Number	Question & Answer
1	**Why is there no hardwired ethernet option on the Reach IP?**
	The Reach IP offers critical connectivity via a secure VPN connection and is therefore not reliant on a PSTN infrastructure or additional hardware such as a broadband router. With cloud-based management & configuration, the Reach IP is perfect for self-install scenarios.
2	**How has the Reach IP been optimised to work in a low signal strength area?**
	The Reach IP is fitted with a roaming SIM that allows for connectivity to any available network in the area. The onboard GSM antenna is tuned to offer a much improved reception like those used in modern mobile phones compared to a traditional external aerial. Comparable tests have shown that the performance of the internal aerial is much improved over legacy products with external antennas.
3	**What happens if there is no network coverage in an area where a unit is required?**
	It is true that there may be some blackspots in terms of network coverage, but these are few and far between. Most of the population can access a mobile signal and through the Government's roll out of smart meters and super-fast broadband, additional masts are being installed every day to offer enhanced network coverage in rural areas. Just because a mobile phone doesn't show a signal doesn't mean that there are no other networks available so a signal analyser should be used to determine network availability prior to deployment.
4	**Why does the Reach IP operate using 2G?**
	2G has the widest coverage by area of all current mobile network technologies in the UK. This is what is used for smart metering and in many security applications.
5	**When will 2G & 3G be switched off in UK?**
	The current view is that 3G is likely to be switched off in the coming years however 2G is not expected to be decommissioned any time before 2028 as this network supports both smart metering and security applications.
6	**Why are we mandating the use of the supplied SIM with the unit?**
	The SIM card provides access to the secure VPN and cloud based configuration portal. It uses a proven technology that has been deployed in millions of security applications across the UK. The SIM is dedicated and locked to the alarm unit therefore offers an enhanced level of security.
7	**SIMS are not part of my budget, our IT dept has a council wide contract, what can I do?**
	The Reach IP is part of a secure digital ecosystem and provides critical connectivity for the resident. It is therefore imperative that the unit is fitted with a secure SIM which is connected to the appropriate VPN. The cost of the service is extremely low and is continually reviewed to ensure that our customers get best value for money.

8	**Why would we move to an all GSM unit when GSM networks seem to be more challenged by the Analogue to Digital transition than fixed lines?**
	Analogue protocols are becoming less and less reliable whether it be through GSM or fixed line connections. For many GSM alarm units, the fact that they are continually monitoring their networks means that they can often highlight failures in network availability that an analogue line would never have been able to do. For example, many fixed line networks undergo routine maintenance throughout the night but due to the unit continuing to see a voltage on its line, it's unable to recognise a drop in service availability. Changes to media gateways in analogue infrastructures means that reliable signalling will be impacted further in the future whereas digital protocols are much more resilient and will allow for a much more reliable form of communication.
9	**Is the Reach IP SIM permanently roaming?**
	The Reach IP continues to monitor network availability through a digital heartbeat to the Pulse Cloud Management Portal. If a data connection is unable to be established the Reach IP will instruct the SIM to roam to the next available network.
10	**Is the Reach IP SIM steered?**
	The Reach IP is not steered so it will remain on the network it has selected if there is a reliable connection available. Only when it loses connectivity will it roam to another available network. A steered SIM will always try to return to its primary supplier network, but this is not the case for the Reach IP.
11	**How can I check an area for connectivity before accepting a client or arranging an installation?**
	Ofcom have a mobile app that can provide some basic network coverage details by entering the postcode of the property. This of course is only a guide and use of a signal analyser in the final location is the only way to reliably view the network signals currently available.
12	**What is the backup time of a GSM network mast in power failure scenarios?**
	Our current view is that the backup time will vary depending on the technology used. In many outlying areas, diesel powered generators will be used whilst in more urban areas, there are often multiple masts so failure of one often means another will be available on an alternative network.
13	**Who can I contact to get details of a GSM outage including the ETA of a fix?**
	In the unlikely event that there is a GSM outage, network providers often publish information regarding maintenance or service issues on their websites but as the SIM in the Reach IP is a roaming SIM, it will move to the next available network if the current network is compromised.
14	**Why move to digital and what are the benefits?**
	The switch from Analogue to Digital infrastructures has been forced upon the sector by the telephony providers. In some cases, moving to a digital solution can provide cost savings so it's essential that service providers carry out a detailed digital review to look at the most appropriate way for them to transition away from analogue systems. Digital can offer greater efficiencies, improved perfomance, delivery of new transformational services, all of which have been identified and discussed in detail as part of our "Unleashing the Digital

	Premium" white paper which was launched in February 2020. https://www.tynetec.co.uk/unleashing-the-digital-premium/
15	**Are your digital systems secure?**
	Legrand use an independent third-party specialist organisation to carry out regular penetration testing across a variety of our product platforms to ensure that the product is always resilient to potential cyber security threats.
16	**What are the advantages of bi-directional telecare?**
	Bi-directional technology offers a robust method of validating communication between a telecare device and a Reach IP alarm unit. There are several advantages including: - Infrastructure resilience & monitoring – all bi-directional peripheral devices use a periodic heartbeat to communicate with the alarm unit. By applying supervision to this heartbeat its possible to determine whether there is a problem with the device or whether its been removed from the environment. Enhanced battery management – unidirectional data communication relies on multiple alarm transmissions being sent between a peripheral device and the alarm unit to ensure the signal is received. Bi-directional communication however allows a peripheral device to send one transmission and receive an acknowledgement from the alarm unit.
17	**Why can't we use legacy telecare on the Reach IP?**
	The Reach IP uses enhanced bi-directional communication technology which works on a different frequency and protocol to the legacy peripheral devices. Infrastructure resilience, monitored devices and enhanced power management are a just a few of the enhanced features that are offered as part of a bi-directional solution.
18	**Is the Reach IP compatible with SCAIP TS50134-9?**
	Yes. TS50134-9 states that communication should be carried over a secure infrastructure. The Reach IP uses a VPN over a mobile GSM network to ensure a robust and secure method of connectivity.

Number	Question & Answer
1	**Does every scheme need its own VPN in order to communicate using VoIP?**
	Yes. Unless the communication between a scheme and the ARC is through a corporate WAN, then a secure VPN should be installed to provide a secure and robust method of communication to the ARC.
2	**What about when connected via corporate network i.e. own security within councils' network?**
	If a scheme is connected via a corporate network, then a secure VPN is not required.
3	**How did Now-IP become the protocol for digitally connected schemes?**
	A BSI working group was developed consisting of suppliers & industry associations to develop an open protocol standard for digital connectivity.
4	**When will Now-IP become BS8521-2?**
	BS8521-2 was recently published as a digital IP protocol for use in specialised grouped living environments through to alarm receiving centres. Both the Advent XT digital communicator and Advent XT2 system are BS8521-2 enabled ready for immediate connection to BS8521-2 digitally enabled monitoring platforms.

Number	Question & Answer
1	**Why would I buy ISDN30 lines when I'm being told they are going to be obsolete (old technology)?**
	For an ARC to support both analogue and digital connectivity with one platform, ISDN30 is required until all analogue connections have been migrated to digital. Following full migration to digital the platform can support all units using a simple SIP infrastructure.
2	**Can the Answerlink platform dial out to a Reach IP unit?**
	In principle this is possible but as most units being deployed contain a roaming SIM, calling from the ARC would lead to significant telephony charges being incurred by the service provider. Instead, the call charges are bundled into the monthly SIM subscription and the Reach IP initiates the call after communicating via SCAIP with the ARC.
3	**How often should I refresh my hardware?**
	A hardware refresh is generally required every 3-5 years in line with IT policy. This would traditionally include servers, call handling equipment and PC's.

Number	Question & Answer
1	**Why is Technology Enabled Care moving from Analogue to Digital solutions?**
	The demand for digital services has been on the rise for many years now (e.g. mobiles, broadband, digital TV and music streaming). This growth in demand requires a more capable set of infrastructures and therefore the communications industry need to replace all their older and less reliable analogue solutions that are hard to maintain, with more capable systems that will deliver reliable methods of communications for many years to come. The focus for these organisations is to increase revenue by selling increased levels of data services. For those products that currently operate over an analogue network, they need to evolve in order to maintain reliable connectivity on a new digital infrastructure. Clearly as can be seen in our recently published white paper "Unleashing the Digital Premium", there are many areas of health and social care that can benefit significantly from the deployment of new digital solutions. https://www.tynetec.co.uk/unleashing-the-digital-premium/