



**Desk study to review the potential for reinvigorating the J-eS costing upload service**

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## **1 Introduction**

This report is submitted by the Strategic and Specialist Support Team of the JISC's FSD programme in response to a request from the programme manager, Alex Hawker, for a desk study to review the J-eS upload system. The upload system is part of the J-eS up system owned by the Shared Services Centre at RCUK.

The purpose of the study is twofold. The report identifies, firstly, the present state of the J-eS upload software and, secondly, its past, present and potential future use. Recommendations are presented as to the course of action recommended for the JISC FSD programme.

## **2 Methodology**

Our approach was to identify appropriate online documentation and to interview key individuals by telephone. The table below shows the number of individuals we interviewed: a small number of these were interviewed more than once. We were most helpfully given access to the e-mail list supporting the development of the J-eS upload system and were able to contact individuals based in institutions through that.

<b>Stakeholder group</b>	<b>Number of people interviewed</b>
Suppliers of software used within the preparation of research grant applications	3
Institutions	9
Members of the RMAS steering committee	5
RCUK managers	2
Others	3
Total	22

Of the institutional representatives we spoke to, eight were from Russell group universities, one from a 92 University and the remainder from other universities. None were from non-university institutions.

## **3 Information gathered about the state of the J-eS upload system**

### **3.1 Information from Research Council and JISC sources**

J-eS, which was developed in-house, has been in use for about six years and was based on one previously in use in just one of the research councils. Its development for all the research councils followed the development of a framework shortly after the millennium, which involved consultations with the institutions that would be using it. During these consultations, a proposal was made that an upload system should be developed.

The use of J-eS for the submission of applications research councils has been obligatory since about the beginning of 2006. There are a lot of these awards. The Times Higher Education Supplement has made available statistics for the research council awards for the period 2007 to 2008<sup>1</sup>. These show that 12,707 applications were made of which 3547 were successful. Several institutions make over 500 applications each per annum.

The upload system has been developed to make it easier for institutions to develop proposals and manage these effectively in-house. According to the Progress Report for the J-eS Cost Upload Direct Submission System, dated 12 December 2007, the functionality was first trialled in March 2004 and then was planned for live release in July 2006. This was to have followed user acceptance testing (UAT) between March and June 2006. In fact a number of windows were made available but this ceased when no testing was carried out during one UAT window. During UAT windows, RCUK made resources specifically available to support developers. Outside the windows, RCUK committed only to best endeavours.

The upload system has two components. The first provides an upload of costing information into an existing J-eS proposal. The second, RODES, allows the complete creation of a proposal from an institutional software backend.

At an early stage of our investigations, we identified the existence of euroCRIS<sup>2</sup> and of CERIF<sup>3</sup>. CERIF is a standard for the exchange of research proposal data, agreed at a European level. J-eS does not make use of this standard but does use eGov standards.

### **3.2 Information from institutional sources**

The interviews we undertook related almost exclusively to use of the costing upload facility. Only the most research intensive institutions seem to have given RODES significant consideration.

Because the cost upload system is a bulk upload facility and only works with proposals that have already been created within J-eS, the workflow for a principal investigator is slightly tortuous. Costs can only be uploaded once a proposal has been created in J-eS. The upload system does provide for hierarchical authorisation within institutions of the costs

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<sup>1</sup> [http://www.timeshighereducation.co.uk/Journals/THE/THE/21\\_August\\_2008/attachments/grants\\_recieved2007-8\\_final.xls](http://www.timeshighereducation.co.uk/Journals/THE/THE/21_August_2008/attachments/grants_recieved2007-8_final.xls) (sic)

<sup>2</sup> <http://www.eurocris.org/>

<sup>3</sup> <http://www.eurocris.org/cerif/introduction/>

before they are submitted. We found that the way in which this was used varied significantly across universities. As a generalisation, those universities with a large number of research proposals tended to allow the principal investigators to make the final cost submission, after agreement has been reached with the centre about the costs and prices to be applied. Universities with fewer submissions tended to submit from the centre. One interviewee noted to us that the upload system changes the relationships embodied within the workflow: the relationship of the J-eS system is with the principal investigator but the provision of the upload facility changes that relationship to one between the system and the research organisation. This is reflected for example in the question of data ownership: who owns the J-eS data on the principal investigator, RCUK or the research organisation employing the principal investigator.

We received some comments on problems with the upload system and this serves to highlight institutional concern about communications with RCUK. One of our interviewees went so far as to say they had only recently become aware of the upload system. There was a widespread feeling that the UAT windows made available for testing were short and not necessarily appropriate to the timetables of universities, who may have had other priorities at those times. In particular, full economic costing was demanded of institutions at about the time that the testing of the upload system began: inevitably, university resources were diverted to dealing with this.

Outside the UAT windows, RCUK would only support testing on a best endeavours basis. It was also noted to us that there has been no meeting between RCUK and universities to discuss the software since a meeting in Swindon in 2004, a meeting described to us as "robust".

Most people we interviewed believed that opportunities for testing had ceased and there was a lack of understanding as to why this is. In fact, one institution is currently testing the system with a view to bringing a production piece of software into operation in the New Year. One interviewee suggested that the cessation of testing is something of a chicken and egg problem. Institutions ceased because they felt they were getting insufficient support from RCUK: RCUK ceased supporting UAT windows because they felt there was insufficient testing. The fact that RCUK would only speak to institutions and not to suppliers also caused difficulty for institutions, most of whom are using commercial software rather than developing the software in-house.

### **3.3 Information from Suppliers**

Each of the software suppliers we spoke to had developed software that would link into the cost upload facility of the J-eS system. Only one of the suppliers suggested that their customers had not requested this facility: the other two indicated there was a keen demand for this. It is clear that the RCUK system has worked according to its specification and that therefore the software suppliers have been able to develop systems which work with it.

The suppliers felt that they had been kept at arms length from the RCUK developers of the upload system: RCUK had spoken only to the institutions and the suppliers had been obliged

to work through the institutions. This had caused frustration both within the suppliers and the institutions, which meant that there was declining enthusiasm for developing linkages into the upload system. This inevitably meant that resources were not being devoted to testing the linkage into the J-eS upload system. The suppliers we spoke to were not uniformly aware of the present state of the J-eS upload system. It was suggested to us that it had actually been switched off.

## **4 Information gathered about the use, both actual and potential, of the J-eS upload system**

### **4.1 Information from Research Council and JISC sources**

An early interviewee from the Research Councils gave the view that J-eS has only a short lifetime and that a replacement system would be introduced within a couple of years or so. However, further investigation has supported the view that the future of J-eS, at least to a four year or so medium-term, is assured. A stated reason for this is that the shared service centre of RCUK has currently a huge investment programme under way and it would find difficulty in diverting resources to a replacement for J-eS.

It is clear that RCUK has used substantial resources in the development of the upload system and also that the system developed meets its specifications. RCUK is, however, concerned about planning for the continuing use of resources in supporting a system which currently is not used. They would only wish to invest further resources in supporting the testing of the upload system if they had a reasonable expectation of use of the system in production mode in the future.

If the use of CERIF were to be the cause of lack of use of the upload system, RCUK would be prepared to invest in adaptation of the upload system to handle CERIF, as long as this did not require a major re-engineering of the system. However, RCUK has no direct evidence that its lack of CERIF compliance is the cause of its lack of use.

It is clear that CERIF is of real importance and is the standard which should be followed by any system which deals with data exchange relating to research proposals. However, despite having been in existence since 1991 and with its development being managed by the euroCRIS organisation, CERIF does not yet provide all the answers. Additionally, two other research information system projects that we have identified that are based on CERIF have found it necessary to extend the standard to meet their needs. Several people we spoke with stated that it needed extensions and modifications but, as an EU recommendation to member states, it is the de facto standard. It is in use in a number of EU states.

The JISC has, however, recently undertaken a project titled "Exchanging Research Information in the UK"<sup>4</sup>, the intent of which is

- a) to identify and document scenarios, requirements and criteria for exchanging research information in the UK.

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<sup>4</sup> <http://www.jisc.org.uk/whatwedo/programmes/inf11/exri-uk.aspx>

- b) To appraise the options for doing so and, specifically, whether any particular format for exchanging research information (eg CERIF) would be suitable.

The project was due for completion at the end of November. It is very probable that the outputs of this will be of value and available to RMAS and will place the importance of CERIF in context.

## **4.2 Information from institutional sources**

The evidence we have suggests that institutional central administrations want the cost upload facility but that few at present want the RODES facility. Institutions do consider it important to have a clear understanding of the costs contained within proposals, not only to ensure that the costs are calculated according to the policies of the institution but also that the institution is in a position to address the financial risks implicit within any proposal. The principal requirement of institutions at present is for the cost upload facility to be brought into production.

Only one institution to whom we to which we talked appeared to consider it unlikely that they would link into the J-eS upload system: this institution had a small number of research proposals and uses a spreadsheet as its institutional system

## **4.3 Information from Suppliers**

There was no question but that the suppliers are enthusiastic to ensure that their software can link into the J-eS upload system and are prepared to commit resources to doing that. It is in the interests of the suppliers that their software is seen by users to provide a complete service: at present, this is not the case. It would seem that of the order of 30 to 40 institutions would wish to access the cost upload system if the suppliers we spoke to were enabled to embed access in their own systems. They would undoubtedly welcome a direct dialogue with RCUK in order to ensure that their testing is satisfactory: one suggestion is that they be given direct login accounts of their own for testing purposes on the J-eS upload system.

# **5 Discussion and Recommendations**

## **5.1 Discussion**

In the proposal for the study we identified a number of tasks to be undertaken and questions requiring answering. In the following paragraphs we discuss the answers to these questions. In this, we discuss the cost upload system only: we did not find the RODES facility to be a significant priority for any but a very small number of institutions.

- 1) What is the use of the current J-eS upload service?

At present it appears that it is only being used by one institution for testing new institutional software. The institution is planning to move into full use in the New Year.

- 2) Is there a need for the J-eS upload service?

There is ample evidence, both from the institutions we have interviewed (mainly the research intensive ones) and from the suppliers we have talked to, that there is a demand for this service. There are two principal reasons: one is that it removes the

need for re-keying of data and the second is that it allows central administrations to have control over the costing process.

- 3) What were the barriers to adoption of the J-eS upload system by institutions?  
The principal issue seems to have been that institutions found the UAT windows too short and their position as go-betweens between RCUK and suppliers frustrating. The specification does not entirely meet the needs of institutions but it is clear from our discussions with software suppliers and with those institutions developing software that the failings are relatively minor.
- 4) Is the J-eS upload system still viable?  
J-eS itself appears to have a future stretching well into the medium to long term and, given that the demand for upload system exists, the J-eS upload software is therefore clearly viable.
- 5) What are the options for linking RMAS into the J-eS upload system in a sustainable form?  
We have identified three suppliers who have developed interfaces to the J-eS upload system and at least one institution which has developed its own. Development of the software does not therefore seem to be a problem as long as the testing is adequately catered for by RCUK.  
RCUK have indicated their preparedness to invest in bringing the J-eS upload system to production status. We would suggest that this includes a continuing dialogue between RCUK and the suppliers.  
The development of a back-end for RMAS into the J-eS upload system is not of general applicability to the sector and should therefore be seen as part of the overall RMAS development.
- 6) Is adoption of the CERIF standards important?  
This is probably answered by the outputs of the JISC project entitled "Exchanging Research Information in the UK". We would suggest that the specification of RMAS allows for data exchange both with the J-eS upload system and in a CERIF format.
- 7) How should institutions that wish to interface the J-eS upload system with existing back-end systems be catered for?  
The linkages of the RMAS system backend which delivers data to the J-eS upload system should be published.
- 8) Are there any special issues for those institutions who are committed to the RMAS deliverables?  
If our recommendations (see section 5.2) are adopted, we see none.
- 9) Are there any management issues which need to be identified?  
In our view, it is absolutely vital that RMAS and RCUK have a close working relationship, so that the RMAS development can be tested properly against J-eS. Such a close working relationship might be achieved by having a steering committee for RMAS which includes RCUK representation and is chaired by an influential third party chairman. The steering committee should have available to it both technical and procurement skills and experience.
- 10) What are the possible timescales for use of the J-eS upload system by RMAS?

The J-eS upload system for costing data appears to be working now. To allow RMAS to use it, RCUK needs to revive its programme for moving the system into production.

11) How can this development be brought into the FSD programme?

If this development were to be treated separately from the rest of RMAS, it could be introduced into the FSD programme as a separate module under the SOA banner. This would require that the interfaces to the backend be published and be clear. In such a case, the module could be provided as a shared service to those institutions requiring it. Since the J-eS system is a shared service provided by RCUK for the use of the research community, and because the upload system enhances this service, it is arguable that FSD funding could be made available to encourage suppliers and institutions to complete the testing process and to encourage institutions to roll out use of the system. This could be facilitated by the appointment of a project manager.

12) What are the risks?

The principal risk is that institutions are not interested in such an SOA module as suggested in paragraph 11. Given that the principal suppliers have already developed their own interfaces to the J-eS upload system and their customer bases represent a sizeable proportion of institutions with an interest in the J-eS upload system, it is very likely that, in today's environment, there would be a low level of interest in such an SOA module.

## **5.2 Recommendations**

### **5.2.1 General recommendations**

Recommendation 1: RMAS is justified in investing in a backend into the J-eS cost upload system.

Recommendation 2: RMAS should invest in the capability to share information with CERIF conformant systems.

Recommendation 3: To facilitate bringing the J-eS upload system into full production, we suggest that RCUK be encouraged to maintain a dialogue with both institutions and software suppliers.

### **5.2.2 Recommendations for the JISC**

Recommendation 4: Development of an RMAS interface to the J-eS upload system should be seen as part of the overall development of RMAS.

Recommendation 5: There is little justification for the JISC to provide funding specifically for the development of such an interface through the FSD programme.

Recommendation 6: Consideration should be given to FSD funding of a project manager within the programme to support institutions and their suppliers in developing fully tested upload capabilities and moving to production status.

## **6 Acknowledgements**

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