

## Circular

<b>Title:</b>	<b>SLSWA Frontline Emergency Communication System (ERCN) Upgrade</b>
<b>Date:</b>	4 June 2026
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<b>Department:</b>	Lifesaving
<b>From:</b>	Glen Hinkley, Support Operations Coordinator Ph: 08 9207 6666 (SLSWA Office Hours Monday to Friday, 8.30am to 5pm)
<b>Audience:</b>	Lifesaving Directors/Patrol Officers, Radio Officers, Administrators, Club Captains
<b>Summary:</b>	To inform clubs of the planned transition of the SLSWA Emergency Rescue Communication Network (ERCN) ahead of the 2026/2027 patrol season.
<b>Attachment:</b>	ERCN – Frequently Asked Questions

### Background

The ERCN supports frontline lifesaving and emergency response services. Via a grant, Lotterywest is generously supporting SLSWA to upgrade the **ERCN 1.0**, a Motorola Tier II Digital Mobile Radio (microwave-linked) network, and transition into the **ERCN 2.0**, a Hybrid Telstra 4G / VHF radio technology.

This initiative will:

- Enhance statewide operational communication coverage.
- Strengthen support for volunteers across all operational zones.
- Maintain inter-agency communication compatibility.
- Provide a localised solution (line of sight) communication via VHF, enhancing redundancy to the Telstra 4G.

**Important:** Now that the grant has been confirmed, clubs are advised not to purchase any additional Motorola handsets to replace or expand current inventory.

Further guidance, rollout dates, technical support and upskill opportunities will be progressively supplied by SLSWA.

For queries, contact **Glen Hinkley, Support Operations Coordinator**, ([ghinkley@slswa.com.au](mailto:ghinkley@slswa.com.au)) or call (08) 9207 6666 during business hours. I encourage you to read the FAQ attachment before making contact at this early stage of the initiative and ask you to be patient with the transitional process.



**James O'Toole**  
**Chief Executive Officer**

## ERCN 2.0 - Frequently Asked Questions

### 1. Why is the Motorola Microwave-Linked Network being replaced?

The current **ERCN 1.0**, commissioned in 2015, is reaching end-of-life.

Network firmware and hardware support from Motorola has effectively ceased for this technology type. This and the age of the equipment that supports the network is resulting in increased outages and rising maintenance and replacement expenditure across the seventeen (17) network sites.

The **ERCN 2.0** upgrade will reduce maintenance overheads, improve system uptime, and greatly expand coverage—particularly in regional zones—by using next-generation hybrid TELSTRA 4G – VHF technology.

For frontline users, day-to-day operation will remain familiar, ensuring a **seamless transition**.

### 2. When will the transition occur and what is involved?

Implementation is planned for winter 2026 (“off-season”) to ensure the system is fully operational for the 2026/27 patrol season.

A phased rollout will include commissioning, training, and device allocation.

SLSWA will distribute detailed rollout schedules, channel maps, and training materials closer to activation.

If the code plugs in each Motorola handset (DP4801 or R7) are correctly programmed according to the SLSWA channel map, these handsets will be able to communicate with the Icom IP-730D over VHF analog channels within a localised area.

Each club will receive an assigned allocation of new devices and accessories.

### 3. What is a Hybrid TELSTRA 4G + VHF system?

Feature	Description
<b>Dual-Mode Operation</b>	Combines nation-wide TELSTRA 4G coverage with direct local VHF.
<b>Handheld Device</b>	<a href="#">IP730D</a>
<b>Dual PTT Function</b>	Two push-to-talk buttons—one for TELSTRA 4G network, one for VHF.
<b>PoC (Push-to-Talk over Cellular)</b>	Enables real-time voice communication over TELSTRA 4G via IP data.

## Key Technical Features

- Operates independently on VHF when no cellular signal is available
- Achieves broad coverage using TELSTRA 4G infrastructure
- Supports simultaneous VHF + TELSTRA 4G listening
- Ruggedised (IP67/68) for professional field use

Used widely in maritime, emergency, and transportation sectors where both local and wide-area communication is mission-critical.

## **4. What are the key advantages of the new system?**

### Enhanced Safety and Reliability

- Greatly reduces communication current “black or brown spots.”
- Enhances mission-critical reliability during rescue operations.
- Improves operational coordination between clubs and services.

### Technical Superiority

- Combines the broad-area TELSTRA 4G network with VHF local redundancy.
- Provides instant push-to-talk (< 300 ms) latency.
- Enables GPS tracking and emergency signalling.

### Operational Impact

- Reliability improvements enhance surf life saver safety.
- Strengthens inter-agency interoperability and situational awareness.
- Future-proof technology compatible with 5G evolution.

## **5. What are the main deliverables in the transition?**

- Replacement of all Motorola DP4801 or R7 handsets with new Icom hybrid IP-730D handsets, chargers, batteries and handset bags (like-for-like allocation numbers based on each club’s response to the SLSWA audit conducted between 18/01/2025 – 05/01/2026).
- Programming with SLSWA-licensed VHF frequencies and regional channel maps prior to delivery.
- Installation of Cel-Fi booster systems in selected remote clubs to strengthen TELSTRA 4G coverage.
- Provision of rugged wet/dust bags with each radio for field protection.
- Commissioning of a new SurfCom console management system

## 6. Will clubs incur any transition costs?

- No. The initial capital cost for the new handsets, chargers and batteries or club-installed boosters will be funded by the Lotterywest grant.
- The IP-730D require a monthly plan to operate in TELSTRA 4G mode (\$24 per month per handset). SLSWA will pay the TELSTRA 4G SIM plan and access fees at least for 12 months from system commissioning.
- Any equipment associated with the handsets will be gifted to clubs. As is the case now club must continue to retain and pay for an insurance policy covering the issued equipment for theft, loss, or damage.

## 7. When will the current microwave-linked system cease?

- The ERCN 1.0 will be decommissioned once the transition to ERCN 2.0 is complete.

## 8. Will the Motorola DP4801 handsets have compatibility with IP-730D handsets

- Yes. The Motorola DP4801 or R7 handsets will remain functional in local line of sight mode on VHF analog channels (Select Zone 14, Direct/Analog on the Motorola DP4801), ensuring continuity during transition.

## 9. What to do with old Motorola DP4801 or R7 units after transition.

Clubs may:

- Retain for local training use, or
- Reprogram for use in Australia as standard VHF Marine radios, or
- Dispose / on-sell after factory reset—all SLSWA channel templates and frequencies must be erased before resale with proof of re-set sent to SLSWA. Clubs will have responsibility to complete this task with a capable local provider of Motorola products.

## 10. Why is Hybrid TELSTRA 4G + VHF a technological advancement?

Key outcomes include:

- Eliminates dependency on fixed microwave links.
- Achieves statewide coverage in regional talk groups with TELSTRA 4G + local VHF fallback.
- Supports faster, reliable and secure communication.
- Reduces infrastructure, network equipment need, gives reduction in capital cost and improves network resilience.
- Elimination of network site rental/licences and site compliance obligations.



## 11. Will members receive in-service training and guides?

- Yes. SLSWA is developing:
  - Operational User Manuals and Regional Channel Guides.
  - Workshops / online sessions for club radio officers and for TAFs who deliver courses that include radio usage.
  - Quick Reference Cards for beach deployment.
  - Potential for optional post-implementation webinars three months after rollout to address questions and optimisation tips.

## 12. Data Security and Privacy Considerations

- All TELSTRA 4G communications are encrypted using carrier-grade VPN or private APN technology, ensuring voice and location data remains secure.
- SLSWA will manage SIM cards and network access centrally to maintain system integrity.
- No personal data of volunteers is accessed or stored locally on the devices.

## 13. Support and Contact

- For system queries, training requests, or technical assistance:
  -  [lifesaving@slnwa.com.au](mailto:lifesaving@slnwa.com.au)
  -  (08) 9207 6666
- A dedicated support page will also be available on the **SLSWA Member Portal** providing FAQs, rollout updates, and downloadable guides.

## Summary

The ERCN 2.0 Hybrid TELSTRA 4G + VHF upgrade, using the Icom IP-730D (Telstra4G/VHF Analogue) and underpinned by Lotterywest funding, provides a long-term, scalable solution eliminating the limitations of legacy infrastructure while enhancing rescuer safety and network reliability across Western Australia's coastline.