

Expression of Interest to Government
15 January 2013

Re-engineering Engineering:
RAISING OUR G-AME

COVENTRY AND WARWICKSHIRE CITY DEAL
Growth of Advanced Manufacturing
& Engineering (G-AME)

Section A: Summary information

A1. Proposal title.

Coventry and Warwickshire City Deal – *Re-engineering Engineering: raising our G-AME*

Our challenge - and opportunity - is to leverage the existing strengths and assets of the CW City Deal area's economy to drive globally competitive growth in high value advanced manufacturing and engineering through investment in skills; access to innovation and space for growth. We must take full advantage of the current export-led upturn in automotive and allied sectors and the expansion of low carbon technologies.

Our first step in raising the **G**rowth of **A**dvanced **M**anufacturing and **E**ngineering (G-AME) is to address the immediate skills shortages facing our local businesses: **we must re-engineer our engineering skills urgently**. We will establish a **G-AME Changer Programme** to deliver new engineers from April 2014 through targeted collective effort. Universities, FE colleges, innovation centres, major manufacturers, supply chains, business and sector support organisations and local authorities will all work together locally with Government to significantly up-skill our engineering workforce as part of our wider strategy for growth.

The CW City Deal, firmly based on CWLEP priorities, tackles our skills issue head-on. It will deliver the growth potential of the whole sub-region as the heart of England's high value manufacturing and engineering corridor – from the East Midlands down to Oxfordshire and the South East and across from the West Midlands to the East of England – to provide a sustainable, productive platform for export-led national economic growth into the future.

A2. Key partners involved in the proposal.

This is an integrated private/public sector bid, driven by the CWLEP and its business partners and all the local authorities within the City Deal area. The key partners are:

Coventry & Warwickshire
Local Enterprise Partnership
(CWLEP)*

Coventry City Council

Warwickshire County Council

Hinckley & Bosworth Borough Council

North Warwickshire Borough Council

Nuneaton & Bedworth Borough
Council

Rugby Borough Council

Warwick District Council

Stratford on Avon District Council

*NB The CWLEP Board includes senior private sector representatives (including Jaguar Land Rover; SCH Group; and MIRA), Coventry University and the University of Warwick, the Coventry & Warwickshire Chamber of Commerce and the Federation of Small Businesses.

The CW City Deal Leaders Board and City Deal Steering Group, which include members of CWLEP Board and all participating local authorities, are engaging with key partners across the City Deal region including:

6 FE Colleges & other learning
providers

Job Centre Plus/Connexions/Careers

Local Chambers of Trade

Registered providers of housing

Key private sector businesses

Adjoining Local Enterprise
Partnerships

Coventry and Warwickshire Place
Board

West Leics and Northern Warks

Market Towns Cross Border Delivery
Partnership

All local MPs

A3. Local point of contact.

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Section B: Problem definition

B1. What is the single economic challenge or opportunity that you want to address through a city deal? Why has this been chosen as the focus of your proposal?

CW City Deal area is England's high-value and historic manufacturing heart and has major strengths in design, manufacturing and delivering of products and services: mechanical, electrical and electronic engineering; digital technology; ICT and energy and green technologies and advanced construction. CW City Deal area has **almost a tenth of all English motor manufacturing jobs** and has the **second highest proportion of employment in advanced manufacturing/digital media** by LEP area.

There are currently real opportunities for growth in the AME sectors in which the CW sub-region excels – with global players; world class brands and diverse SME providers including the automotive and digital technology sectors. However we need to significantly increase the number and skills levels of our engineers if we are to root large internationally mobile investors; attract investment to the UK, and develop globally competitive supply chains, and grow our indigenous AME business base.

There is a **shortage of 18,000 high-level engineers** in the West Midlands. In addition the CW City Deal area is expected to require **up to 25,000 level 2 and 3 engineers** to replace the ageing workforce over the next five years. Local companies Jaguar Land Rover and Rolls Royce both cite a lack of suitably skilled engineers as a barrier to growth and this applies at every level of the economy. All 30+ businesses on the CWLEP High Value Manufacturing Business Group have identified the lack of engineering skills at all levels as their key inhibitor to growth. Lack of engineering skills also has a critical impact on local businesses' ability to innovate – this is particularly cited by SMEs in the West Midlands Manufacturing Manifesto.

A skilled workforce is the key to generating and increasing R&D and innovation activity. While investment in R&D by businesses in CW sub-region is three times the national average; research from Centre for Cities for CWLEP identifies the huge potential in the sub-region for delivering innovation for businesses and growth in advanced manufacturing and engineering. Our research also shows that **90% of local R&D investment is concentrated in only 5% of firms** and **GVA at £43k per head** remains below the national average.

A lack of sufficient skilled labour and weak business to business connectivity is also hindering agglomeration benefits. We need to support our engineering and advanced manufacturing supply chain companies to secure a greater UK share of supply to original equipment manufacturers (OEMs) in line with the national Industrial Strategy - estimated to be worth **an additional £3billion pa for businesses** in the automotive sector alone. Lack of confidence in the market is impacting on the provision of suitable locations for advanced manufacturing and engineering businesses to grow and expand quickly to enable them to innovate; respond to growth opportunities and to attract inward investment.

Skills shortages, access to innovation and space for growth all need to be tackled if the CW City Deal area is to be the recognised international “go-to” place for advanced manufacturing and engineering. The CW City Deal proposes to focus on **re-engineering engineering skills** as the most immediate and critical issue that

needs to be addressed, which will act as catalyst for our wider strategy for AME growth.

There is an unrivalled mix of AME skills providers and innovation assets in the sub-region including: high value manufacturing and engineering businesses; two High Value Manufacturing Catapult centres (Manufacturing Technology Centre at Ansty & Warwick Manufacturing Group); the National Automotive Innovation Campus and Motor Industry Research Association; two outstanding Universities – University of Warwick and Coventry University; six FE Colleges with deep connections into industry eg Power Academy at Warwickshire College; and innovation incubators at Warwick Science Park, MIRA & Coventry University.

Our unique mix of assets provides the City Deal with the opportunity to do something very different to address our skills problem; working with Government to re-engineer our engineering skills as part of our wider G-AME strategy.

B2. Why can't this be taken forward by the private sector or through existing policy tools?

Skills for Advanced Manufacturing and Engineering growth - CWLEP is leading work on the provision of local apprenticeships and meeting the skills shortages and has commissioned an in-depth study to better understand local business needs and the mismatch with skills in the local labour market. Larger firms like JLR and Rolls Royce have developed bespoke training packages but lack of availability of suitably skilled workers is still a barrier to growth. Although initiatives are being developed locally to meet specific local needs – including cross-border initiatives in the north of the City Deal area - the current provision of training is not sufficiently flexible or quick enough to respond to local businesses' needs, especially smaller businesses, with rigid training systems cited as a particular problem eg three funding rates for apprenticeships depending on age.

Businesses also identify an insufficient number of school leavers with STEM subjects and a general lack of technical skills – this is beginning to be addressed through specialist bespoke provision but will not solve the immediate issue facing employers. Both providers and employers cite the lack of flexibility and responsiveness in skills funding, which prevents local specific needs being addressed quickly.

Engineering skills change and these require continual updating for those in work eg there is currently an identified local need for up-skilling mechanical engineers into automation engineers. SMEs in particular cannot commit to the level of retraining that is required. The Work Programme does not offer the type of intensive targeted work-based training required to up-skill those capable of becoming engineers. Lack of co-ordination and funding limits local placement opportunities for Graduates.

Access to innovation - More than 80% of funding for R&D in the CW City Deal area comes from the private sector and is supported by targeted public sector investment. Public funding for innovation and R&D comes from a variety of sources and understanding of the range of national and local opportunities is poor; advice and support is dispersed.

Infrastructure for AME growth - local authorities are working with developers and using assets to facilitate the development of key sites. Lack of market confidence means developers are not building speculatively with insufficient provision for businesses to move quickly to upscale production with a number of automotive supply chain companies in this position. AME companies have high expectations of quality of life for their employees which impacts on their investment decisions. The

private sector is not addressing housing supply issues and a lack of economic confidence is slowing the redevelopment of our urban centres. Road and rail transport investment needs better longer term co-ordination with local development sites and to get local people to jobs. CWLEP is co-ordinating the allocation of a range of funds but for further co-ordination of local and national funding across boundaries and departments a single infrastructure fund for growth is required.

Section C: Broad approach -

C1. What broad approach do you intend to take to addressing the challenge or opportunity identified above?

Our unique and bespoke City Deal offer is to **RE-ENGINEER OUR ENGINEERING SKILLS** through a **G-AME Changer Skills Programme**.

We will establish a new CWLEP led **Re-engineering Skills Board** - bringing together local authorities and the CWLEP business groups with the unique mix of outstanding Universities, FE Colleges and other learning providers and centres of innovation set out in B1. The Board will take a radically different approach to skills delivery. By joining up the demand and supply sides we can match training provision to business cycles rather than fixed academic cycles and current funding arrangements.

Providers will re-engineer and tailor training courses to meet the specific requirements of AME businesses, informed directly by the CWLEP Business Groups and the AME Skills Audit currently underway. We will build on and roll out good practice such as the JLR Chaired Advanced Skills Accreditation Scheme which offers SMEs flexible access to individual Masters level modules through a network of top universities. By working flexibly and collaboratively we will radically reduce training periods to significantly increase the number of engineers trained.

Subject to securing our City Deal and the flexibility of skills funding arrangements, the Board will launch the **G-AME Changer Skills Programme** in late 2013 and the revised offer will begin to deliver skilled engineers from April 2014 onwards.

The Programme will operate across the City Deal area, building on the current breadth and depth of provision, to establish an integrated network of G-AME Changer assets to join up skills and apprenticeship services and to offer bespoke services to AME employers with a dedicated point of contact located at each site. The co-ordination of the G-AME Changer Skills network and its offer will be the responsibility of the Re-engineering Skills Board, providing accountability to local authorities, CWLEP and local AME businesses. The Programme will have four key target groups:

Engineers in workforce and former engineers: retraining and up-skilling engineers who need to reach level 4 and above through modular degree programmes completed in less time with employers providing in house training with tailored modules from FE/HE

Unemployed people: identifying people with the aptitude to be trained to level 2 and level 3 and provide industry designed intensive and flexible training packages

Graduates: immersive experiential training through intensive work-based schemes; opportunities for involvement in R&D; work pathways and placements.

Apprenticeships and trainees: using integrated network for engineering apprenticeships at one rate; with ability for employers to access and share resources immediately

We ask Government:

- **To devolve control of elements of skills and apprenticeships funding to deliver the G-AME Changer Skills Programme to meet the needs of local engineering employers**
- **CW to pilot/fast track the new Traineeships Programme and level 6/7 apprenticeships**
- **To give local flexibility to adapt the DWP Work Programme including the mandatory attendance at G-AME Changer Skills Programme events for 18-24 year olds**
- **Release capital funding for the development of the proposed AME Apprenticeship resource at the Manufacturing Technology Centre at Ansty to add to our Programme.**

The uplift in skills from our “Bespoke Offer” will allow use of freedoms and flexibilities in the Core Package to develop our G-AME Changer Programme further as outlined briefly below.

Delivering access to innovation – we will co-ordinate our unrivalled innovation offer to increase local AME R&D activity through an “innovation escalator”. We want to work with Government to develop a local dedicated Innovation Fund of Research Council, Technology Strategy Board funding and other public resources.

Delivering Infrastructure for AME growth - We will develop a £0.3b local CW Infrastructure Fund to deliver key development sites for AME business growth and inward investment; facilitate housing and regeneration schemes and improvements to our key road and rail corridors. We want to discuss how the local infrastructure fund could be supplemented with Government funding streams, including transport, and the release of land assets. We will build on our good planning practice including the wider use of local development orders for the AME sector. We want to work with Government to stream-line and expedite planning issues including the provision of a single point of contact for developers.

C2 How can this approach ‘do more with less’ by delivering greater efficiency in public spend or by leveraging new resources from the private sector?

CW City Deal partners are committed to thinking differently about how existing resources can be used to drive better outcomes and growth in the City Deal area. The Re-engineering Skills Board will bring together all the key agencies, businesses and skills providers to provide a more effective use of resources by reducing bureaucracy; co-ordinating provision and aligning public and private sector resources to meet AME business needs. This will significantly increase private sector investment in training and the provision of apprenticeships and provide greater value for money. The local cost of benefits will be reduced through the up-skilling of unemployed residents, including NEETs, so that they enter a sustainable job.

A City Deal Economic Prosperity Board (EPB) will be established to take a strategic approach to investment decisions as all partners agree finance and investment are critical to success. Leveraging growth will break down existing barriers between layers of government and private and public sector organisations. Funding City Deal priorities will require investment with the biggest impact, better use of existing public sector funding; providing the private sector with the incentives and confidence to invest existing and new cash. The Deal will not just mean investment of cash resources. Of equal importance is the commitment of the partners to use human

capital to invest time and expertise to drive innovation and growth through the development of the G-AME Changer programme.

C3 What local resources do you expect to invest in addressing this problem?

We will develop new financing models which incentivise growth, working through the EPB to co-design and co-fund the interventions needed. Our existing planned arrangement for business rate pooling demonstrates an ability to work together on funding strategies. Work is underway on the process to identify how partners would pool resources and to initially support the development of a CW G-AME Changer Skills Fund.

In addition we believe collaborative working will allow us to develop a £0.3 billion of local resources to fund investment via an evergreen Infrastructure Fund. Providing longer term funding solutions to co-finance and de-risk development will deliver our growth priorities. The Fund will be deployed as part of the wider G-AME Changer strategy to produce a return on investment and will be tailored to provide site-specific commercial funding and public investment depending on the nature of the project and gap/funding requirement.

Section D: Expected benefits

D1 How do you expect your proposal to have an impact on local jobs and growth, and at what scale?

Improving skills

There is currently a shortage of skilled engineers at all levels. Further detailed information on the local position will be provided by the CWLEP AME skills audit when it is completed in March 2013. The CW sub-region is delivering apprenticeships, but currently **just 7.3% of all achievements at intermediate level, and only 13.5% at advanced level apprenticeships**, are within our key AME sectors.

Expected impact: through the G-AME Changer Skills Programme we expect to:

- Deliver an additional **5,000 new engineers** within the workplace over the next two years and to have eliminated the City Deal area's engineering skills shortage by 2020
- We will upskill existing engineers to levels 2 and 3 and 4 by involving more businesses in retraining their workforce (numbers to be confirmed by CWLEP Business Groups)
- Deliver a significant increase in engineering apprenticeships particularly at the intermediate and higher level (numbers to be confirmed by CWLEP Business Groups)

Innovation

A key driver of productivity is innovation. Currently, within Coventry & Warwickshire, we have a much higher than **average spend by business on R&D activity**. However, this activity is concentrated within a small number of key firms so **that 90% of all R&D spend occurs in just 5% of our companies**.

Expected impact: We want to both increase the total amount of spend on R&D through our City Deal, and for that activity to be spread more across our business base with **25% of AME business becoming R&D active** with the highest level of R&D investment nationally.

Productivity

The Coventry & Warwickshire economy is less productive than the England average, and surrounding areas that have a strong presence in advanced manufacturing (i.e. Leicester/Leicestershire; Oxfordshire and Northamptonshire). GVA per employee in 2011 was **£42,773** compared to **£48,782** for England as a whole. This equates to a **productivity gap of £2.4bn** for the local economy. In other words, if our workforce was as productive as the England average, our economy would produce £2.4bn more output per annum (a 12.3% increase in total GVA for the area).

Expected impact: through investment and support for advanced manufacturing through our City Deal, we aim to **eliminate this productivity gap by 2020**, with an aspiration for **20% growth**.

Local Jobs

An outcome of increased innovation, productivity and economic output will be **growth in employment**. According to the 2011 Business Register and Employment Survey, there are 438,000 people employed within Coventry & Warwickshire City Deal area (including Hinckley & Bosworth). **Just over 21% of these (93,500)** are

employed in either manufacturing; information & communication or professional, technical & scientific sectors.

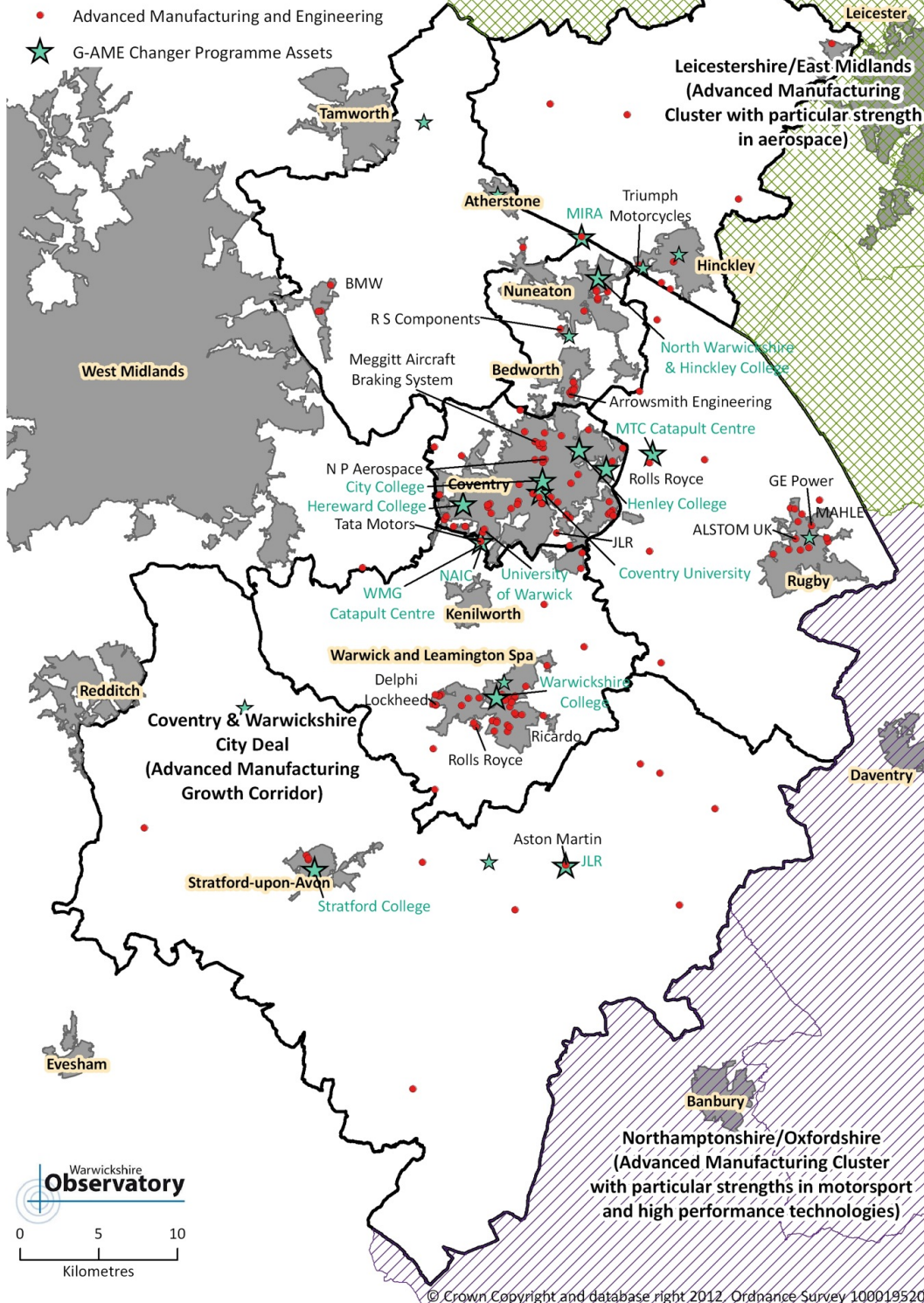
Expected impact: We intend to both **increase the net number of jobs by 30,000 in our area, and raise the proportion of our workforce employed in these key sectors to 25% by 2020.**

Section E: Governance

E1. Over what geographical area will you address this problem? Why?

The map below shows the functioning economic geography of the CW City Deal area: the key AME businesses that the G-AME Changer Programme will benefit; and the education and innovation assets that will deliver the Programme.

City Deal



E2. What governance structures will ensure effective, binding and strategic decision-making across the relevant economic area?

It is anticipated that a new City Deal Economic Prosperity Board governance structure will be developed. Chaired by the CWLEP, membership of the Board will include Leaders from all 8 local authorities within the CW City Deal area. Other key

private sector partners and the two universities would be represented through CWLEP nominees to the City Deal EPB. The initial City Deal focus will be on the skills agenda and the proposed Re-engineering Skills Board will report to the EPB. We would want to explore the potential of a combined authority structure, although this is not immediately viable given the complexities of transport authority arrangements (which include Coventry's membership of the West Midlands ITA; and Hinckley and Bosworth's inclusion in the county of Leicestershire). In addition the current CWLEP governance structure does not include Hinckley and Bosworth. The EPB will develop strong links with adjoining City Deal and LEP areas in West Midlands, Leicestershire, Northamptonshire and Oxfordshire to strengthen the UK AME offer.

These proposals build on a strong track record of political and private sector collaboration, strengthened with the advent of the CWLEP. The CW City Deal area's track record of cross border/organisational collaboration includes:

- History of joint working through Coventry, Solihull, Warwickshire (CSW) Partnership to foster economic development with the private sector (superseded by the CWLEP)
- Strong public/private sector cooperation through the CWLEP e.g. CCC hosting the CWLEP Chief Executive and Operations Director, County and District Council representation on the Executive Delivery Group and Business Groups
- Business rates pooling involving Coventry and all 6 Warwickshire authorities.
- Coventry and Warwickshire MoUs on shared services; procurement and planning matters including a formal Duty to Cooperate
- Robust examples of cross-boundary and cross-county working e.g. the A5 corridor improvements & MIRA Enterprise Zone (NWBC, NBBC, HBBC), the University of Warwick Masterplan (CCC, WDC), the development of Ansty Park (CCC, RBC, WCC), the proposed C&W Gateway (WDC, WCC, CCC).
- Innovative shared services e.g. CCC and WDC shared Head of Planning; CCC and WCC undertake joint Highways procurement; shared CSW Resilience Team
- CWLEP initiatives to accelerate financial assistance to the private sector schemes through streamlined management of funding e.g. Growing Places Fund, ERDF, RGF etc.
- Strong cross-LEP working within the West Midlands and neighbouring areas

E3. How will you generate momentum in developing a workable city deal proposal?

The Re-engineering Skills Board will be established with HE, FE and innovation centres and local businesses. The G-AME Changer Skills Programme will be developed using data from CWLEP skills research and CWLEP business groups. CW City Deal has already involved close co-operation across borders and political control (4 councils are Conservative controlled, 3 Labour and 1 Liberal-Democrat) enabling the early creation of a CWLEP-Chaired Shadow EPB. Local MPs have been briefed and are fully engaged with the Deal. Local authority, CWLEP and private sector staff are formally allocated to work with City Deal partners to develop the CW City Deal EOI and these arrangements will continue until a CW City Deal is signed.