



MIGRATING TO MISSION CRITICAL BROADBAND SERVICES

Comunicazioni radio per la sicurezza
Il punto sulle reti mission critical

Aggiornamenti sulle reti radiomobili delle Forze di Polizia



MOTOROLA SOLUTIONS

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CONSIDERAZIONI CHIAVE PER LA MIGRAZIONE VERSO SERVIZI MISSION-CRITICAL BROADBAND

STANDARDIZZAZIONE
DEVICE MC BROADBAND
PER SERVIZI PPDR

Standardizzazione
delle funzionalità
mission critical, per
raggiungere
performance
equivalenti ai sistemi
radio

DISPONIBILITA'
APPARATI MC
BROADBAND PER
SERVIZI PPDR

Implementazione
commerciale,
disponibilità spettro
PPDR, economia di
implementazione ed
uso operativo

TEMPI DI ADOZIONE
DEGLI UTENTI PER
SERVIZIO BROADBAND
MISSION CRITICAL

Accettazione da parte
degli utenti ed
equivalenza con sistemi
LMR in scenari operativi
mission-critical.

GESTIRE LA
MIGRAZIONE A
SERVIZI BROADBAND
MISSION CRITICAL

Processi,
pianificazione,
discussione con
operatori di reti mobili,
valutazioni legali,
prove e test

INTEROPERABILITA'
CERTIFICATA (IOP) IN
UN ECOSISTEMA
MULTI VENDOR

Sfruttare gli standard
aperti attraverso
processi di test di
interoperabilità formali;
promuovere
l'innovazione, evitando il
blocco sul singolo
fornitore.



ASTRID TETRA PUBLIC SAFETY NETWORK
BELGIUM

"ASTRID WILL ... PROVIDE
SERVICE CONTINUITY
GUARANTEES DURING
SEVERE STORMS OR POWER
OUTAGES."

GAINING USER ACCEPTANCE FOR BROADBAND SERVICES

“UK OFFICIALS HAVE STATED THAT PUBLIC SAFETY AGENCIES WOULD NOT BE REQUIRED TO ABANDON THE AIRWAVE TETRA NETWORK BY A SPECIFIC DEADLINE”



TIMELINE OF USER ADOPTION OF MC BROADBAND SERVICES

"When the nationwide public safety broadband network launches, it will not replace LMR systems ..Public safety entities will continue to rely on their LMR networks for mission critical voice features – such as Group Communications and Direct-Mode – that are needed in an emergency response setting."

FIRSTNET, USA, 2018

"Adoption of these new technologies, like MCPTT, will occur only when public safety agencies have confidence that the systems will provide true mission critical functionality and local control as well as appropriate coverage and network capacity."

NPTC, PUBLIC SAFETY LMR INTEROPERABILITY WITH LTE MCPTT, 2018





MANAGED MIGRATION TO MC BROADBAND SERVICES

"ASTRID will continue as the communications operator for the public safety services into the future, through to 2025-2030. There will be a gradual changeover from the existing TETRA network to 5G mobile networks "

ASTRID MESSAGE TO USERS AND PARTNERS, OCT 2018

"There will be a significant time period where LMR/PMR/TETRA/P25 and broadband will operate in parallel."

TCCA ROADMAP, 2019

"IHS Markit expects an incremental rollout of ESN which will provide supplemental data...rather than replacing LMR.."

IHS MARKIT, AUG 2018





STANDARDISATION OF MC BROADBAND SERVICES FOR PPDR

RELEASE 15 IS THE FIRST 3GPP RELEASE THAT SUPPORTS THE MAJORITY OF CRITICAL PUBLIC SAFETY LMR FEATURES

- First Rel-15 commercial products expected in 2022 timeframe
- Off-network Device-to-Device communication range (based on Rel-13 ProSe) will be significantly less than with LMR (TETRA, P25) due to differences in transmit power levels.*
- To date, there are no commercial offerings of Public Safety Device-to-Device communications based on Rel-13 ProSe

* Source: PPDR roadmap for evolution from LMR/PMR to 4G/5G, 2019, TCCA white paper





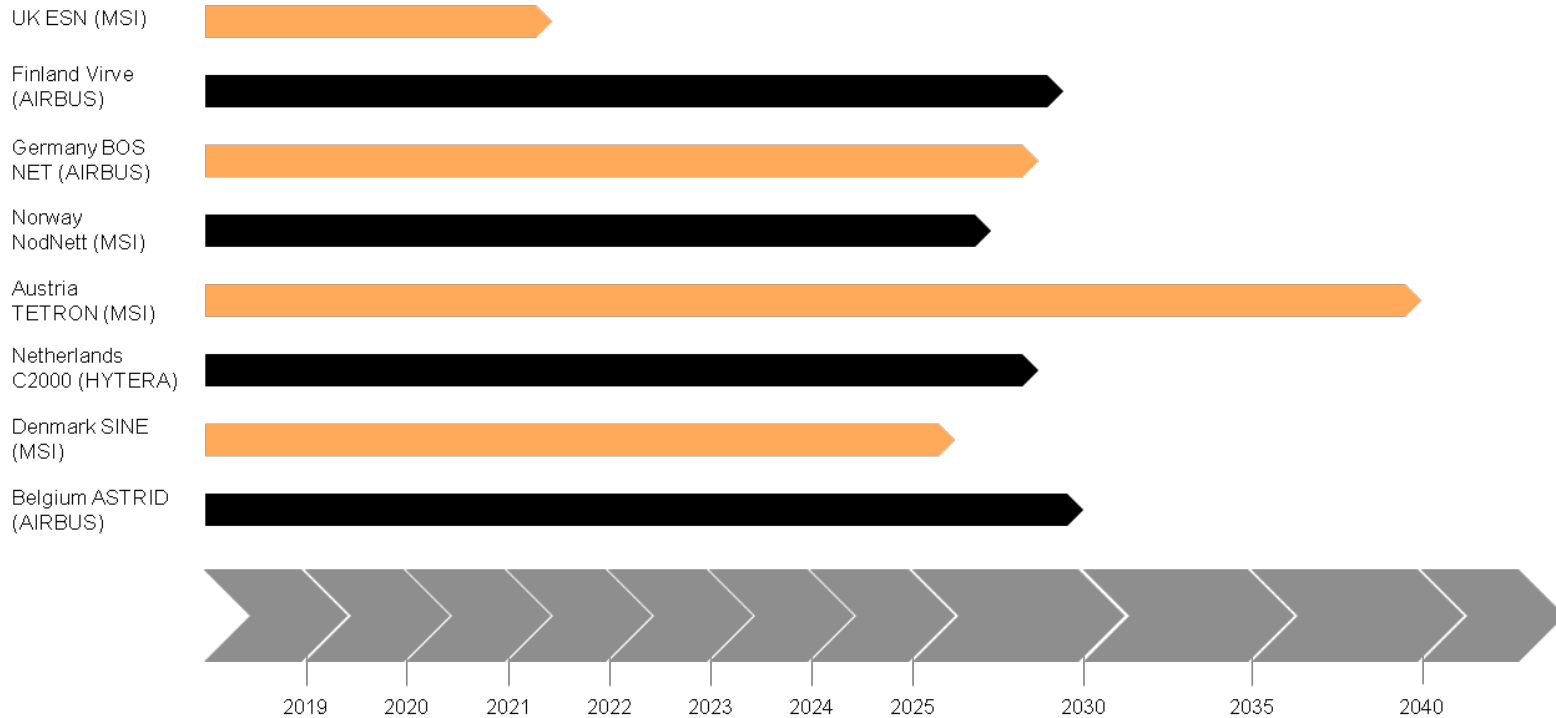
ROBUST IOP FRAMEWORK AND ECOSYSTEM

FORMAL INTEROPERABILITY PROCESSES FOR
MISSION CRITICAL PTT OVER BROADBAND
ARE YET TO BE DEFINED

- IOP processes are critical to enabling a trusted, open multi-vendor market
- Work is ongoing to define formal IOP processes for MCPTT that match the proven TCCA IOP process for TETRA

CONTINUED INVESTMENT IN TETRA

COMMITTED TO TETRA



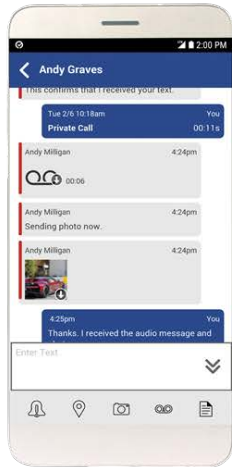
MSI VISION READY TODAY & TOMORROW

WAVE application
Your Network. Your Device.

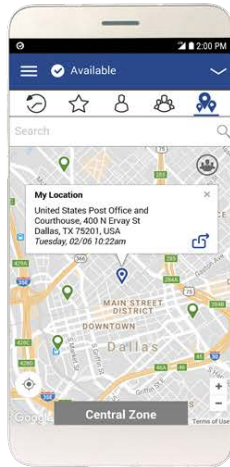
WAVE wireless service
Our Network. Our Device.



Private &
Group PTT



Multimedia
Messaging



Presence, Location
& Mapping



WAVE Dispatch



TLK 100



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