University of East Anglia

ISC11D006

Title: **UEA Emergency SMS Text Messaging Service**
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Issue

To consider a proposal for introducing and funding text messaging tools to provide an alternative medium for communication with staff and students.

Recommendation

Recipients are asked to consider this report and endorse the recommended approach.

Resource Implications

If approved there would be a need for an additional supplementation of ISD budgets in order to provide this service, the cost of which would be £4,320 per annum. ISD is unable to fund this from existing resources.

Risk Implications

The new service proposed would enhance the University's ability to communicate with staff and students in the event of an emergency. Improved communications would potentially help to reduce risks associate with major incidents.

Equality and Diversity

All new services are subject to Equality Impact Assessments as they are implemented.

Timing of decisions

Not applicable

Further Information

Enquiries about the content of the paper should be addressed to Jonathan Richardson (jonathan.richardson@uea.ac.uk – ext 1029)

Background

Following the failure of the network core in December 2010, ISD was asked to develop proposals for alternative communications mechanisms to alert students to problems.

Discussion

UEA Emergency SMS Text Messaging Service

Overview

Over the past years several large impact events such as the December 10 network outage, flu pandemic warnings, etc. have occurred which have called into question the University's ability to communicate with students in the event of an emergency and the capability to contact students via SMS messaging would be advantageous.

We could also consider options of using SMS messaging for non emergency events such as:

- Lecture room changes
- Cancelled lectures
- Start of year reminders for fees, registration, photo upload, etc.
- Bad weather warnings

Using the service for more than one function has the added advantage of encouraging registration. Without obvious benefits for the user there is little reason to ensure mobile numbers are kept up to date and the value of using SMS for emergency notification is diminished. Any wider use to encourage students to lodge mobile numbers with us other than for emergency notification must be carefully considered and will require a separate analysis to look at authorisation routes, opt-out procedures and data protection statements.

At present, we have a mobile number for approx 60% of all students. No mobile number is held in SPOT for staff at present, though this data can be extracted from the HR system if required.

Considerations

An emergency SMS text messaging service should:

- Complement other messaging means – email, Facebook, twitter, etc.
- Not replace the existing regulations for students to regularly check email.
- Not be assumed to be guaranteed delivery – there is no guarantee a message can be sent, or received, or that students have mobile numbers, or that these are correct.
- Not be assumed to be secure – caution should be exercised over sending sensitive messages.
- Not be used for non emergency purposes – specifically in relation data protection (see below).

Data Protection
In our Data Protection statement the University agrees to collect data as below:

"UEA must hold and process data relating to students in order to undertake teaching and research, to administer courses, examinations and accommodation, and to ensure the health, safety and well-being of students."

And

"It is a condition of registration with the University that the following data may be collected, used and updated in accordance with the eight Data Protection Principles set out above.

- *Personal details, including application forms.*
- *Details of courses, enrolments, marks and examinations.*
- *Financial information collected for the purposes of administering fees and charges, loans, grants, studentships and hardship funds.*
- *Photographs.*
- *Other data which may be collected in pursuance of the University's legitimate functions in ensuring the health, safety, and well-being of students and ensuring the academic quality and validity of both research and teaching at the University."*

In particular the fifth item above covering 'Other Data' would enable us to use mobile numbers gathered at registration for the purposes of health and safety and well-being of students in the form of emergency notifications. It is permissible for the University to ignore personal preferences (which might have been identified by a user opting out of some other service using the same mobile technology in the future) relating to communication methods (this is permissible if it is in the 'vital interests of the data subject' – Data Protection Act Schedule 2(4)). In addition, phone numbers may be stored by third parties for the purpose of sending messages, but names will not be stored. There may, very rarely, be the need to send a message to identified groups for test purposes.

When should the service be used?

Existing University-wide incident and crisis management procedures should always be in operation before the service is used. The incident manager should recommend the use of the service for approval by senior managers based an assessment of the health and safety implications and/or the impact of the incident on a section of the university population.

Approvers

A request to send a message via the service must be approved by one of the senior crisis management team or a member of the Executive Team.

Authorisation will be given for a message only if:

- It is considered that it is important to get the message to a significant number of the recipients as soon as possible, and
- Content is both appropriate and factually correct.
- The **message format** meets the guidelines as defined below.

Target Recipients

It should be possible to target messages to various groups as below:

- All staff and students
- All staff
- All students
- All undergraduates
- All postgraduates
- All postgraduates research
- All postgraduates taught

Message Format

- Messages should start with the words 'UEA Alert:'
- Messages must clearly indicate what it concerns, i.e. 'UEA Alert: Winter Weather Closure'
- Messages should be no longer than 160 characters and should address the recipient directly, i.e. as 'you'.
- Message should include essential points, and should avoid 'text speak', e.g. write 'you', not 'u'; and 'for', not '4'.
- The message should indicate where more information can be sought. If the University website is operational, 'see www.uea.ac.uk'. or 'check email for details'.

Service Hosting Options

We have investigated 3 options for hosting this service.

ActiveSMS

This service is currently running within ISD and is used to send system alert messages to support staff. The service is hosted in the ITCS machine room and uses a single USB connected mobile device. Message costs are at standard network rate and not able to be discounted by buying in bulk.

For small group messages this is sufficient. The system would not however scale to be used for student and staff messaging.

Janet txt

This service is contracted by Janet and run on behalf of the HE Sector. Setup cost is free with most costs relating to message costs. There is no option to brand the service, or integrate it with our VLE.

To enable the service we will need to purchase a block of messages at 4p per text. It is recommended we carry a credit of 20,000 texts in order to have enough in credit to send at least one bulk message. Since messages expire on an annual basis the cost of this service would be an annual recurring cost.

To ensure messages are shown to come from UEA we would register for an approved sender id.

We would use a SOAP/XML API to feed staff and student mobile numbers from SPOT.

Item	Qty	Cost	Total	
Setup	1	Free	Free	
Text Bundle (expire after 12 Months)	20000	£ 0.04	£ 800.00	
Network approved sender ID £25 per month	12	£ 25.00	£ 300.00	
SOAP/XML multiple user license £50 per month	12	£ 50.00	£ 600.00	
			£1,700.00 pa	+ VAT

Text bundles take up to 1 business day to order and enable. We could purchase bundles immediately after using some but would need to hold some in credit in order to be able to send messages immediately.

The setup would enable up to 5 named users to administer the system and send messages.

Blackboard Connect (txttools)

This is a service run by Blackboard (our current VLE supplier). The service is separate from the VLE and is hosted offsite. There are optional components to link the service with our VLE in the future should we wish to extend the use: this feature is not available with other services and has already been requested to support some teaching in FMH.

The service can be fully branded for UEA and provides interfaces for users to register/unregister from the service. There is also an Android and iPhone app for administrative staff to use to send messages – reducing the dependence on having a pc available in an emergency.

The service has multiple APIs and can be fed with data and groups from SPOT.

Item	Qty	Cost	Total	
12 month Licence with 5000 messages	1	£3,000.00	£3,000.00	
Text Bundle (do not expire)	15000	£ 0.04	£ 600.00	
			£3,600.00	+ VAT

(£3000 pa + £600 recurring when required)

Blackboard Connect is more expensive but is both easier to integrate with existing systems and can be used more widely for other users if required. Unused credit can be rolled forward and we can utilize it far more flexibly to enhance teaching and learning in the future, which may have an advantage of ensuring we have good take-up of the service.

Recommendation

It is recommended that due to the added benefits of the Blackboard Connect service and the possibility of integration into our VLE that we purchase this option.

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v0.1   06 October 2011
v0.2   12 October 2011 – following comment from ISDMT