FIs in this priority theme, in a numbers of areas in particular:

- Risk capital in particular and to a lesser extent debt finance for commercialising R&D that is close to the market
- Possibly proof of concept activity.

Also the possibility of use of FIs for collaborative university-industry ventures commercialising university R&D should not be dismissed

These should be the focus of further investigation.

However, it needs to be borne in mind that the market in these areas is modest for Wales as a whole and hence the deliverability and VFM of FIs will need to be carefully considered.

The scope for capital investment in R&D facilities through a JESSICA type vehicle could also be explored (focused on the





| innovative businesses, such as spin-outs. | other sectors, possibly drawing on angel investors  A fund of between £30 to £40 million is required in order to maintain existing portfolio and support stream of new spin-offs and start-ups | separated from grow funds. Where appropriate successfi projects/start-ups we then progress to commercialisation/la scale equity investme.  There is also a continucase for traditional grow | appropriate due diligence and simplify complex funding streams and governance rger ent. Fragmenting into sector specific funds is not an efficient use of resource. | highest performing, internationally significant facilities). This approach might be most suited to private sector led projects and it is unlikely to be justified by activity in this priority alone (but could be a strand of a wider JESSICA programme). |
|---|--|---|---|--|
|   |  | funding aimed at capacity building dur the earlier stage of development   | stage of development and prospects for growth while developing links with co- investors with sector skills and market presence                                      |  |



# Renewable Energy and Energy Efficiency Priority

| Priority Activity  | Relevance   |  | Suit   | ability   | Track Record Upon Which  | Overall Conclusions   |
|--|---|--|--|---|--|---|
|  | Clear and Specific Role For FIs   | Specify Policy Priority  | Effectiveness  | Cost-effectiveness  | to Build   |   |
| Energy Efficiency:   |   |  |  |   |  |   |
| Energy Efficiency<br>Improvements in<br>housing / public<br>buildings                      | High - Grants have been paid for energy efficiency improvements through the Arbed scheme over the period of the 2007-13 ERDF programme and there is potential to replace this grant approach with a loan scheme.  The activity reduces carbon footprint, creates cost savings and helps to reduce fuel poverty. | High - 'Energy conservation and efficiency measures in existing housing and public buildings' is a key intervention under the energy efficiency theme for this priority.                         | Medium – the Arbed scheme has run successfully for several years. Although a loan scheme is likely to make this slightly less attractive to participants than the grant scheme, it should still generate strong demand and loans could make this funding go further. There may be questions to answer regarding overlap with Green Deal. | High – the Arbed scheme is a sufficiently sizeable scheme to warrant the high set up and management costs of a loan scheme, and the nature of energy efficiency savings should make failure rate low.   | Medium – strong experience in delivering Arbed as a grant scheme.  Experience from the London Energy Efficiency Fund under the 2007-13 programme will help provide lessons learned.  Overall - 10 current JESSICA schemes across EU include energy efficiency / renewable energy themes. | There is strong potential for use of FIs in this intervention area.  It should be explored in the second phase of this work.    |
| Installation of<br>micro-renewable<br>energy generation /<br>energy efficiency for<br>SMEs | High – Loans to SMEs to improve energy efficiency or install micro-renewables can generate annual cost savings, improving business efficiency.  | High – 'Advice, guidance<br>and loans for businesses to<br>improve energy efficiency<br>and competitiveness' is a<br>key intervention under the<br>energy efficiency theme for<br>this priority. | Medium – provision of loans along with the benefits of cost savings and FITs for energy generation may create an attractive offer for businesses and help to reduce carbon emissions. However the long payback period may limit demand from SMEs   | Medium – although a fairly reliable intervention with expected low failure rate, the costeffectiveness would depend on whether there is sufficient demand and willingness to set up a sufficiently large fund to justify the management set-up and operational costs. | Medium-Low – the current Wales JESSICA fund provides funding for renewable energy developments, although primarily focusing on larger interventions.  Overall - 10 current JESSICA schemes across EU include energy efficiency / renewable energy themes.                                | There is reasonable potential for use of FIs in this intervention area. It should be explored in the second phase of this work. |
| Marine Energy:   |   |  | T  |   | T  |   |
| Business loans for   | <b>High</b> – As per the justification  | <b>Low</b> – 'innovation supply  | <b>High</b> – the effectiveness  | Low – the likelihood is   | Medium-High – strong   | There is <b>low potential</b> for use   |



| Priority Activity   | Releva   | ance  | Suit   | ability   | Track Record Upon Which  | Overall Conclusions  |
|---|--|---|--|---|--|--|
|   | Clear and Specific Role For FIs  | Specify Policy Priority   | Effectiveness  | Cost-effectiveness  | to Build   |  |
| renewable energy<br>sector  | for general SME finance interventions - finance for SMEs is more challenging in the current economic climate, and interventions are needed to enable investment in new enterprise / innovation and support sector growth.                                    | chain development for marine energy research' is highlighted as a secondary focus, however in general the priority does not expect to fund support covered by other priorities eg innovation, R&D, supply chain development.    | of finance interventions for SMEs to support enterprise and innovation has been proven through a wide range of JEREMIE funds, and would be equally applicable to the renewable energy sector.  | that a separate fund for renewable energy firms would not be cost effective in its own right (particularly given this is not a high priority under this axis and is unlikely to be allocated a substantial resource)                                  | experience in Finance Wales of more general business finance interventions, although not necessarily strong expertise for the renewable energy sector. Overall - 10 current JESSICA schemes across EU include energy efficiency / renewable energy themes. | of FIs in this intervention area, and it should not be explored in the second phase of this work.  Activities of this nature will be captured under the Business Competitiveness priority. |
| Infrastructure investment for marine energy (e.g. site preparation, shore-based facilities) | Medium – investment in infrastructure for the marine energy sector may involve higher risk investment that cannot be secured from the private sector.  However types of infrastructure and longer term goals are not fully clear in current priority papers. | High – 'targeted infrastructure investments to remove barriers, reduce risks and maximise investor confidence' is a key priority intervention under the Marine energy theme of this priority (West Wales and the Valleys only). | Medium – loan guarantees would help to de-risk investments and leverage private sector investment to enable key infrastructure developments to go ahead. Full loans may crowd out private investment.  However types of infrastructure and longer term goals are not fully clear in current priority papers. | Medium – Loan guarantees could prove a cost-effective way to enable new important investments to come forward to support marine energy sector.  However types of infrastructure and longer term goals are not fully clear in current priority papers. | Medium-Low – the current JESSICA fund provides funding for large scale development investments, although not necessarily of this nature.  Overall - 10 current JESSICA schemes across EU include energy efficiency / renewable energy themes               | There is some potential for use of FIs in this intervention area and it should be explored in the second phase of this work  |
| Marine renewable<br>R&D/innovation<br>e.g. demonstrator<br>projects                         | Medium - investment in prototypes / demonstrators for the marine energy sector may involve higher risk investment that cannot be secured from the private  | High – 'marine energy<br>innovation and R&D with<br>commercial potential' is a<br>key priority intervention<br>under the Marine energy<br>theme of this priority (West  | Medium – equity investment would help to de-risk investments and leverage private sector investment to enable demonstrator   | Low – limited potential to<br>deliver through this<br>particular priority due to<br>scale issues, but potential<br>through R&I priority<br>strand.  | Medium – Experience in<br>Finance Wales and through<br>current JEREMIE fund of<br>making investments in<br>company innovation<br>activities, although not  | There is <b>limited potential</b> for use of FIs in this intervention area. It <b>should not be explored in the second phase</b> of this work  |



| Priority Activity  | Relevance   |  | Suitability   |  | Track Record Upon Which   | Overall Conclusions   |
|--|---|--|---|--|---|---|
|  | Clear and Specific Role For Fls   | Specify Policy Priority  | Effectiveness   | Cost-effectiveness   | to Build  |   |
|  | sector.  However types of prototype / demonstrator and longer term goals are not fully clear in current priority papers.  | Wales and the Valleys only).   | activity to go ahead.  However types of prototype / demonstrator and longer term goals are not fully clear in current priority papers.  |  | necessarily in areas such as renewable demonstrator projects.  Overall - 10 current JESSICA schemes across EU include energy efficiency / renewable energy themes                               |   |
| Low Carbon Transition  | on:   |  |   |  |   |   |
| New large renewable energy / low carbon infrastructure - energy generation schemes in new business parks, district heating infrastructure etc. | Medium – investment in renewable energy / low carbon infrastructure may involve higher risk investment that cannot be secured from the private sector.  However types of infrastructure and longer term goals are not fully clear in current priority papers. | High – 'renewable energy generation schemes to improve business competitiveness in key areas' is a key priority intervention under the Low Carbon Transition theme of this priority. | Medium – loan guarantees would help to de-risk investments and leverage private sector investment to enable activity to go ahead. Full loans may crowd out private investment.  However types of infrastructure and longer term goals are not fully clear in current priority papers. | Medium – Loan guarantees could prove a cost-effective way to enable new infrastructure investment to come forward to support low carbon transition.  However types of infrastructure and longer term goals are not fully clear in current priority papers. | Medium - the current Wales JESSICA fund provides funding for renewable energy developments.  Overall - 10 current JESSICA schemes across EU include energy efficiency / renewable energy themes | There is some potential for use of FIs in this intervention area and it should be explored in the second phase of this work |
| Community<br>Renewables<br>Schemes   | High – investment in community renewable energy schemes was a part of the 2007-13 programme, however securing financing has proved a challenge due to the risk involved.  | Medium – 'support<br>forcommunity renewable<br>energy schemes' is listed as<br>a secondary priority under<br>the Low Carbon Transition<br>theme of this priority.                    | Medium – access to<br>finance would<br>substantially help to<br>bring schemes forward,<br>however there are<br>likely to be significant<br>operational challenges<br>in identifying legal   | Medium-Low – the likely limited scale of ERDF investment in this type of activity, given that it is not seen as high priority, and the likely challenges in administering the scheme, may affect cost  | Medium - the current Wales JESSICA fund provides funding for renewable energy developments.  Overall - 10 current JESSICA schemes across EU include   | There is some potential for use of FIs in this intervention area and it should be explored in the second phase of this work |



| Priority Activity | Activity Relevance   |  | Suit   | ability   | Track Record Upon Which                        | <b>Overall Conclusions</b> |
|-------------------|--|--|--|---|--|----------------------------|
|                   | Clear and Specific Role For FIs  | Specify Policy Priority  | Effectiveness  | Cost-effectiveness  | to Build                                       |                            |
|                   | Objectives include reducing carbon emissions, creating income streams for community bodies, and encouraging a culture of local ownership of renewable energy agenda. | objectives – demarcation discussions taking place in the coming weeks. | entities and delivering and administering the schemes. | effectiveness.  Scope to link with community benefit funds from wind farms. | energy efficiency /<br>renewable energy themes |                            |



# **Infrastructure Priority**

| Priority / Activity  | Releva   | ance   | Suit   | ability   | Track Record Upon Which   | Overall Conclusions  |  |  |  |
|--|--|--|--|---|---|--|--|--|--|
|  | Clear and Specific Role For<br>Fls   | Policy Priority  | Effectiveness  | Cost-effectiveness  | to Build  |  |  |  |  |
| Transport and Netwo  | Transport and Network Bottlenecks to Growth  |  |  |   |   |  |  |  |  |
| Targeted investment in the Core or Comprehensive TEN-T road and rail network  Wider investment in road network, providing access to the TEN-T network or alleviating bottlenecks or alleviating urban congestion | Medium – Loans / guarantees to help finance improvements to roads / transport networks. For reasons of return, investment in public networks / traffic systems not likely to be appropriate for FIs, unless private sector can be involved.  | Medium – The policy focus<br>for these interventions is<br>likely to be on publically<br>operated transport<br>networks and systems. In<br>this context potential for<br>FIs likely to be limited by<br>existing FI structures at<br>national and EU level | Medium – Given the public sector nature of most transport networks, difficulties in generating returns make grant funding more appropriate. Existence of existing loan facilities – e.g. Public Works Loan Board – also a consideration. | Medium – The large scale<br>nature of many<br>infrastructure<br>investments means that<br>FIs are likely to be a<br>suitable mechanism,<br>although size of market<br>may be constrained by<br>existing loan mechanisms | Medium –Track record based on existing JESSICA Regeneration Investment Fund for Wales. Yet analysis of existing JESSICA funds across Europe suggests there has been little focus on public transport networks. Mechanisms at the European level include the Loan Guarantee Instrument for T-TEN | Limited potential for FIs in public sector infrastructure (such as roads) given difficulties in generating a return on investment.  No further investigation proposed.   |  |  |  |
| Intermodal and sustainable transport facilities that improve access to employment and education  | Medium –At a high level, loans or guarantees to improve interchanges and sustainable transport may be suitable under urban development instruments such as JESSICA – particularly if part of private sector development schemes (e.g. a light rail scheme to improve access as part of a new development). | Medium –The policy focus<br>for these interventions is<br>likely to be on publically<br>operated transport<br>networks and systems. In<br>this context potential for<br>FIS likely to be limited by<br>existing FI structures at<br>national and EU level  | High – Where commercial development is involved, FIs could be a suitable mechanism over Grants, as in most cases there will be an identifiable return on the investment  | High – The large scale<br>nature of many<br>infrastructure<br>investments means that<br>FIs are likely to be a<br>suitable mechanism  | Medium – Existing JESSICA Regeneration Investment Fund for Wales shows track record in FIs although not specifically in this area.  | May be some potential for FIs where private sector can be involved – such as provision of new sustainable transport facilities.  Further outline investigation proposed. |  |  |  |
| Port infrastructure<br>and access to ports<br>by road or rail  | High – Improvements to port<br>infrastructure (including<br>accessibility) could be an area<br>for loan or guarantee finance   | High – This policy area is<br>likely to focus more on<br>commercial infrastructure,<br>with potential for  | High – FIs could be a suitable mechanism to for these types of interventions, as in  | Medium –Whilst likely to<br>involve large scale<br>investments, there are a<br>finite number of port  | Medium –No track record<br>in Wales of use of FIs in this<br>area.<br>Current facilities at the   | Overall, there is some potential for the use of FIs for these type of interventions, reflecting the commercial   |  |  |  |



|   | given commercial nature of<br>these operations and hence<br>likelihood of return on<br>investment. Particularly so in<br>context of given importance<br>of ports in Offshore Wind /<br>Marine Energy sectors   | significant returns on investment in the long run (subject to demonstrating market failure). As such, FIs might be deemed preferable to Grant Finance, to act as a catalyst for investment but also to allow money to be reinvested   | most cases there will be<br>a definable and easily<br>identifiable return on<br>the investment   | facilities in Wales – thus impacting upon the extent to which a bespoke FI could be delivered. Would need to be integrated into a larger FI scheme.   | European level include the<br>Loan Guarantee Instrument<br>for T-TEN and the Project<br>Bond Initiative   | nature of port activities and the integral role that port infrastructure plays in the growing markets of marine and offshore wind energy.  Further outline investigation proposed.   |
|---|--|---|--|---|---|--|
| ICT Networks and mobile communications networks   | Medium –Loans / guarantees to finance the provision of new ICT infrastructure and high speed broadband.  However, reflecting extensive existing projects / delivery, potential likely to be limited to very rural areas ('Not Spots') where the perceived risk is higher and hence the market is more disinclined to deliver. This may prove a relatively small market | Medium – Reflecting existing delivery mechanisms, interventions under this policy area are likely to be built upon collaboration between the public and private sector. Fls are likely to provide an appropriate funding mechanism given potentially strong returns, but will need to take account of existing delivery landscape | Medium – FIs could be an appropriate way deliver projects – if part of wider infrastructure strategy, an urban development model (such as JESSICA) might be appropriate. Likely to be most relevant in rural areas where market more disinclined to deliver and where Community Partnerships could play a role | Medium – Again, the large market and scale of investment associated with these types of interventions makes FIs possible logistically. However, size of the market may be limited by existing provision (particularly in urban areas) and existing funding mechanisms | Medium – JESSICA Regeneration Investment Fund for Wales provides a track record for use of FIs – although not in this specific area. Analysis of existing JESSICA funds across Europe suggests there has been little focus on ICT networks to date (although several new JESSICA funds such as Sheffield City Region are looking at this) | Reflecting extensive existing delivery, the potential for FIs is likely to be constrained to rural areas where the market is disinclined to deliver. These markets may ultimately prove too small for a bespoke FI to prove an effective mechanism, but nonetheless it is an area which is worthy of further investigation.  Further outline investigation proposed. |
| Infrastructure Led Gro  | owth   |   |  |   |   |  |
| Economically important investments in Wales physical infrastructure Strategically important business sites and premises  Local Infrastructure | High – Loans or potentially Guarantees using models such as Urban Development Funds to help accelerate investment and bring forward developments which might otherwise not happen. Potential for use of JESSICA type instruments to fund redevelopment of brownfield sites, creation of new floor- space and provision of HEI  | High – This policy area is likely to include land and property type interventions, with potential for significant returns on investment in the long run. As such, Fls might be deemed preferable to Grant Finance, to act as a catalyst for investment but also to allow money to be  | High – FIs represent a<br>suitable mechanism for<br>these types of<br>interventions, as in<br>most cases there will be<br>a definable and easily<br>identifiable return on<br>the investment   | High – Given the large scale of many land and property type investments, FIs are likely to be a suitable mechanism – as highlighted by existing mechanisms such as JESSICA  | Medium – The existing JESSICA Regeneration Investment Fund for Wales provides a platform and expertise on which to build, although there are lessons to be learnt.  | Overall, there is clearly potential for the use of FIs for these type of interventions, building upon the existing JESSICA initiative. Needless to say, even where there is a case, the challenges of delivering these types of FIs need to be carefully considered alongside the lessons from the current   |



| development  | buildings | reinvested |  | programme period.                              |
|--|-----------|------------|--|--|
| Targeted investment in education and training infrastructure |           |            |  | Further <u>outline</u> investigation proposed. |

## ESF

# **Early Years and Young People (Brighter Futures)**

| Priority & Activity   | Relevance                          |                            | Suitability          |                       | Track Record Upon Which       | Overall Conclusions – colour                     |
|-----------------------|------------------------------------|----------------------------|----------------------|-----------------------|-------------------------------|--|
|                       | Clear and Specific Role For<br>FIs | Specify Policy Priority    | Effectiveness        | Cost-effectiveness    | to Build                      | denotes whether to explore<br>further in stage 2 |
| Early Years           |                                    |                            |                      |                       |                               |  |
| Supporting the skills | High – FIs could be used to        | Medium – Developing and    | Medium – Student     | Medium – To be a cost | Low – No track record in      | Aspects of skills development                    |
| of current and        | fund student loans or loans        | supporting the early years | loans may be covered | effective mechanism,  | Wales of using ESF for FIs in | could be supported through                       |



| potential childcare practitioners  | to private sector providers for up-skilling employees  | workforce is a key policy theme under the Brighter Future Priority area. No policy priority for use of FI over grant funding other than generic benefits discussed in the introduction   | elsewhere – e.g. by existing national mechanisms such as Professional and Career Development Loans and the 24+ Advanced Learning Loans and the EU Level Student Loan Guarantee Facility. For loans to enterprise likely to need to be targeted at helping businesses achieve legislative standards (where there is a clear return) | would likely need to offer a broader range of loans (i.e. not just relating to childcare) relating to a number of different priority areas (e.g. skills for all) and themes in order to secure necessary economies of scale | this area in Wales – in the<br>UK student loans covered<br>by generic national level<br>mechanisms  | Fls but unlikely to be cost effective approach compared to traditional approaches unless scope to achieve scale of activity through aggregation.  No further investigation proposed.                                      |
|--|--|--|--|---|---|---|
| Activities to promote a better gender mix across the childcare sector                              | Medium – Relatively bespoke<br>loans focusing on providing<br>equalities training for<br>employers, with aim of<br>highlighting benefits of<br>employment equality | Medium – Equal Opportunities and Gender Equalities a Cross Cutting Theme for Brighter Futures. No policy priority for use of FI over grant funding other than generic benefits discussed in the introduction                   | Low –FIs likely to be less appropriate than grants as employers unlikely to see benefit / return. Anecdotally, willingness to invest in training is low in current economic context, with even a grant based approach challenging  | <b>Low</b> – An appropriate<br>model for the use of FIs in<br>this area has not been<br>identified  | Low – No track record in<br>Wales of using FIs in this<br>area or of using FI for this<br>type of activity elsewhere<br>in Europe.  | FI model unlikely to be appropriate for this activity area  No further investigation proposed.  |
| Activities to promote entrepreneurship and support for new childcare providers including mentoring | High – Loans / guarantees<br>could be used to provide<br>support to people moving<br>into self-employment,<br>business start-ups or micro<br>businesses            | High – Promoting entrepreneurship and self-employment, with links to ERDF Priority areas also. Access to finance seen as a key way to facilitate entrepreneurship as a route to employment and to develop the childcare sector | High – Potential for FIs in new business start-up. However, it is likely that this will be covered elsewhere under ERDF SME competitiveness and delivery by Department for Business, Enterprise, Technology and Science (BETS)   | Medium – To be a cost effective mechanism, would likely need to offer a broader range of entrepreneur loans (i.e. not just relating to childcare) relating to a number of different priority areas & themes                 | Medium – No track record in Wales of using FIs specifically in this area in Wales. Relevant examples elsewhere include in Finland where Finnevera have used ERDF funding for Entrepreneur Loans. In Latvia, the Support for Self Employment and Business Start Ups project uses ESF to provide both loans and | Interventions to support move into self-employment, and entrepreneurship seen as an area where ESF could be distributed via FIs, reflecting examples elsewhere in Europe – but likely to be covered under ERDF programme. |



|  |   |  |   |   | grants   |   |  |  |  |
|--|---|--|---|---|--|---|--|--|--|
| Youth attainment and engagement  |   |  |   |   |  |   |  |  |  |
| Support to help young people to develop their learning skills and motivation to participate in learning  Interventions to those who are classified as NEET to re-engage with education, to improve skills attainment levels and to help move into sustained employment  Providing broader vocational opportunities  Youth attainment and engagement — Activities which increase access to tertiary (HE) or | Low –No clear and specific role for Fls. The majority of interventions under this priority area are likely to focus on helping the individual into and through education. Loans likely to be unsuitable given distance from the labour market and relative uncertainty regarding ultimate employment outcomes (and hence potential for repayment) | Medium – Targeting youth engagement has been a long running structural priority for Wales, with strong focus in both the 2000-2006 and 2007-2013 programmes. However, there is no policy priority driving the use of FI over grant funding other than generic benefits discussed in the introduction | Low – Potential for FIs is limited unless linked to future employment (and hence repayment through salary) or to the likelihood of going on to claim benefit (and hence repayment from the UK government if benefit is avoided). Both these options though are made difficult by the uncertainty of positive employment outcomes. The latter option would also be difficult to achieve given the non-devolved nature of UK benefit payments. As such, given the absence of a realistic repayment mechanism traditional grant funding models likely to be more appropriate. The use of loans could also have a | Medium –Theoretically, this is a relatively broad area with a relatively large client group. This scale could make it possible for FIs to be a cost effective mechanism for delivery. However, as discussed, there are many reasons why FIs are not an appropriate model for this policy priority and client group. | Low – No track record in Wales of using Fls in this area in Wales or of using Fls for this type of activity elsewhere in Europe.  The UK Work Programme uses a mechanisms linked to reduction in benefit claimants, but on a grant funding basis | No realistic potential for this due to distance from labour market and hence uncertainty of employment outcomes  No further investigation proposed. |  |  |  |
| equivalent education   |   |  | deterrent effect on the client group.   |   |  |   |  |  |  |
| Activities to increase the take up and participation in (STEM) subjects  |   |  |   |   |  |   |  |  |  |



| Interventions which remove the barriers to learning, help create independence, and provide individual mentoring and advocacy advice to young people from specific groups |  |  |   |   |   |   |
|--|--|--|---|---|---|---|
| look to tackle<br>gender segregation<br>in subject choices<br>and career<br>aspirations  |  |  |   |   |   |   |
| Supporting the development of practitioners  | Medium – Fls could be used<br>to fund student loans or<br>loans to private sector<br>enterprise for up-skilling<br>employees | Medium – Targeting youth engagement has been a long running structural priority for Wales, with strong focus in both the 2000-2006 and 2007-2013 programmes. However, there is no policy priority driving the use of FI over grant funding other than generic benefits discussed in the introduction | Medium –Student loans may be covered elsewhere – e.g. by existing national mechanisms such as Professional and Career Development Loans and the 24+ Advanced Learning Loans and the EU Level Student Loan Guarantee Facility. For loans to enterprise likely to need to be targeted at helping businesses achieve legislative standards (where there is a clear return) | Medium – To be a cost<br>effective mechanism,<br>would likely need to offer<br>a broader range of loans<br>relating to a number of<br>different priority areas<br>(e.g. skills for all) and<br>themes | Low – No track record in<br>Wales of using ESF for FIs in<br>this area in Wales – in the<br>UK student loans covered<br>by national level<br>mechanisms | Aspects of skills development could be supported through Fls but unlikely to be cost effective approach compared to traditional approaches unless scope to achieve scale of activity through aggregation.  No further investigation proposed. |



| - Actions to ensure that young people gain the skills and competencies required to compete in a competitive work environment  Actions to support young people to access and maintain sustained employment | Low – No clear and specific<br>role for FIs. Given the<br>relatively uncertain<br>employment outcomes, the<br>potential for the use of loan<br>type finance over more<br>traditional grant based<br>approaches is limited | Medium – Youth employment has been a long running structural priority for Wales, with strong focus in both the 2000-2006 and 2007-2013 programmes. This is also a key policy focus through the UK Government's Work Programme. It is noted that it is important that ESF interventions do not replicate delivery of Work Programme, limiting the potential for FIs in this area | Low –Potential for FI is limited unless linked to future employment (and hence repayment through salary) or to the likelihood of going on to claim benefit (and hence repayment from the UK government if benefit is avoided). Both these options though are made difficult by the uncertainty of positive employment outcomes. As such, given the absence of a realistic repayment mechanism traditional grant funding models likely to be more appropriate. | Medium –Again, this is a relatively broad area with a relatively large market area. As such, it is possible that FIs could be a cost effective mechanism for delivery. However, an appropriate model for the use of FIs in this area has not been identified | Low – No track record in<br>Wales or of using ESF for<br>this type of activity<br>elsewhere in Europe. The<br>UK Work Programme uses<br>mechanisms linked to<br>reduction in benefit<br>claimants, but on a grant<br>funding basis   | Limited potential for this –<br>repayment mechanism likely<br>to be too dependent on<br>uncertain employment<br>outcomes<br>No further investigation<br>proposed.  |
|---|---|---|---|--|--|--|
| Actions which promote entrepreneurship and self-employment including skills and mentoring support   | High – Loans or guarantees<br>could be used to provide<br>support to help individual<br>move into self-employment<br>or to start-up businesses  | Medium – Youth employment has been a long running structural priority for Wales, with strong focus in both the 2000-2006 and 2007-2013 programmes. Access to finance is identified as a key way to facilitate entrepreneurship as a route to employment   | Medium – Potential for FI in new business start-up although this is likely to be covered under ERDF SME competitiveness and delivery by Department for Business, Enterprise, Technology and Science (BETs)  | High – As above –FIs<br>could be delivered cost-<br>effectively if delivered<br>within a wider framework<br>of FIs aimed at supporting<br>entrepreneurs  | Medium – No track record in Wales of using such mechanisms, but could draw on models elsewhere – e.g. PROGRESS Microfinance Facility, use of ESF for Microcredits and Guarantees in Calabria and Germany or use of ERDF funding for Entrepreneur Loans in Finland. In Latvia, the Support for Self Employment and Business Start Ups project uses ESF to provide both loans and grants | Interventions to support move into self-employment, entrepreneurship and micro enterprises seen as a core area where ESF could be distributed via FIs – but likely to be delivered under ERDF programme so will need to define complementarity.  Further initial investigation proposed. |



Activities with enterprises and educators to raise participation levels in occupations and sectors where a particular gender is under-represented.

Medium – Loans could be used to provide equalities training for employers, ultimately showing businesses the benefits of employment equality Medium – Equal
Opportunities and Gender
Equalities a Cross Cutting
Theme for Brighter Futures.
No policy priority for use of
Fl over grant funding other
than generic benefits
discussed in the
introduction

Low – FIs likely to be less appropriate than Grants as firms unlikely to see a financial return. Anecdotally, willingness to invest in training is low in current economic context, with even a grant based approach challenging

Low – A relatively specific market area – might need to be combined with wider intervention areas to be cost effective. In turn, this might dilute the potential to respond to objectives

**Low** – No track record in Wales of using FIs in this area or across Europe.

FI model unlikely to be appropriate

No further investigation proposed.



# **Education, Skills and Lifelong Learning (Skills for All)**

| Priority Activity   | Releva   | Relevance  |   | ability   | Track Record Upon Which  | Overall Conclusions  |  |  |  |  |
|---|--|--|---|---|--|--|--|--|--|--|
|   | Clear and Specific Role For<br>Fls   | Specify Policy Priority  | Effectiveness   | Cost-effectiveness  | to Build   |  |  |  |  |  |
| Skills for Adaptability   | Skills for Adaptability and Progression  |  |   |   |  |  |  |  |  |  |
| Interventions to improve access skills provision for employees within and outside the workplace  Activities which develop skills to break down barriers to engagement with technologies  Supporting demand led progression through flexible learning provision for individuals, including apprenticeships  Providing low skilled workers with vocational skills to support up-skilling in the workplace  Activities as part of wider economic development strategies which link skills, employer demand and a focus | Medium – A range of interventions such as learning loans to enterprises or student loans to help individuals and employees up-skill and progress –both inside and outside the workplace. Would need to be linked to an identifiable return on investment. Likely to be more applicable to the individual (i.e. increasing salary) than to the employers (return likely to be more. intangible). For the individual – some sort of student loan mechanism might be appropriate. | Medium – The policy objective for the Skills for All Priority is "investing in the skills development of the workforce to promote flexibility, growth and progression". At the UK Level, the FI approach to this area is well developed with products such as Professional and Career Development Loans and the 24+ Advanced Learning Loans. This is likely to limit the scale of the market for specific FIs in this area over a grant based approach | Medium – FIs could be used where strong incentive (and hence likelihood of positive return) to acquire skills on part of individual or provide them for employees, but lack own resources or other sources of grant to do this. | Low – Lack of scale and<br>high management costs<br>significantly reduce the<br>cost effectiveness of FI<br>mechanisms here | Low – No track record in<br>Wales of using FIs in this<br>area. Examples of loan<br>finance for skills the UK<br>level - but this is likely to<br>limit market for ESF FIs in<br>this area | Away from the workplace, potential for loan based finance, although existing UK Government products limit the market for development of ESF FIs.  In the workplace, a loan approach to skills development is likely to be less effective in terms of achieving results than a more traditional grant based approach.  No further investigation proposed. |  |  |  |  |



| on adaptability and growth.   |  |   |   |   |  |  |  |  |  |
|---|--|---|---|---|--|--|--|--|--|
| Skills for Research and Innovation  |  |   |   |   |  |  |  |  |  |
| Higher level skills and research based activity responding to the needs of and embedded within the private sector  Action between enterprise and learning providers, linked to research and innovation, to raise the supply of individuals with higher level skills.  Activities as part of wider economic development strategies which link higher level skills, employer demand, and a focus on growth and innovation | Medium – Provision of loans<br>to help build links between<br>HEI / R&I skills providers and<br>enterprise, based upon an<br>expectation of<br>commercialisation /<br>realisation of commercial<br>benefit further down the line               | High – There is strong emphasis in policy at all levels on the need to strengthen collaboration between academic institutions, government and business – FIs are seen as a stronger mechanism to engender collaboration and knowledge sharing than more traditional forms of grant funding. | Medium – Loans could be appropriate where clear link between skills acquired and the financial benefits (and how shared between individual or employee and the firm). But subject to impact of providing assistance through loan rather than grant and the possibility of deterrence. | <b>Medium</b> – Again, the<br>combination of modest<br>scale and high<br>management costs may<br>provide little benefit over<br>a more traditional grant<br>approach. | <b>Low</b> – No track record in<br>Wales of using ESF for FIs in<br>this area. | A loan approach is worth exploring further. However, given the difficulties in achieving commercialisation and then linking this to R&D skills, FIs may ultimately struggle to generate the necessary returns  Further outline investigation proposed. |  |  |  |
| Skills for Leadership a   | and Equality   |   |   |   |  |  |  |  |  |
| - Actions which support the development of leadership and management  | Medium – Loans to help individuals and employees up-skill – both in terms of general leadership / management and more specifically around areas such as equalities. Given the need for an identifiable return on investment, likely to be more | Medium – The policy objective for the Skills for All Priority is "investing in the skills development of the workforce to promote flexibility, growth and progression". At the UK Level the FI approach to this area is well developed with products such as                                | Medium – Fls could be used where strong incentive (and hence likelihood of positive return) to acquire skills on part of individual or provide them for employees, but the lack of own resources or other sources of grant  | Low – Lack of scale and<br>high management costs<br>significantly reduce the<br>cost effectiveness of FI<br>mechanisms here   | <b>Low</b> – No track record in<br>Wales of using ESF for FIs in<br>this area. | Overall, limited potential for FI – given the difficulties in identifying return on investment, grant finance probably a better mechanism.  For the individual, a student loan type mechanism could be possible, but unlikely to                       |  |  |  |



| with the skills to support workforce development, adopt flexible working practices to address disabilities in work, an ageing workforce and address workforce health issues. | applicable to the individual (i.e. increasing salary) than to the employers (return likely to be more intangible). For the individual, student loan mechanisms might be appropriate, although products already available at the UK Level | Professional and Career Development Loans and the 24+ Advanced Learning Loans. This is likely to limit the market for specific FIs in this area over a grant based approach | to do this. |  | generate significant results given presence of existing mechanisms.  No further investigation proposed. |
|--|--|---|-------------|--|---|
| Interventions which promote gender equality in the workplace   |  |   |             |  |   |



# **Employment for All**

| Priority Activity   | Rele   | Relevance  |   | tability   | Track Record Upon   | Overall Conclusions   |  |  |  |
|---|--|--|---|--|---|---|--|--|--|
|   | Clear and Specific Role For<br>Fls   | Specify Policy Priority  | Effectiveness   | Cost-effectiveness   | Which to Build  |   |  |  |  |
| Helping people into work  |  |  |   |  |   |   |  |  |  |
| Job brokerage activity  | <b>Low</b> – A loan model likely   | <b>Medium</b> – The Helping  | Low – Businesses would<br>need to be able to identify<br>an efficiency saving<br>through using job<br>brokerage. Given that job<br>brokerage will still require   | <b>Medium</b> – Theoretically, this  |   | Limited potential for FIs to be<br>used for job brokerage or  |  |  |  |
| Activities with job ready participants and employers to deliver quality work experience opportunities                                     | to be unsuitable for job<br>brokerage and work<br>experience as would be<br>dependent upon the<br>business achieving a<br>benefit (e.g. efficiency<br>saving) by using this model<br>over more general forms<br>of recruitment | People into Work theme focuses upon those closest to the labour market and has the potential to deliver higher than average employment outcomes and hence potentially mechanisms by which FIs can generate a return                      | time inputs from business, efficiency savings unlikely to be significant enough to make FIs a more viable option than Grant finance. Grant finance also likely to be more appropriate for work experience - difficult to guarantee a return for businesses – a job outcome and hence savings on recruitment costs would be by no means be a given | is a relatively broad market<br>area for which FIs could be a<br>cost effective mechanism for<br>delivery. However, as<br>discussed to the left, FIs an<br>appropriate model for the<br>use of FIs in this area has not<br>been identified | Low – No track record in<br>Wales of using ESF for<br>FIs in this area.   | work experience type interventions – for both interventions, the return for business and hence potential for repayment is relatively uncertain.  No further investigation proposed.   |  |  |  |
| Investments and support to acquire work relevant skills for employment or self-employment and to enhance entrepreneurship and innovation. | High – Loan support for<br>helping individuals enter<br>self-employment might be<br>an appropriate mechanism<br>for FIs; along with micro<br>finance for new<br>enterprises  | Medium – The Helping People into Work theme focuses upon those closest to the labour market and has the potential to deliver higher than average employment outcomes and hence potentially mechanisms by which FIs can generate a return | Medium –Potential for FI and new business start-up, although the latter is likely to be covered under SME competitiveness and delivery by Department for Business, Enterprise, Technology and Science (BETS)  | High – Possible to implement FIs aimed at supporting entrepreneurs to set up businesses, as demonstrated by examples elsewhere in Europe (see right)   | Medium – No track record in Wales of using such mechanisms, but could draw on models elsewhere – e.g. PROGRESS Microfinance Facility or use of ESF for Microcredits and Guarantees in Calabria and Germany. In Latvia, the Support for Self | Interventions to support move into self-employment, entrepreneurship and micro enterprises seen as a core area where ESF could be distributed via FIs – but likely to be covered by ERDF programme so will need to define complementarity.  Further outline investigation |  |  |  |



|  |  |   |  |  | Employment and<br>Business Start Ups<br>project uses ESF to<br>provide both loans and<br>grants   | proposed.  |
|--|--|---|--|--|---|--|
| Targeted back to work support and retraining  Activities which support older individuals to reengage with the employment market  Activities which provide access to broader employment opportunities by tackling barriers to employment  Activities which support individuals to maintain sustained employment or which offer targeted support to employ disadvantaged individuals | Low – As is the case for interventions aimed at individuals under the Brighter Futures theme, there is no clear and specific role for FIs here – given the focus on helping the individual tackle barriers to employment including skills into employment, the potential for the generation of identifiable and repayable returns is likely to be limited. | Medium –The Helping People into Work theme focuses upon those closest to the labour market and has the potential to deliver higher than average employment outcomes and hence potentially mechanisms by which FIs can generate a return | Low –Potential for FI dependent upon either employment outcome (and hence repayment through salary) or upon likelihood of going on to claim benefit and repayment from the UK government if benefit is avoided. Both of these models fairly uncertain so grant funding models likely to be more appropriate. | Low – An appropriate model<br>for the use of FIs in this area<br>has not been identified, so<br>cost-effectiveness not<br>relevant | Low – No track record in Wales or of using ESF for this type of activity elsewhere in Europe.  The UK Work Programme uses mechanisms linked to reduction in benefit claimants, but on a grant funding basis. Away from European funding, Community development financial institution are a possible model on which to build | Limited potential for this – repayment mechanism would need to be based upon a reduction in benefit claimants, and this is a non-devolved issue for Wales.  No further investigation proposed. |
| Inclusion and enga   | gement in the labour market  |   |  |  |   |  |



| Support for acquiring work relevant skills necessary to return to employment or to support entrepreneurship including through the use of voluntary activity, work trials or work experience and mentor support.   | Low – A range of loan interventions could theoretically be used, but to be appropriate mechanisms would need to be able to generate a return for the individual. Work trials or work experience unlikely to be suitable for FIs as unlikely to generate a return for businesses over more general forms of recruitment   | Low – The Inclusion and Engagement in the Labour Market theme targets those furthest from the labour market. As such employment outcomes are likely to be less strong and the potential for use of FIs is more limited | Low – Whilst FIs could be explored for work experience placements, returns likely to be limited as would be dependent upon ultimate recruitment and demonstrable saving on recruitment. As such, grant finance likely to be more appropriate  | Low – As with helping individual into work interventions above, an appropriate model for the use of FIs in this area has not been identified, so costeffectiveness not relevant | Medium –No track record in Wales of using Fls in this area. Away from European funding, Community development financial institution are a possible model on which to build  | Overall, limited potential for use of FIs for these interventions. Grant finance likely to provide an overall more effective form of support.  No further investigation proposed.              |
|---|--|--|---|---|---|--|
| Activities which address barriers to employment; support the move off welfare through advice and guidance and address issues such as attitudes to work and welfare dependence.  Support activities for those suffering from more complex barriers to employment  Activities which support access to | Low – As under the Brighter Futures strand, no clear and specific role for FIs – the majority of interventions under this priority area are likely to focus on helping the individual overcome the barriers to employment and move into employment. Given the lack of certainty around positive outcomes, the potential for the use of repayment dependant FIs over more traditional grant based approaches is limited | Low – The Inclusion and Engagement in the Labour Market theme targets those furthest from the labour market. As such employment outcomes are likely to be less strong and the potential for use of FIs is more limited | Low – Potential for FI is limited unless linked to the likelihood of going on to claim benefit and repayment from the UK government if benefit is avoided. However, this would be difficult to achieve given the nondevolved nature of UK benefit payments. As such, given the absence of a realistic repayment mechanism traditional grant funding models likely to be more appropriate. | Low –As above, an<br>appropriate model for the<br>use of FIs in this area has not<br>been identified, so cost-<br>effectiveness not relevant                                    | Medium – no track record in Wales or of using ESF for this type of activity elsewhere in Europe. The UK Work Programme uses a mechanism linked to reduction in benefit claimants, but on a grant funding basis (including ESF funding). Away from European funding, Community development Financial Institutions are a possible model on which to build | Limited potential for this – repayment mechanism would need to be based upon a reduction in benefit claimants, and this is a non-devolved issue for Wales.  No further investigation proposed. |

employment such as job-



| search or other employment focused guidance  Activities which support individuals to maintain sustained employment  Helping people stay and prog   |   |   |  |  |  |
|--|---|---|--|--|--|
| employers to support support support support workforce development, promote flexible working arrangements and the provision of support to workers — Innovative activities which work with the participants to interve support support intervets support to the intervets of support to workers for busing statutory by incompression of support to work with the participants to interve support suppo | Medium – The Helping People Stay and Progress in Work theme focuses upon those already in the labour market. Under this Priority this theme has possible the greatest potential for FIs over grant finance given the presence of a stronger opportunity to secure returns  The Helping People Stay and Progress in Work theme focuses upon those already in the labour market. Under this Priority this theme has possible the greatest potential for FIs over grant finance given the presence of a stronger opportunity to secure returns  The Helping People Stay and Progress in Work theme focuses upon those already in the labour market. Under this Priority this theme has possible the greatest potential for FIs over grant finance given the presence of a stronger opportunity to secure returns | might be difficult – for example even if worker productivity increases, it might be difficult to establish a direct and | Low – Again, an appropriate model for the use of FIs in this area has not been identified, so costeffectiveness not relevant | Low – No previous experience on which to build in Wales. Fls using 2007-2013 ESF elsewhere in Europe have typically focused on providing micro- credit to small enterprises – no evidence of this type of activity | A grant based approach likely to be more effective than a FI based approach in this respect.  No further investigation proposed. |



| help address     |  |  |  |
|------------------|--|--|--|
| issues for those |  |  |  |
| in work, to      |  |  |  |
| prevent loss of  |  |  |  |
| employment       |  |  |  |
| Work with        |  |  |  |
| enterprises to   |  |  |  |
| develop or       |  |  |  |
| improve          |  |  |  |
| appropriate work |  |  |  |
| place or         |  |  |  |
| occupational     |  |  |  |
| health           |  |  |  |
| programmes       |  |  |  |



# RDP

| Priority Activity  | Relevance   |  | Suitability  |   | Track Record Upon Which  | Overall Conclusions  |
|--|---|--|--|---|--|--|
|  | Clear and Specific Role For FIs   | Specify Policy Priority  | Effectiveness  | Cost-effectiveness  | to Build   |  |
| Competitiveness: Farming Modernisation, Diversification and Efficiency | High – This activity forms a core part of RDP activity, and whilst this has more commonly been delivered through grant support in current and past programmes, there is scope to replace / complement grant support with alternative financial support options.  There are various areas of the priority in which FIs could be pursued. | Medium – 'enhancing the competitiveness of all types of agriculture and enhancing farm viability' is a key priority under the competitiveness theme of the RDP 2014-20 paper.  General desire to shift from grant culture amongst SMEs, but challenges of doing this recognised. | Medium – this area of activity is an established part of RDP, however there is a risk of a drop in demand from shifting to commercial finance from grants given in previous programmes.  To ensure effectiveness would require demand stimulation and support to applicants. | Medium - low - this is likely to be the largest area of investment from the programme, and loan funding could enable the fund to support more activity than current grant approaches, but subject to set-up, management and recovery costs. | Medium-Low - strong experience in delivering this intervention through grant schemes.  Experience in Finance Wales of delivering loan schemes to businesses, although not in the agricultural sector and low penetration in rural areas  Knowledge sharing through the European Network for Rural Development (ENRD), although limited experience (only five Member States actively using EAFRD FIs) | There is some potential for use of FIs in some aspects of this intervention area, although the costeffectiveness issues could be a major constraint. There is the potential to overcome in some instances through coordinated delivery approaches with ERDF programmes.  It should be explored in the second phase of this work. |
| Competitiveness:<br>Micro-loans for<br>Rural Businesses                | Medium – small business grants have been provided in past programmes for small-scale investments. Loan options may be a preferable solution going forward.  However, it is not fully clear what overall impact  | Medium - 'fostering innovation' and 'enhancing competitiveness' in rural areas are listed as potential areas of support under the competitiveness theme of the RDP 2014-20 paper, which this activity could contribute to. 'Low-value business grants' are                       | Medium-Low — experience from previous programmes found limited evidence of significant impacts arising from small business grants. However, delivery via a loan scheme may increase beneficiary focus on   | Medium-Low – the scale of loans offered and the limited likelihood of significant impacts delivered may mean this type of intervention would not justify the management set-up and operational costs.                                       | Low - experience in delivering this intervention through grant schemes.  Knowledge sharing through the European Network for Rural Development (ENRD), although limited experience (only five Member States actively  | There is some potential for use of FIs in this intervention area. Again, the challenges of achieving cost-effective delivery could be achieved through coordinated delivery approaches with ERDF programmes.   |



| Priority Activity   | Relevance   |   | Suitability  |   | Track Record Upon Which  | Overall Conclusions   |
|---|---|---|--|---|--|---|
|   | Clear and Specific Role For<br>FIs  | Specify Policy Priority   | Effectiveness  | Cost-effectiveness  | to Build   |   |
|   | would be sought from these investments.   | discussed.  | ensuring positive economic impacts of investments.   |   | using EAFRD financial FIs)   | It <b>should not be explored in the second phase</b> of this work.  |
| Environment: Loans for Community Renewable Energy Investments | High — investment in community renewable energy schemes has proved a challenge due to the financial risks involved.  Objectives include reducing carbon emissions, creating income streams for community bodies, and encouraging a culture of local ownership of renewable energy agenda. | Medium – support for community renewables is listed as a potential area of support under the environment theme of the RDP 2014-20 paper.  | Medium – access to finance would substantially help to bring schemes forward, however there are likely to be significant operational challenges in identifying legal entities and delivering and administering the schemes.  Scope to link to community benefit funds for wind farms.                        | Medium-Low – the likely limited scale of RDP investment in this type of activity, and the likely challenges in administering the scheme, may affect cost effectiveness.  The cost-effectiveness of some forms of delivery also heavily influenced/dependent upon FIT regimes. | Medium - the current Wales JESSICA fund provides funding for renewable energy developments.  Knowledge sharing through the European Network for Rural Development (ENRD), although limited experience (only five Member States actively using EAFRD FIs) | There is some potential for use of FIs in this intervention area and it should be explored in the second phase of this work                     |
| Community: Loans for Community Hub Developments               | High — investment to purchase community assets to be developed into sustainable rural hubs is a recognised aspiration in many rural areas to support community cohesion and rural settlement vitality and viability. Accessing finance is a key obstacle to this.                         | High – 'promoting social inclusion' is a key priority under the community theme of the RDP 2014-20 paper, and supporting 'Strategic Spaces' is listed as a potential intervention area. | Medium — access to finance is a key challenge for this type of activity and a dedicated fund with associated support could be very effective. However, payback periods could be considerable.  Bodies such as the Plunkett foundation and Wales Co-operative Centre could have a role in associated support. | Low – management and administration costs could be high, working largely with community / voluntary sector bodies, and payback periods may be long and failure rates high.  | Low – no real experience of delivering this type of intervention through loan schemes.  Knowledge sharing through the European Network for Rural Development (ENRD), although limited experience (only five Member States actively using EAFRD FIs)      | There is <b>limited potential</b> for use of FIs in this intervention area.  It <b>should not be explored in the second phase</b> of this work. |
|   | <b>Medium</b> – there are a   | High – 'promoting social  | Medium-Low – access to   | Low – management and  | Low – no real experience of  | There is medium-to-weak   |



| Priority Activity  | Relevance  |  | Suitability   |  | Track Record Upon Which   | Overall Conclusions  |
|--|--|--|---|--|---|--|
|  | Clear and Specific Role For FIs  | Specify Policy Priority  | Effectiveness   | Cost-effectiveness   | to Build  |  |
| Community: Loans for rural community services e.g. improved local transport activities       | range of opportunities for FIs to support rural services e.g. loans for capital purchase of vehicles for community transport. However this type of intervention is not specified as a focus area in the RDP 2014-20 paper. | inclusion' is a key priority<br>under the community<br>theme of the RDP 2014-20<br>paper, and supporting<br>'community and voluntary<br>transport' is listed as a<br>potential intervention area.                | finance is a key challenge for this type of activity and a dedicated fund with associated support could be effective. However, payback periods could be considerable and this may not be the most effective solution to the major challenges of rural transport across Wales. | administration costs could be high, working largely with community / voluntary sector bodies, and payback periods may be long and failure rates high.  | delivering this type of intervention through loan schemes.  Knowledge sharing through the European Network for Rural Development (ENRD), although limited experience (only five Member States actively using EAFRD financial FIs) | potential for use of FIs in this intervention area and it should not be explored in the second phase of this work.                       |
| Community: Venture capital / credit union development supporting rural enterprise innovation | High — building on experience in the current RDP programme, there are clear opportunities for FIs to be set up to support local enterprise development, including credit union schemes and local venture capital funds.    | Medium – 'promoting economic development in rural areas' is a key priority under the community theme of the RDP 2014-20 paper, although support for individual enterprise is not identified as a key focus area. | High – local level access to finance has been successfully delivered through these types of activity in the current RDP programme, supporting local enterprise development.   | Medium – similar schemes have been delivered under the current RDP programme. Whilst it is not clear how cost effective these solutions have been at this stage, given management set-up and operational costs, there are cost-effective models for CDFIs. | Medium-High — experience<br>in the current RDP<br>programme through the<br>Anglesey Rural Venture<br>Capital Fund and Neath<br>Port Talbot Credit Union<br>scheme, both supported.  | There is medium-to-strong potential for use of FIs in this intervention area and it should be explored in the second phase of this work. |

