ARGYLL AND BUTE COUNCIL

Policy and Resources Committee

Development and Infrastructure

8th December 2017

REVIEW OF THE DISCOVER SPACE UK BUSINESS CASE

1.0 EXECUTIVE SUMMARY

- 1.1 The purpose of this report is to highlight the main findings of Capital Ambassadors Ltd (CapAm) as detailed in the presentation entitled "CapAm Deliverables for DSUK, October 2017", produced on behalf of Discover Space UK (DSUK).
- 1.2 A report presented to the Policy and Resources Committee on 16th March 2017 noted that Campbeltown Spaceport (DSUK) has the potential to be a transformational project for both the Argyll and Scottish economies, and requires an initial investment to take it to the next stage of development.
- 1.3 This paper also proposed that the next phase of activity, to be carried out by CapAm, would provide information to inform a business case which intended to determine the direction that DSUK would take in developing a space-based business plan. In support of these activities Argyll and Bute Council contributed £40,000 towards the £120,000 total cost of this new period of enhanced activity, with Highlands and Islands Enterprise and Machrihanish Airbase Community Company (MACC) also contributing circa £40,000 each.
- 1.4 The recommendations are that DSUK continue to investigate a joint venture with the Benbecula launch site in the Western Isles to accommodate future opportunities at both sites.
- 1.5 Members are asked to
 - 1.5.1 Approve the council's continued involvement with DSUK including an investigation of a possible joint venture with the Benbecula launch site to accommodate the possible development of facilities at Machrihanish.
 - 1.5.2 Consider the content of the presentation to be given at this meeting by CapAm.

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2.0 INTRODUCTION

- 2.1 In March 2017 Capital Ambassadors Ltd (CapAm) was contracted by DSUK to deliver information resulting from a series of 14 activities, defined by DSUK aimed at providing information on nine deliverables. These activities resulted in the presentation entitled "CapAm Deliverables for DSUK, October 2017" and which forms the basis for the presentation.
- 2.2 These activities were intended to form a space-based business plan. Argyll and Bute Council contributed £40,000 towards the £120,000 total cost of this new period of enhanced activity, with Highlands and Islands Enterprise and Machrihanish Airbase Community Company (MACC) also contributing circa £40,000 each.
- 2.3 The information contained in the presentation highlights a period of enhanced activity, resulting in nine deliverables, of which eight are key.
 Table 1 of this report details the aforementioned 14 activities and 9 deliverables.
- 2.4 In addition to noting the findings of CapAm's work to date, this report seeks Member's approval for the Council to continue to work with DSUK in order to investigate a joint venture with the Benbecula launch site to accommodate the development of facilities in both sites.

3.0 RECOMMENDATIONS

- 3.1.Members are asked to
 - 3.1.1. Approve the council's continued involvement with DSUK including an investigation of a possible joint venture with the Benbecula launch site to accommodate the possible development of facilities at Machrihanish.
 - 3.1.2. Consider the content of the presentation to be given at this meeting by CapAm

4.0 DETAIL

4.1 **Table 1** details the activities and deliverables associated with the work of CapAm on behalf of DSUK.

Ac	Activity		Deliverable	
1.	Prepare data for Business Case and investment campaign	1.	Preparation of key data for business case/investment campaign	
2.	Further detail and validate operating model design including proposals for formation of legal entity	2.	Validation and detailing of operational model including SWOT	
3.	Further develop relationships with partners	3.	Gathering of initial requirements	
4.	Define SWOT analysis for each collaborator	4.	Identification of critical projects	
5.	Identify and prioritise obstacles and challenges	5.	High level scoping of critical projects	
6.	Finalise market analysis	6.	Preliminary governance framework	
7.	Identify quick wins	7.	High principles of business case	
8.	Define critical projects	8.	UKSA grant funding submission	
9.	Define high level resource for critical projects	9.	Political/public capture plan	
10.	Define business benefits			
11.	Produce materials to support activities			
	Outline pros and cons of approaches			
	Attend meetings as required			
14.	Develop public/political capture plan			

- 4.2 The information provided by CapAm provides the background to the significant amount of collaboration and partnership working that has been undertaken by DSUK and by CapAm on the behalf of DSUK. During the process of collaboration and partnership working several non-disclosure agreements were signed with a number of high level international space industry companies.
- 4.3 Options for vertical and horizontal launch models were investigated. This led to DSUK focusing on a horizontal launch model as this better suits the location and facilities currently available at Machrihanish.
- 4.4 An application for funding was made to the UK Space Agency (UKSA) during its call for grant proposals in June 2017, the result of which has not yet been made public. This application process developed a clear operating model and considerably enhanced the exposure of DSUK as a partner and Machrihanish as a site with tremendous opportunities.
- 4.5 Recently, discussions have been held with a rocket manufacturing

company, interested in collaborating with both DSUK at Machrihanish and the Benbecula launch site. The aim is to assemble the rockets at Machrihanish and ship the completed sections to the Benbecula launch site. Although still in the early stages of discussion, this project illustrates the possibilities revealed by the work of DSUK and CapAm.

4.6 The economic impact of siting a UK Spaceport at Machrihanish are considerable. **Table 2** provides a conservative estimate on the employment and financial gains of such a venture.

Economic effects of a UK Spaceport at MACC				
Gross impact				
FTE employment impact	992			
Turnover impact (£m)	329.9			
GVA impact (£m)	61.4			
Income impacts (£m)	23.5			
Net direct impact				
FTE employment impact	784			
Turnover impact (£m)	238.5			
GVA impact (£m)	46.2			
Income impacts (£m)	18.3			
Net direct, indirect and induced impacts				
FTE employment impact	1,221			
Turnover impact (£m)	309.7			
GVA impact (£m)	59.7			
Income impacts (£m)	23.4			

 Table 2. Economic impact of a UK Spaceport at Machrihanish

- 4.7 The work of CapAm and DSUK has led to the following outcomes and opportunities:
 - A considerable number of international companies are now aware of the possibilities of the MACC site and are in discussions with DSUK and DSUK
 - Non-Disclosure Agreements have been signed with several national and international organisations and companies
 - Although the MACC site is limited to horizontal launch, analysis suggests that combining with a vertical launch site/operator would reduce business risk and increase revenue potential
 - There is potential for the development of a hydrogen economy at MACC
 - A number of specialist sub-groups have been organized and allocated projects
 - A public relations strategy has been developed. DSUK, however, wishes this to remain passive until notified of the result of funding applications
 - DSUK has been approached by companies seeking to develop launch and/or manufacturing opportunities
 - Application to a UK grant funding process to the value of £9.5m

5.0 CONCLUSION

- 5.1 The distance travelled by DSUK since its inception is significant in terms of reputation and number of collaborators. The presentation by CapAm provides significant proof of this and gives a clear operating model for future growth.
- 5.2 It is important that the current impetus is continued to allow for DSUK to be prominent in the market and to avail itself of any future opportunities within the space industry. The council's continued involvement with DSUK, will ensure that the maximum benefit to residents is realised. This includes an investigation of a possible joint venture with the Benbecula launch site to accommodate future developments.

6.0 IMPLICATIONS

6.1	Policy	This work supports the key aims of the Local Outcome Improvement Plan including aims 1, 2 and 3 together with the Economic Development Action Plan.
6.2	Financial	None arising from this report.
6.3	Legal	None
6.4	HR	None
6.5	Equalities	None
6.6	Risk	There is no guarantee that the £40k invested in this project by Argyll and Bute Council will result in the project progressing to becoming a part of the space industry.
6.7	Customer Service	None

Executive Director of Development and Infrastructure, Pippa Milne Policy Lead, Aileen Morton 24/10/2017

For further information contact: James Paterson, Senior Economic Growth Officer