

## **Machinery and Allied Component Supply Chain Industrial Strategy Proposal for development and implementation 2015-16**

### **Summary**

*Having identified the priorities for a successful industrial strategy for the machinery and allied component sector by commissioning a scoping study report from the Cambridge Institute for Manufacturing ECS, Engineering and Machinery Alliance (EAMA) associations have decided to develop and implement that strategy in a 16 month project with BIS support and are inviting non-EAMA associations to take part as Alliance membership isn't a pre-requisite to enjoying the benefits the programme is designed to produce. In addition, UK supply chains will benefit from cohesive action to raise capacity across a wider front if participants come from beyond the EAMA footprint.*

### **Background**

Government launched its industrial strategy three years ago and encouraged the development of vertical sector strategies – initially 11 in all including for example aerospace, automotive and construction and then subsequently into other sectors but with less attention paid to cross-cutting supply chains and enablers such as our own sector.

Four associations joined EAMA to win government support to explore the potential for a cross-cutting industrial strategy for the machinery and allied component sector in autumn 2014.

This group then commissioned the Cambridge Institute for Manufacturing ECS (IfM) to produce a Scoping Report (available separately). This illustrated that there are significant opportunities to build the core manufacturing base by taking part in initiatives that are already under way and in new initiatives increasing capacity and productivity.

### **Our vision for 2030**

- The UK machinery and allied component supply chain fully able to exploit the significant investment planned in UK infrastructure (Rail, Nuclear, Alternative Energy etc.).
- There is significant exploitation of currently available and emerging technologies in automation/motion control, robotics and simulation and modelling.
- Expertise in new manufacturing technology applications particularly additive layer manufacturing (ALM), digital manufacturing and internet of things/Industrie 4.0 is extensively exploited across the supply chain.
- School leavers and graduates see a career in engineering and advanced engineering in particular as a very attractive proposition.
- UK supply chain is seen as pro-actively involved in setting and exploiting the UK innovation agenda and associated government investment.

### **“Next steps”**

The Scoping Report lays out the priorities in three areas as follows:

#### **1) Innovation for growth**

*Key rationale:* OEMs demanding supply chain innovation and companies taking on new lines and services

*Topics:*

- Building depth in additive manufacturing
- Exploiting the Internet of Things/Industrie 4.0 and modelling in both the factory and the wider supply chain
- Mass customisation

## **2) Innovation for efficiency**

*Key rationale:* Essential in the drive for re-shoring and re-industrialisation

*Topics:*

- Manufacturing automation/motion control (note: also contributes considerably to innovation for growth)
- Global best practice, capability and capacity self-assessment benchmarking for continuous improvement in productivity

## **3) Enabling initiatives**

*Key rationale:* To improve:

- Collaboration across the value chain – both with original equipment manufacturers (OEM) and between SMEs
- The image of the sector
- The record on investment in technology and skills

*Topics:*

- Technical and business skills development, possibly through a trade association sponsored national academy
- Small set of competency/technology based innovation centres focused on SMEs but linked to the Catapults
- Fiscal and taxation environment
- LEPs: local delivery opportunities for strengthening supply chain economics
- IP protection services
- Profile of UK machinery makers and component manufacturers in education, and with OEMs and government

N.B. Underpinning all these activities, the aim will be to establish a coherent sector strategy, that's managed by the sector and supported by key stakeholders and that can form the basis of specific funding requests to UK and EU funding bodies.

## **What's involved**

### ***General direction***

The IfM are our programme partners working under the immediate direction of a small steering group (SG) currently comprised only of EAMA members. SG membership is voluntary and absolutely open to non-EAMA members participating in the initiative. This simple governance structure will flex to provide direction, cohesion and expertise as the initiative takes on more partners and the work streams' activities become clearer in phase two (see below).

### ***Deliverables and estimated budget***

The whole programme is broadly estimated to take 16 months.

#### *Phase One (April-June)*

1. Stakeholder engagement by EAMA with key stakeholders to confirm sponsorship/governance of the programme and links to other established programmes and other industry partners for the main study.
2. Includes three half-day stakeholder review meetings.
3. Finalisation phases two to four, including budget which currently guide estimated below.
4. Kick-off meeting.

#### *Phase Two (July – December)*

1. Up to six one day workshops addressing strategic topics as identified in the Scoping Report and modified in the stakeholder engagement process and sector partners' priorities (most

likely additive manufacturing, internet of things, mass customisation, automation, supply chain benchmarking and skills).

2. In addition, consultative work streams will be set up on tax and finance, intellectual property and the profile of the industry to be developed by the participating partners, outside the workshops.
3. Three progress meetings.

#### *Phase Three (July 15-March 16)*

1. Develop approaches and associated feedback and reporting templates for consultations on Innovation Centres and Local Enterprise Partnerships to be conducted by EAMA members and other participants.
2. Work streams tackling other 'enabling initiatives.
3. Four progress meetings.

#### *Phase Four (April 16 -June 16)*

1. Report based on all the workshops, work streams and collated results from the Innovation Centre and LEP consultations held in Phases Two and Three.
2. Formal launch of the comprehensive strategy and links (by now well established) into other programmes.

#### **Opportunities ahead**

- This programme will help sector companies raise their productivity performance, grow their businesses and build upon government's recognition of the sector in establishing their future industrial policy.
- Our challenge is to significantly enhance confidence in the UK supply chain, particularly in the eyes of international OEMs and the potential pipeline of skilled recruits by 2030.
- Conceived as a strategy open to all interested sector partners, it will combine a series of workshops and working groups to profile key performance indicators and then help firms link into well developed, well funded initiatives, strengthen relevant programmes that will benefit from extra critical mass and lastly, where needed, initiate activities and allied funding proposals.
- The aims are to give suppliers and our member companies, a strategic voice and to help them 'hook-into' the programmes that they want to use to raise their performance.
- As trade associations and associated stakeholders, we all have a duty to help develop routes that help our member companies and supply chains succeed. But while we all aspire to these goals, all too often we are hampered by lack of resources, influence or even well defined opportunities.
- Now here is that opportunity. By becoming part of Phase Two to work with other sector partners we all have the opportunity to realise a result of which all parties will be proud. We are already 'well into the race'. The return on this investment and the leverage realised from government support, will, without doubt, far exceed piecemeal stand alone initiatives.

#### **To register your interest for more information**

We are keen to gauge the reaction of all potentially interested partners before the end of April as it will materially affect the way in which the programme is structured and managed.

For more information please contact Alliance Secretary Rupert Hodges (mobile 07939 722 447, [ruperthodges@eama.org.uk](mailto:ruperthodges@eama.org.uk)).