

# Science Industry Partnership



Science  
Industry  
Partnership

## Strategic Skills Action Plan 2017

Supported by

**Cogent skills**  
for science industries

# Strategic Skills Action Plan 2017

Skills Strategy Strategic Objective	Strategic Actions	Action supported by	Progress
1. Secure and embed vocational skills in the workforce, through raising standards & responsiveness in education & training provision	1.1 Establish an employer apprenticeship support offer through the Science Industries Apprenticeship Training Agency (ATA) supporting the sector to get best value and quality for the sector	SIP Apprenticeship Working Group (SAWG)	In place via Cogent ATA
	1.2 Identify regional skills funding opportunities and access these, with the support of SIP members, to deliver solutions to science industry skills priorities	SIP, LEPs	Work is continuing to identify opportunities and projects. New bid opportunity identified with Greater Cambridge and Greater Peterborough LEP. £764,659 of skills investment through funded projects
	1.3 SIP to support the Institute for Apprenticeships & Technical Education through the development of an occupational map, Trailblazer Standards and the new Technical Pathways for Further Education (FE)	SIP, Life and Industrial Science Trailblazer Group, SAWG, DfE	Occupational map completed, on-going development of access to information and format of search results. Further additions to job description and additional of new roles to the map - an on-going process.  New standards developed: Science Process Plant Engineer (L6), Laboratory Scientist (L6), Laboratory Technician (L3), Science Manufacturing Technician (L3), Science Industry Maintenance Technician (L3), Science Manufacturing Process Operator (L2). Standards in development: Science Research Professional (L8), Research Scientist (L6), Regulatory Affairs Specialist (L7), Bio/Cheminformatician (L7), Clinical Trails Specialist (L6), Quality Assurance Specialists (L2, L4 & L6), Technician Scientist (L5),  Monitoring standards in development: Materials Scientist (L7), Risk & Safety Professional (L7), Process Control Engineer (L6), Sales Professional (L6), Data Scientist (L6), SHE Technician (L3) Packaging Technician (L3).  T level development: Working with two groups to develop the curriculum for the Core and Specialist pathways for both the Health and Science and the Manufacturing and Engineering Routes. Reports due year end prior to submission to Government route panels.
	1.4 Create a network of industry partners and stakeholders working collaboratively on the development of science skills to optimise activity and provide consistent messages on the skills needs of the sector	Cogent, with Professional Bodies, Trade and Cluster Associations	
	1.5 Aggregate employer demand through the SIP to create a critical mass of learners, stimulating responsive high quality local and regional provision	Cogent	
	1.6 Promote and grow a national SIP assured provider network, delivering easy access to vocational training and CPD	SIP	National Quality Assured Provider network in place
	1.7 National apprenticeship Standards to be linked to appropriate professional accreditation and professional registration	Professional Bodies	Implemented through the SIP Trailblazer Group

2. Build and update the transferable skills base in the science based workforce	2.1 Establish a SIP HE skills group to bring academia, industry and stakeholders together to agree and take action to meet higher level skills requirements, including the development of Higher and Degree Apprenticeships	SIP HE Skills Group	SIP HE skills group established but under review to amalgamate with the AWG.  Working to develop a sector wide measurement of placement opportunities. This will be available in 2018
	2.2 Expand the availability of placement opportunities to enhance graduates practical and transferable skills, and quality assure the relevance of work experience gained through completion of the SIP Graduate Output Profile	Cogent Industry Academia	
	2.3 Professional bodies to extend and update degree accreditation criteria to meet employer skills needs, to include: - Multidisciplinary skills - Mathematical and statistical - Computing skills	Life and Industrial Science Trailblazer Group, SAWG, DfE, Professional Bodies, The Tech Partnership	HE Working Group working with Professional Bodies to extend and update degree accreditation
	2.4 Ensure relevant Apprenticeship and Technical Education Standards include: - Appropriate mathematical, statistical and computing skills - Enhance transferable skills through embedded behavioural competence	Cogent SIP	Ongoing via the Life Sciences and Industrial Sciences Trailblazer Group Reflected in the sector deal
	2.5 Support the development of training provision facilitating the transfer of skilled staff from established industries into emerging areas e.g. Pharmaceuticals to Advanced Therapy Medicinal Products (ATMPs), Oil and Gas to Industrial Biotechnology	Cogent	Included in Life Sciences Industrial Strategy and MMIP Roadmap seeking on-going funding for ATMP.
	2.6 Work with regional partners and stakeholders to identify and publicise funding streams to support short course training needs for the SME workforce	Cogent	To date 9 projects have been won in 2018 with a total value £764,659. These project are 6 to 18 months in delivery. Cogent partnered in a number of ESF 'Skills for Growth' projects. As a result of high management fees and lack of SME take-up the Lancashire project with Learn Direct was reduced in scope and the C&W project with Calderdale College terminated. Cogent will now focus on science only projects with an eye on the Sector Deals.
	2.7 Support identification of and access to commercialisation training, especially for SMEs	Cogent	Limited progress. Launching regional SIP membership offer to understand the skill needs for SMEs. First pilot launched on 16/10 in Cambridge

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3. Provide mechanisms for the upskilling the existing scientific workforce	3.1 Promote the use of online learning and multi-media platforms for the science sector workforce	Cogent, Professional Bodies	Cogent Skills Training is actively using on line learning for science apprenticeships
	3.2 Make a proposal to Government regarding the apprenticeship levy, to: - Ensure levy raised from science companies is spent within the science sector - Enable in-company delivery of training	SIP	Included in response to Industrial Strategy green paper and Sector Deal inputs
	3.3 Develop Apprenticeship Standards to allow companies to use levy funding to provide CPD training to the existing workforce	Life and Industrial Science Trailblazer Group, SAWG	Done and on-going work. New SIP Apprenticeship Landscape Document produced every 6 months
	3.4 Support Professional registration as a mechanism to ensure continual upskilling of the workforce through CPD	Professional Bodies, supported by industry	Implemented through the SIP Trailblazer Group
4. Attract young people to the Science Industries	4.1 Build understanding of the value of vocational learning as a pathway to higher level qualifications and successful careers through the identification, mapping and promotion of good careers schemes	SIP Careers Group, STEM Learning, Professional Bodies, Trade Bodies	A SIP careers sub-group has discussed 4.1 with SIP Ambassadors who felt they had sufficient knowledge at present.
	4.2 Grow the SIP STEM Ambassador Network to include representation across the science industry subsectors	SIP Careers Group, STEM Learning	The SIP Ambassador network has grown to 376 in total.  The British Plastics Federation funded a pilot to train 32 polymer specialist Ambassadors.
	4.3 Develop and promote a work experience structured programme to support more companies to offer opportunities	Cogent, MMIP	Three best practice brochures published for employers, apprentices and students/schools.
	4.4 Promote social mobility and diversity in the sector through: – Fair and equal apprenticeship promotion, recruitment and selection processes – Supporting staff from under-represented groups to become SIP Ambassadors	Industry, STEM Learning 'Insight into Industry' Scheme, SIP Careers Group, SAWG	A SIP careers sub-group has reviewed all of the Ambassador processes and materials with respect to social mobility and diversity. As a consequence they are revising some resources to widen the appeal and ensure there is no unconscious bias.
5. Monitor and respond to emerging skills needs	5.1 Conduct an annual review, working with the Ministerial Councils, of the SIP Red, Watch and Wish Lists <sup>1</sup>	Cogent SIP Members	Some progress on the lists has been made. The review will be published in 2018
	5.2 Support the development of solutions to meet demand for technology specific skills e.g. skills for development and deployment of decarbonisation technologies for energy intensive industries and specialist regulatory and sterile manufacturing knowledge for ATMP's	Cogent, Industry, Professional Bodies, Catapults	ATMP working on solutions including apprenticeships.
	5.3 Develop and communicate our understanding of the effect of Brexit on the sector, assessing the impact on skills	SIP, coordinating with trade & Professional Bodies / sector organisations	SIP Papers on Brexit have been submitted to Government. Brexit will be a Workshop theme for the SIP Board in 2018.

<sup>1</sup>The Red List denotes those areas and occupations identified in the SIP Skills Strategy with immediate shortages, requiring immediate action. The 'Watch List' denotes those occupations where possible future shortages are anticipated. The 'Wish List' denotes those areas where multidisciplinary skills are in high demand, but rarely available.

# *Science Industry Partnership*



Unit 5, Mandarin Court  
Centre Park, Warrington, WA1 1GG

t 01925 515220  
e [kate.hutchins@cogentskills.com](mailto:kate.hutchins@cogentskills.com)  
w [www.scienceindustrypartnership.com](http://www.scienceindustrypartnership.com)

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