OneNet
What we know so far

Webinar and Q&A

Today's Session

- **What is OneNet**

- **What are the benefits of OneNet**

- **Can you use OneNet with NMEA 0183?**

- **Is OneNet secure?**

- **What is the future for OneNet?**

- **Q&A**

"For the last 10 years, Actisense has been working on the OneNet steering committee, ensuring that the new network standard benefits both technical installers and boat users around the globe. We are committed to seeing the new standard be successfully integrated alongside the other NMEA protocols. You can be sure that Actisense has some exciting planned updates and OneNet products on our roadmap. Watch this space!"
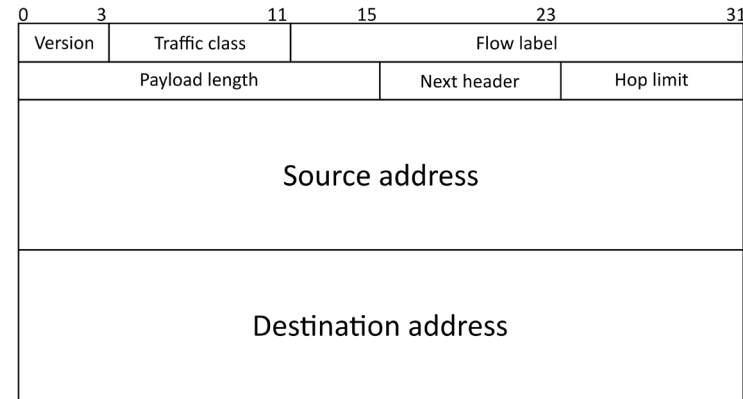
– Phil Whitehurst, CEO of Actisense

What is OneNet?

Third generation NMEA Standard

0	3	11	15	23	31
Version	Traffic class		Flow label		
Payload length			Next header	Hop limit	
Source address					
Destination address					

IPv6

"OneNet provides a common network infrastructure for marine devices and/or services on IPv6. All OneNet application protocols, such as PGN Messages, are designed to use a standard IPv6 network protocol stack. This allows OneNet to coexist with other protocols and services that operate parallel on the same network (including other marine standards such as IEC 61162-450). The standard also specifies mechanisms for connecting OneNet networks, NMEA 2000 networks, and other networks via gateway devices. Like NMEA 2000, all OneNet products will need to be certified by the manufacturer and verified by NMEA."

- NMEA

What are the benefits of OneNet?

Provides a common network infrastructure for marine devices and their services using IPv6

All OneNet products will require testing using the NMEA OneNet Certification Tool

Actisense®
Award Winning NMEA Specialists

Whilst NMEA 2000 operates at 250Kbits/sec, OneNet can range from 10Mbits/sec to 10Gbits/sec, making it 40 – 40,000 times faster

Increase in the number of physical devices that can be on the network

Join multiple NMEA 2000 networks together using its OneNet Gateway technology

OneNet realistically has no PGN limit

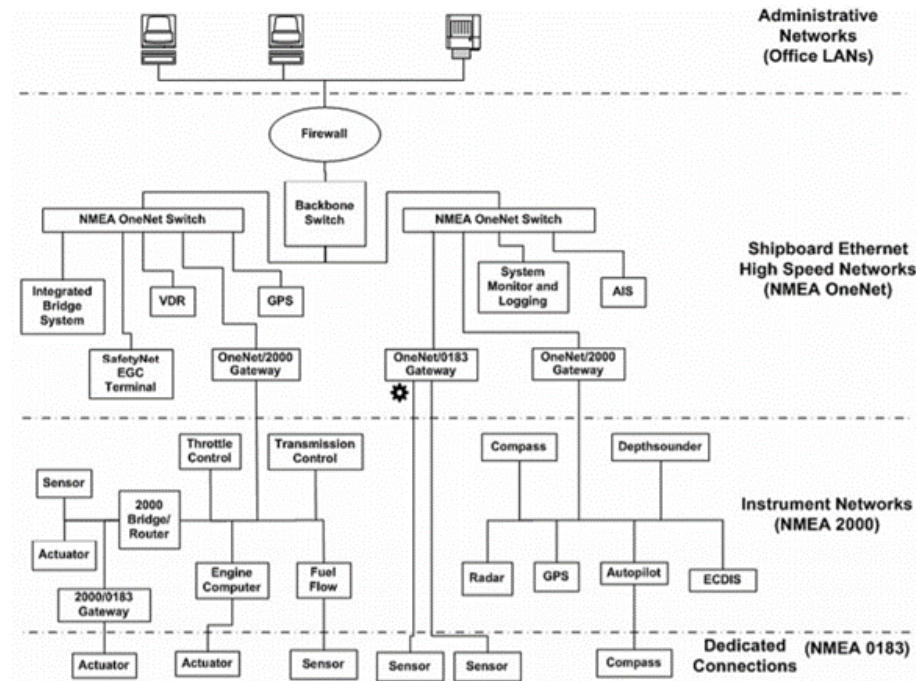# OneNet devices can be powered directly from the OneNet switch using PoE (Power over Ethernet)

Can you use OneNet with NMEA 0183?

NMEA OneNet is designed to work transparently with NMEA 2000

Provided courtesy of the NMEA

https://www.nmea.org/Assets/nmea%20introduces%20onenet.pdf

Is OneNet secure?

NMEA OneNet uses a security model where the user creates a OneNet Secure Network and then adds OneNet Applications to that network using a process called 'pairing'.

What is the future for OneNet?

Q&A WITH CHIEF ENGINEER

ANDY CAMPBELL

DON'T FORGET TO REGISTER FOR YOUR

FREE ACTISENSE.CLOUD ACCOUNT

DID WE MISS YOUR QUESTION?

EMAIL US AT MARKETINGCOMMS@ACTISENSE.COM