IOWA STATEWIDE INTEROPERABLE COMMUNICATIONS SYSTEM

ISICS

ISICS Encryption Document Executive Summary

Over the past couple years, the ISICSB and its committees have taken a look into encrypted interoperable talkgroups on the Iowa Statewide Interoperable Communications System (ISICS). During this work, several new standards were drafted and a policy was edited to reflect the evolving need for secure interoperable communications. The following summary outlines each document for the public comment period ending on April 14, 2022.

Update to ISICSB Policy 2014-03:

> Previously this policy stated that all interoperable channels were to be kept in the clear. The updated policy now endorses encryption on certain interoperable channels. The language has also been updated to incorporate talkgroups.

New Standard – Defining a TEK Compromise:

> This standard outlines how a compromised traffic encryption key (TEK) would be defined, and, in some instances addressed.

New Standard – Over the Air Rekeying:

> This standard outlines the processes for over the air rekeying (OTAR) on the ISICS Platform. A key management facility (KMF) is in the ISICS configuration, but it requires standardized processes for use and function. This standard outlines those.

New Standard – Encryption Key Storage Location Number and Key ID:

> This standard establishes storage location number (SLN) and encryption key ID (KID) layouts for agencies utilizing the ISICS Platform. By establishing this layout, it de-conflicts essential components of encryption which allows agencies to:
>
> 1. Share encryption keys with their neighboring and partner agencies;
> 2. Use a common set of encryption keys for interoperability;
> 3. Maintain local control of which encryption keys they use, and how often they wish to update them.
>
> This standard also recognizes three SLN and KID combinations for interoperability on the ISICS Platform. Three are public safety and/or law enforcement use, and one is for a patch key that allows agencies to patch disparate encrypted talkgroups together.