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ASTUTE 2020 Operation External Evaluation

Mid-Term Evaluation

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ASTUTE 2020 External Evaluation: Mid-Term Evaluation

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Glossary

Acronym/Key word	Definition
ASTUTE	Advanced Sustainable Manufacturing Technologies (delivered as part of the 2007–13 ERDF Programme)
ASTUTE 2020	Advanced Sustainable Manufacturing Technologies (funded via the 2014–20 ERDF Programme)
CCTs	Cross Cutting Themes
ERDF	European Regional Development Fund
HEI	Higher Education Institution
M2A	Materials and Manufacturing Academy
SME	Small to Medium-sized Enterprise
TRL	Technology Readiness Level
UWTSD	Aberystwyth University and University Wales Trinity Saint David
WEFO	Welsh European Funding Office
WW&V	West Wales and the Valleys

Executive Summary

- i. This report documents the findings of the formative Mid-term Evaluation carried out as part of the external evaluation of the ASTUTE 2020 Operation.
- ii. The purpose of the Mid-term Evaluation was to assess progress to date, to check that the Operation was on-target to meet its objectives and to identify any lessons-learnt or ways in which the Operation could be re-shaped (if necessary) to maximise its impact.
- iii. The mid-term evaluation comprised:
 - Document and Monitoring and Information System Review
 - Qualitative Interviews with Stakeholders – 13 stakeholders from 8 organisations.
 - Online Survey of Beneficiary Businesses – 22 responses were received from 30 companies.
 - Analysis and Reporting – including emerging outcomes assessments and lessons learnt.

Mid-Term Position

Policy Drivers and Needs

- iv. The evaluation team undertook a review of the policy context, drivers and needs for the ASTUTE 2020 Operation to assess if the political and strategic landscape for its delivery had changed. The review found that the Operation remains coherent with the strategic objectives of West Wales and the Valleys (WW&V). The review highlighted two important developments. Firstly, a horizon scanning exercise has been undertaken to further develop the understanding of the Operation delivery team regarding current (changing) and future (political, technical, social and economic) market conditions. The review concluded that this process had been integral in ensuring the Operation remains fit for purpose. Secondly, that the UK Government published its *Industrial Strategy: building a Britain fit for the future* in November 2017. This provided further assurance that the objectives of the Operation were well aligned with the foreseeable future political

direction—and particular credit was given to the purposeful alignment of the Operation with the three Adaptive Smart Specialisation areas.

Objectives

- v. The evaluation team reviewed the Operation's objectives in light of developments in the policy context. Stakeholders were unanimously confident that ASTUTE 2020's objectives are unchanged since the Inception Evaluation and are still highly relevant. They also expressed confidence that the Operation has the necessary systems in place (particularly the Stakeholder Advisory Board) to monitor whether its objectives are still relevant on a regular basis.
- vi. The desk-based review of literature also suggests that the ASTUTE 2020's objectives are still highly relevant in the context of current policies and strategies.

Inputs/Resources

- vii. The evaluation team reviewed the Operation's inputs/resources in the context of its progress towards targets. The review concluded that the resources available to the Operation are likely to be sufficient for it to achieve its targets and they are being used effectively.
- viii. Stakeholders unanimously praised the time and effort inputted by the ASTUTE 2020 technical teams across the four partner HEIs and the efficiency and organisation of the Operation's Coordination and Support Team. The Operation's governance arrangements are effective. Stakeholders and beneficiary companies were highly satisfied both with the expertise and knowledge of academic staff and Project Officers, and the technology and facilities of partner HEIs. There appears to be sufficient demand from industry for the Operation, but also an observation from an industry stakeholder that those companies collaborating are those who have previously collaborated with HEIs or accessed public-sector support—with a suggestion that engagement beyond those already engaged could be beneficial to achieve wider impacts. The Operation has received referrals from other schemes, but there is room for further

improvement in the relationship with Welsh Government's SMART team. The Operation has developed close links with industry through Industry Wales and EEF,¹ and used a limited marketing budget effectively to promote the Operation.

Activities

- ix. The evaluation team reviewed the Operation's activities (identified in the Inception Evaluation) for their efficacy and effectiveness. The review concluded that the Operation's activities have generally been undertaken effectively and in a way that maximises outputs.
- x. The project approval process appears robust and designed to identify projects with the potential for high impact and minimise private sector displacement. This process facilitates the Operation providing demand-led, targeted and tailored support to enterprises, which are highly satisfied with the support they have received. The Operation is providing suitable facilities to enable this. The Operation's project approval process seeks to encourage larger-scale 'cluster' projects, but there is a concern that the remaining delivery time-frame might restrict the ability to do this. The Operation uses both established and new referral routes to signpost companies to other services. The Operation's horizon scanning process was well-received by stakeholders. The monitoring of the Operation is undertaken efficiently and transparently. Finally, the Adaptive Smart Specialisation areas selected in planning the Operation remain relevant.

Outputs

- xi. The evaluation team reviewed the progress of the Operation at producing outputs from its activities, both those with WEFO targets and others. Generally, the Operation appears to be on-track to achieving its output targets, as it is on or above target for all indicators but one and there is significant activity in the pipeline to suggest that the Operation will remain on target against its profile.

¹ The Manufacturers' Organisation (formerly the Engineering Employers' Federation).

Table ES.1: Summary of ASTUTE 2020 outputs

Output/Outcome	Indicator	Final target	Profiled cumulative targets as of March 2018	Progress (Q11, March 2018)
ERDF Indicators				
Enterprises supported to introduce new to the market products	Number of enterprises supported to introduce new to the market products / processes	8	2	4
Enterprises supported to introduce new to the firm products	Number of enterprises supported to introduce new to the firm products / processes	39	8	9
Enterprises cooperating with supported research institutions	Number of enterprises cooperating with supported research institutions	89	70	72
Enterprises receiving non-financial support	Number of enterprises receiving non-financial support	42	31	30
Patentable intellectual property	Number of patents registered for products / processes	5	0	0
Private investment matching public support	Private investment matching public support (£)	5,000,000	546,803	1,058,616
Employment increase in supported companies	Employment increase in supported companies	80	12	13
Additional Indicators				
Enquiries, referrals, and other initial contact with companies	Number of enquiries, referrals, and other initial contact with companies	n/a	n/a	189 ²
Formal requests for collaboration from companies	Number of formal requests for collaboration from companies	n/a	n/a	41 ³

² As of 18 January 2018.

³ Ibid.

Scientific Papers with supported enterprise as joint author	Number of scientific papers with supported enterprises as joint authors published (submitted)	n/a	n/a	2 (2)
Research Excellent Framework Impact Case Studies	Number of research excellent framework impact case studies	n/a	n/a	0
Non-Patentable intellectual property	Number of items of non-patentable IP	n/a	n/a	35
Referrals to other schemes (including Welsh Government)	Number of referrals to other schemes	n/a	n/a	18 ⁴
Referrals to private sector	Number of referrals to private sector	n/a	n/a	25 ⁵
Publicly available case studies	Number of publicly available case studies on projects with supported companies	n/a	n/a	6 ⁶

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Outcomes

- xii. It is noted—by their nature—outcomes and impacts take time to be realised and so the assessment at the mid-term stage provides indication of emerging results only.
- xiii. In general, the evidence collected from participant companies (n=21) at the mid-term stage illustrates that collaboration with ASTUTE 2020 is leading to positive benefits.
- xiv. Emerging results suggest that ASTUTE 2020 is particularly effective at increasing knowledge and expertise, safeguarding jobs, employment increased and increasing the amount of private investment secured.

⁴ Ibid.

⁵ Ibid.

⁶ Short abstracts of all projects are provided on the Operation website. Case Studies are developed for a smaller number of projects where it is possible to gather sufficient information.

- xv. The results for additionality of ASTUTE 2020 intervention are also positive with eight of the eleven observable impact indicators queried were self-reported as 'unlikely' to have been produced without ASTUTE 2020 collaboration. The extent of additionality for the creation of jobs was less convincing (although not negative), which could be the result of self-assessment bias (respondents believing in their own company's ability to create jobs or not admit that jobs cannot be created without external support) and should be monitored closely during the final evaluation.
- xvi. Similarly, stakeholders were unanimous in supporting the positive emerging outcomes and impacts that the Operation was generating (or forecast to generate). Stakeholders pointed to exemplar examples of project success, better captured through individual project cases—which illustrates the importance such evidence should have in the final evaluation.
- xvii. Of note, Operation monitoring data reports that £1,058,616 private investment matching public support has been achieved—which is on-track for target levels.
- xviii. Operation monitoring data shows an employment increase of 13 has achieved to date—further emphasis is given towards the effectiveness of support to job creation from the survey results which shows that on average, participant projects rate that their collaboration with ASTUTE 2020 have been 'effective' at leading to employment increases.

Impacts

- xix. At the mid-term stage, there is limited data to report on change, given that impacts take time to be realised. Instead, the survey has focussed on establishing emerging sentiment from the participant companies.
- xx. Feedback from the survey and stakeholder interviews regarding perceptions on how effectively ASTUTE 2020 is leading to the intended impacts is positive.
- xxi. There is evidence in Operation monitoring data to show that ASTUTE 2020 involvement is leading to tangible impacts. At the time of the

mid-term evaluation there have been 13 Jobs Created (OC.3) and 29 Jobs Safeguarded (OC.5), which in turn is estimated (using standard multipliers) that between 18.59 and 26.91 jobs could have been created—and between 41.47 and 60.02 jobs safeguarded in the supply chain as a result of ASTUTE 2020 activity (not discounting for deadweight, leakage or displacement).⁷

- xxii. The emerging findings from the Mid-Term Evaluation also show a positive link between the support that companies are receiving as a result of collaboration with ASTUTE 2020 and savings in energy, greenhouse gas emissions and waste.
- xxiii. The Operation team have embedded an effective data monitoring process via project status reports, which captures additional impacts from participant companies. Of note, additional impacts include non-patent generated IP (now included as an outcome), additional new to firm products, processes or services (over and above those which can be claimed as ERDF indicators), jobs safeguarded, increased investment into companies, and the publication of case studies.

Conclusions

- xxiv. In summary, the feedback from both stakeholders and companies who participated in the mid-term survey were highly positive towards the delivery of ASTUTE 2020 to date.
- xxv. In general, current outputs have exceeded profile expectations to date for all but one indicator (number of enterprises receiving non-financial support). The Operation delivery team are confident that all targets will be met by the end of the project.
- xxvi. To date, the value of private investment matching public support is twice as high as the profiled target. Employment increase in supported companies is marginally ahead of schedule (13 achieved compared with 12 target). Although other noted outcomes and impacts are difficult to measure at this stage in delivery, the feedback collected from survey respondents is on the whole very positive.

⁷ See paragraph 3.94.

- xxvii. ASTUTE 2020 appears to be particularly effective at increasing knowledge and expertise, safeguarding jobs, increasing employment and increasing the amount of private investment secured. This is particularly encouraging as these are the key objectives for the Operation.

Recommendations

- xxviii. At the mid-term stage it is recommended that the ASTUTE 2020 Operation should continue to be delivered largely as it is, but taking into consideration the following recommendations:
- Consider a time-extension
 - Continual monitoring of referral process
 - Continue to record full project costs
 - Proactively pursue cross-HEI and large, strategic / cluster projects
 - Continue to monitor and review the range of enquiries to ensure the Operation is addressing the challenge of engaging companies across the spectrum of target industries.
 - Ensure the external evaluators commissioned for the final evaluation engage with the participant companies as soon as possible to understand the viability of collecting the data required to evidence the outcomes and impacts.
 - Review the project status report template to explore the potential for collecting data to inform the final evaluation
 - External evaluators to re-visit the inception report recommendation to boost the UKIS Wales sample