

Communication Transformation

- Capacity
 - Narrow Banding
 - Phase II
- P25
 - ISSI
 - Encryption
- Leading in the Transformation of Interoperability
- Fleet Management vs Facility Management

Narrowbanding and Phase II



Legacy 25 MHz
Analog FM Channel

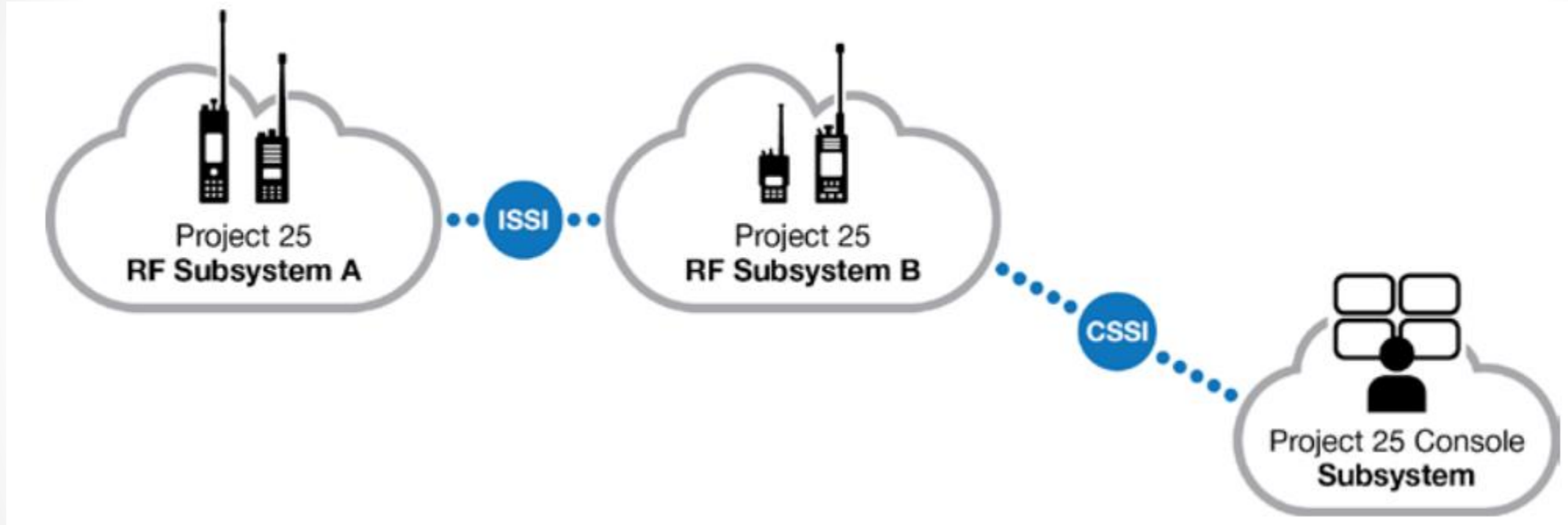


P25 Phase 1 - C4FM
12.5 kHz Channels

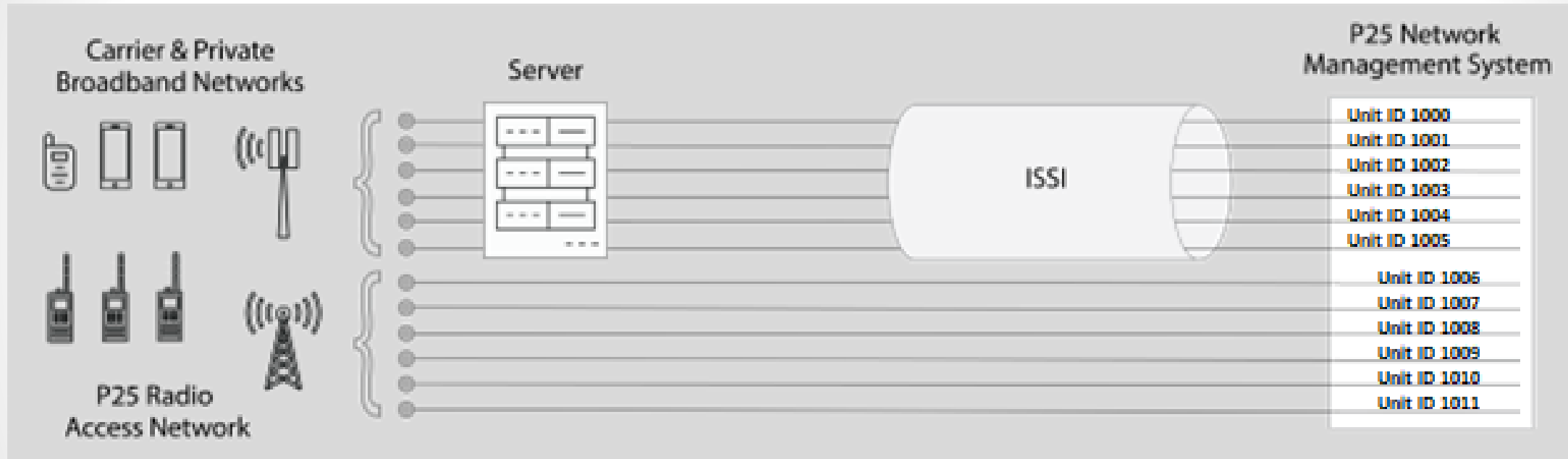


P25 Phase 2 - CQPSK
6.25 kHz Channels

P25 / ISSI / Encryption



P25 / ISSI / Encryption



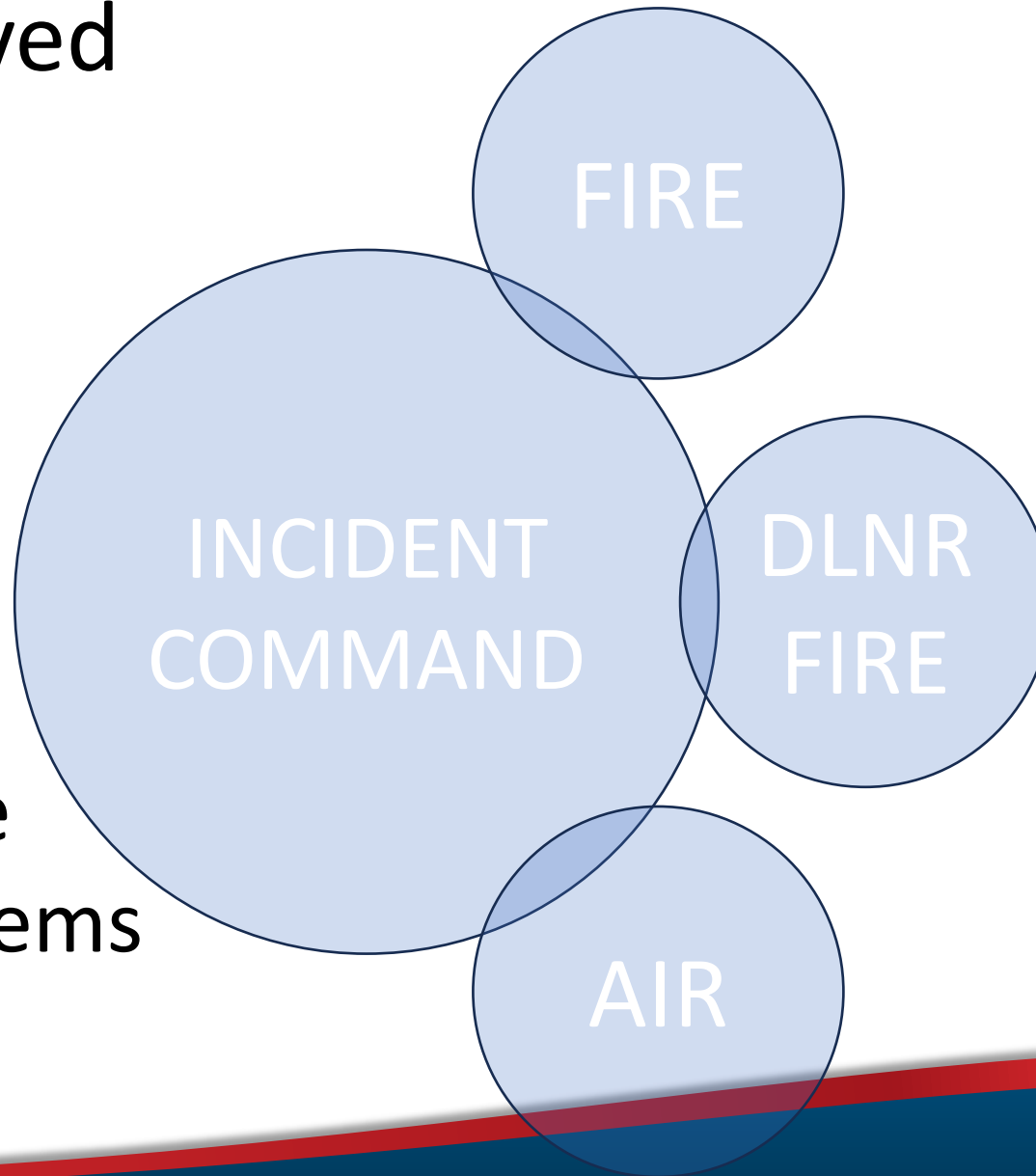
Unique ISSI Solution

- Many papers/webpages have difficulty finding a scenario where disparate systems are interfaced with an ISSI connection.
 - Costly
 - Complicated
- At the time of this presentation, Hawaii is the ONLY state found to have the ISSI opportunities negotiated by the system managers of County and State.
- Facilitates use of Cellular PTT option for Administrators.

Original Interoperability



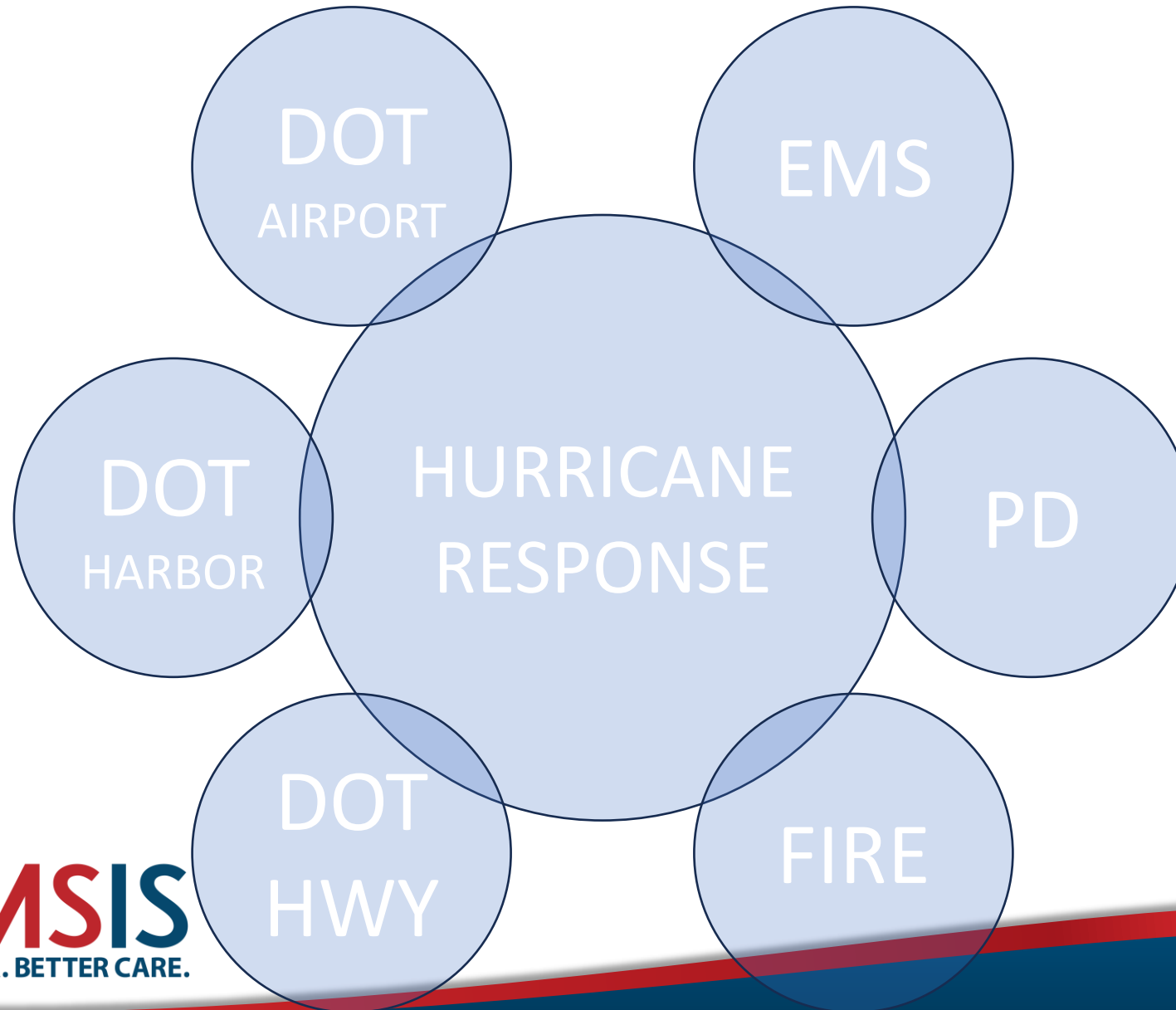
Frequently Observed in County of Maui



How to Communicate
Across Disparate Systems



MASS CASUALTIES AND WIDESPREAD DESTRUCTION



BWS

DOT
AIRPORT

EMS

RED
CROSS

DOT
HARBOR

HURRICANE
RESPONSE

PD

PRESS

HECO

DOT
HWY

FIRE

Communication Transformation

- Moving Away From Silo Systems
- Allowing Agencies to Manage Fleets not Facilities
- Five Public Safety Systems
 - Kauai, Honolulu, Maui, Hawaii, HIWIN Statewide
 - Adjunct Options for Cellular are additional tools but are NOT public safety grade
- Unification Allows Simplification
 - Encryption / Key Management
- EMS Using County System on Oahu
- EMS Moving To HIWIN in Kauai, CoM, Hawaii
 - Capacity



FLEET MANAGEMENT VS FACILITY MANAGEMENT

- DOH makes use of the HIWIN LMR system in 60 sites statewide without cost
- DOH avoids cost of managing 30 facilities already managed by the State
- HIWIN system has been transformed by advancing coverage through negotiated partnerships with the Counties
- DoH need only procure radios to use on public safety systems