Integrated Remote Irrigation Management
Fieldnet is a remote monitoring and control system primarily designed for centre pivots. It is a server based system, and the hardware connects through the mobile phone network, or an on-site Spread Spectrum radio network connecting back through an internet connection.

Typically, a 1-3 pivot system would use individual mobile connections at each pivot site, whereas a system of 4 or more machines would warrant a local radio system due to the price advantages of cheaper subscription costs with a radio based system.
Two different Fieldnet systems are available:

1) Fieldnet to suit Zimmatic pivots – the system takes information directly from the pivot control panel

2) Fieldnet Pivot Control – used on non Zimmatic machines. This unit essentially replaces the existing control panel. A GPS receiver is installed on the end of the pivot to provide position information for end gun control, sector VRI etc.
In Tasmania, we currently have over 100 systems installed on Zimmatic, Valley and Bauer machines. Currently doing trials on T & L pivots.
Apps available for iphone, ipad and android. Direct access via PC login. Each user can create as many sub accounts as needed with different access levels.
Another inclusion to the new Fieldnet Pivot Control is a sector VRI control option. Basically, every degree of the pivot circle is able to be programmed with a different application rate, and all this information is recorded. This screen shot shows a sectional Water usage chart for every single degree between specific dates. One of the main drivers of this level of reporting is in NZ where diary effluent dispersion has to be recorded for the EPA.
In April, Lindsay New Zealand has announced that it now is offering Growsmart® Precision VRI with FieldNET® to provide complete remote pivot management, with VRI control, monitoring and reporting.

With Precision VRI, growers can precisely apply the correct amount of water over multiple crops, soil types and terrains. When integrated with FieldNET remote management, growers have the ability to easily create or edit irrigation plans. The detailed irrigation reports assist with better decision-making. Multiple users can also be added with controlled access, which simplifies communication with staff and stakeholders.
As a part of the new integration, new hardware and firmware has been released.

This now gives us the ability to be able to make and modify VRI plans either online, or at the pivot centre point via the new larger color touch screen. The new display also provides a color representation of the current VRI plan.
Some examples of the new online capabilities of the VRI showing a programming mode and also a reporting mode to display water application between specific dates.
We have online tools that can assist calculate some potential cost savings with VRI, including:

- Water savings
- Energy savings (inc Variable Speed Drives)
- Decreased track and wheel maintenance
- Increased crop yields
- Wet and dry area control
QUESTIONS ?
Thankyou for your time and attendance today. Please feel free to contact any one on the Roberts Irrigation Sales Team for more information on either Fieldnet or VRI systems.