Telephone in Every Instructional

Space

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Information Systems & Services

Project Charter

Telephone in Every Instructional Space

Executive Summary

To comply with Texas Law (Texas Education Code (TEC) 37.108), McLennan Community College (MCC) Department of Emergency & Risk Management has secured funding in the FY 2023-2024 budget to place a telephone in every MCC instructional space that does not already have a device to communicate with emergency response services during emergencies.

MCC Information Systems & Services Infrastructure (Infrastructure) will engage a structured cabling vendor to install cables, fiber optics and an Intermediate Distribution Frame (IDF) where needed. Infrastructure will order, configure and deploy telephones internally. Infrastructure will configure and install existing spare switches where needed. Infrastructure will order and install media converters, SFPs and Uninterruptible Power Supply (UPS) needed for the project.

Infrastructure plans to start engaging vendors June 10, 2024 to get quotes for telephones, wall mounts, IDF, structured cabling, fiber optics, media converts and UPS. Work is estimated to be completed by September 30, 2024.

The estimated cost of structured cabling vender, telephones and additional accessories is \$83,000.

Business Need and Background

• This effort will benefit MCC faculty, instructors, and students by facilitating two-way communication between instructional spaces and first responders during periods of emergency. This two-way communication has the potential to greatly reduce the amount of time it will take for first responders to address emergencies around campus and ultimately, save lives.

- Texas Law (TEC 37.108-2) requires a measure "...to ensure district employees, including substitute teachers, have classroom access to a telephone, including a cellular telephone, or another electronic communication device allowing for immediate contact with district emergency services or emergency services agencies, law enforcement agencies, health departments, and fire departments;"
- Not every instructional space on MCC's campus has a means of two-way communication with first responders during emergencies. Currently there are 159 instructional spaces in need of communication devices.
- Previous limitations included a lack of ethernet port density to accommodate the number of two-way communication devices required to equip every instructional space on campus. This limitation was eliminated with last year's switch replacement project. There are now enough ethernet port density and spare switches to accommodate this effort.

Project Description and Scope

- This project will address the need by bringing MCC into compliance with Texas Law (Texas Education Code 37.108) by providing a means of two-way communication with first responders in instructional spaces.
- Instructions spaces are areas confined by walls or fences, where faculty and staff regularly conduct classes for students.
- This project is expanding the number of telephones in MCC's voice over internet protocol (VoIP) service. This project will add 154 telephones, one in every instructional space on campus that does not currently have two-way communication (see Exceptions in Out of Scope).
- Telephones will not be able to receive calls from outside of campus, cutting down on the chances of disruptions of instructional time. Every telephone deployed will be programmed to automatically dial the MCC Campus Police Emergency telephone number with the push of a button. Additionally, every telephone will be capable of dialing McLennan County emergency services 911 and providing the 911 dispatcher a temporary means to call back and reach the telephone directly for up to two hours after the telephone dials 911.
- Two 2-button, weather resistant, call boxes will be installed on the playgrounds of the Child Development Center to meet the needs of the TEC 37.108-2, where telephones would not be practical.
- ISS Infrastructure currently maintains and supports an on-premises telephone system, this will not change. It is not in the scope of this effort for these additional telephones to be configured or customized beyond what is already mentioned, therefore the support requirements of these devices are low. Customer requests to modify or change these devices will be denied without the approval from the Director of Emergency and Risk Management.

- The structured cabling will be installed in 43 instruction spaces by Panduit certified vendors and have a 25-year warranty covering workmanship and materials. The vendors will certify the structured cabling and cover the warranty. This insures that MCC can depend on this structure cabling to meet its needs and eliminate repair cost for years to come.
- The telephones and call boxes being deployed use the industry standard, session initiation protocol (SIP), insuring that these devices will be compatible with any future phone system the College may purchase.
- An intermediate distribution framework (IDF) will be installed in Community Services Center (CSC) Dwing. CSC D-wing is physically too far away from any of the other IDF's in the CSC for the structured cabling runs to be within the industry standard distance from a switch to provide reliable connectivity.

Out of Scope

The following items are deemed "out of scope" for this project.

- Exceptions:
 - The following exceptions have been approved by Director of Emergency and Risk Management:
 - The Scene Shop in the BPAC 147 will not have a telephone installed but there is a phone available in adjoining staff office (BPAC 148).
 - CSC B29 will not have a telephone installed at the request of the Cosmetology Program Director, but there is a phone available in adjoining office (B35).
 - The small animal treatment room, Vet Tech 120, will not have a telephone installed at the request of the Director of Veterinary Technician Program. There is no practical counter or wall space for a phone and the tile walls make it impractical. Students are always accompanied by an instructor with a cell phone.
- Instructional spaces not maintained by MCC will be outside the scope of the project. Independent School Districts that host Duel Credit classes have the responsibility to meet TEC 37.108-2.
- Upgrading the current connectivity telephone service from Primary Rate Interface (PRI) with SIP is not necessary to meet the purpose of this project. But it should be considered in a future project to meet industry standards.
- Migrating the fire alarm's remote monitoring from analog voice circuits to an IP-based solution is outside the scope of this project. However, it should be considered in a future project to meet industry standards.
- While researching the requirements for this project it was discovered that the Fiber in CSC F 140 is not terminated in a bulkhead. Correcting that issue is outside the scope of this project and should be added to future projects for improving intra-building fiber connectivity.

Project Goals

The overarching goal of this project is to provide two-way communication with first responders from instructional spaces on campus during emergencies. Instructional space occupants will expect the device to

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work and provide dial tone when it is picked up to place a call. Occupants will expect the device to provide the same 911 service functionality, this includes the ability to call 911 without dialing 9 first, and the ability for the 911 operator to call the device back directly if the call is interrupted.

This project will be considered a success when there is properly functioning two-way communication device in the 156 instructional spaces not currently covered by communication devices by September 30, 2024.

Project Schedule

The budget for this project was approved in the 2023-2024 budget under Emergency & Risk Management Required Technology. Planning has been ongoing since the project was approved. Requirements have been determined. Communication will be conducted during June and July 2024. Procurement will be conducted during June and July 2024. Procurement will be conducted during June and July 2024. Board approval is needed before purchases can be made. Deployment will begin as soon as the communications devices are received and configured were new structure cabling is not needed. Installation of communication devices where new structure cabling is needed will begin as soon as the contractor completes structured cabling installation. Delays might me caused by staff leave, contractor scheduling, and the unavailability of products.

PHASE	FY2024Q2		FY2024Q3			FY2024Q4			FY20254Q1			
	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Planning												
Communication												
Planning												
Inventory												
mventory												
Procurement ¹												
Deploy ¹												

¹ Dependent on the delivery of equipment. The project schedule will be updated once more is known.

Project Budget

All of the budget will be spent on hardware and structured cabling. Telephones, call boxes, and mounts will be approximately \$52,184. Structured cabling will be approximately \$18,400. The new IDF in CDC D will cost approximately \$3,009. Other items like patch panels and patch cables will cost approximately \$657. No software or licensing is needed to complete this project. No significant cost will be associated with training for this project. Any training that is needed will be conducted by the ISS Help Desk with instructions on how to use the speed dial on the ISS web site. Maintenance, operations, and equipment (MO&E) will be absorbed in the ISS maintenance budget. The additional telephones will be a 20% increase to the current number of devices supported by Infrastructure. The only new hardware not currently supported by Infrastructure are the 2-button call boxes, which are not different from other call boxes already supported by Infrastructure.

The cost incurred by team members hours worked comes out to 1 FTE for four months spread over nine months. One month for planning and requirements, one-half month for procurement, one-half month for configuring devices, one month for deploying devices, one-half for testing, documentation and verifying traceability and one-half month for project closeout and maintenance.

Project shall be completed within the year; the only long-term cost will be maintenance on all of the equipment. The telecommunication system is four-years into a five-year license contract, no new cost will be incurred until November 2026. ISS has 409 un-used licenses; no new licensing will be required for the additional phones in this project.

BUDGET ITEM	COST
Hardware/Equipment	\$75,549
Software and Licensing	No new requirements
Training	\$100
Consulting	None
Maintenance, Operations & Equipment (MO&E) Other	No new requirements
Full-Time Employees (FTEs)	\$64,000
Total	\$139,649

Project Costs

Maintenance Costs

BUDGET ITEM	COST FY 1	COST FY 2	COST FY 3	COST FY 4	COST FY 5
Hardware/Equipment	0	0	0	0	0
Software and Licensing	0	0	0	0	0
Training	100	100	100	100	100
Consulting	0	0	0	0	0
MO&E Other	100	100	100	100	100
FTEs	100	100	100	100	100
Total	\$300	\$300	\$300	\$300	\$300

Project Management and Governance

Decisions regarding the project will be made by the Project Team Manager, Director of Emergency & Risk Management, and the Project Technical Lead with the advice of the other Team Members. Issues will be tracked on the Information Systems & Services Projects web page. Project progress will be included in the ISS status reports. Scope and change control will be approved by the Director Emergency & Risk Management, with written updates to the charter. Infrastructure will be the primary group for seeing the project through implementation and completion. The Director Emergency & Risk Management, Chief Information & Technology Officer and Director Public Safety/Chief of Police will play advisory rolls. Customer Support Services (Help Desk) will handle opening support request, through the ticketing system.

ROLE	NAME	ORGANIZATION
Executive Sponsor	Johnette McKown	President
Executive Sponsor	Fred Hills	Vice President of Instruction & Student Engagement
Executive Sponsor	Mark Harmsen	Vice President of Finance & Administration
Executive Sponsor	Laura Wichman	Vice President of Strategic Planning & Enrollment
Project Team (Manager)	Noah Daly	Infrastructure Manager
Project Team (Technical Lead)	Lawrence Brooks	Network Specialist
Project Team	Joseph Park	Infrastructure Administrator
Project Team	Mario Leal	Chief Information & Technology Officer
Project Team	Clayton Williams	Director Public Safety/Chief of Police
Information Security Officer	John Segovia	Cybersecurity & Online Technologies Manager
Infrastructure Point of Contact	Noah Daly	Infrastructure Manager
Customer Support Services	David Kuehne	Customer Support Services Manger
Project Stakeholder	Frank Patterson	Director Emergency & Risk Management

Project Management and Governance

Impact Analysis

Faculty and Instructors in some classrooms may be impacted because of the telephones taking up space on the podiums. Some instructors may be impacted because the wall mounted telephones will affect movement around the telephones. Every effort will be made to locate telephones out of normal movement paths, yet making them fully accessible, and ADA compliant where possible.

The addition of the 154 telephones and 2 call boxes will not add significantly to the current phone or networking systems.

Assumptions

The following assumptions have been identified.

- A vendor can be found to install the structured cabling and the IDF.
- Executive sponsors support for this project.
- ISS Infrastructure has the resources to perform the required work.

- ISS already possesses switches needed to meet the needs of this project. Several will have to configured and installed.
- Infrastructure shall need to work on multiple priorities during this project. It is critical to have clear schedules and priorities.
- Disruptive work will be scheduled ahead of time giving the instructor ample notice.
- ISS Infrastructure will provide support once the communications devices are installed. Changes to communication devices in any instructional spaces will only be made with the approval of Director of Emergency & Risk Management.

Constraints

The following constraints will have to be met:

- Vendor walk throughs will have to be scheduled on Fridays in June to minimize class disruptions.
- Purchases will have to be approved by the Board of Trustees at a monthly meeting.
- Quotes and Purchase Orders will have to be processed before August 31, 2024.
- Vendor employees will have to pass a back-ground check to be in the Child Development Center while the children are present or the work will have to be done after hours.
- No installation will occur on college holidays (Juneteenth, June 19th, Independence Day July 4th, or Labor Day September 2nd) or the first week of the fall semester (August 26 September 2, 2024).

Risks

The following risks have been identified.

- ISS is capacity constrained. Any outage of an employee could jeopardize meeting deadlines.
- Unavailability of hardware could jeopardize meeting deadlines.
- There could be things we do not understand now or new requirements needed during implementation. This could cause scope creep and/or increases in budget.

Revision History

Version	Date	Updater Name	Description
V 1			Initial draft completed
V 2	5/30/24	Lawrence Brooks	1 st Revision
V 3	6/20/2024	Mario Leal	2 nd Revision and Comments.