

**COMMUNICATIONS
ALLIANCE LTD**



**INDUSTRY GUIDANCE NOTE (IGN 004)
MIGRATION OF LEGACY SERVICES**

Migration of Legacy Services - Industry Guidance Note IGN 004

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1. Background

The deployment of Australia's upgraded broadband network being deployed by nbn will create significant change within the Australian telecommunications environment. Under the new arrangements the majority of telecommunications services will be progressively transitioned from circuit-switched copper-based network technology to the new fibre-based and other Multi-Technology Mix (MTM) access networks where voice services will be delivered using Internet Protocol (IP) standards. One of the consequences of these changes is the effect on non-telecommunications 'Over the Top' (OTT) devices that make use of copper-based telephony services for their operation.

These OTT devices include (but are not limited to) the following:

- Personal medical and back to base security alarms (referred in this paper as alarm services);
- EFTPOS / payment systems;
- Monitored fire alarms; and
- Lift emergency phones (emergency phones in lifts of multi storey buildings).

The information covered in this paper focusses on the migration of legacy services off the copper networks as determined by the Migration Plan. The principles contained apply generally to legacy services, although there may be certain specific considerations required for certain legacy services, such as monitored medical alarms, security alarm panels, monitored fire alarms and lift emergency phones which are connected to back-to-base monitoring centres (which are called out in the document where appropriate).

Where customers have installed legacy devices that are not monitored e.g. devices that allow a customer to pre-set multiple numbers to be dialled in an emergency, then the users of these devices and suppliers of such equipment will be responsible for their operation following migration of telephony services off the copper network, either onto nbn's network or other networks.

OTT devices and related systems are not telecommunications services. These legacy devices and related systems are typically supplied by ASPs who contract directly with customers (e.g. building managers and building occupants) and make use of the existing in-premises telephone line to connect their devices to remote call centres that monitor these services and where necessary respond to situations requiring their attention. In the majority of circumstances, telecommunications service providers will have no knowledge or record of a legacy device being connected to the customers' telecommunications services or the nature of any associated in-premises wiring arrangements.

As these legacy devices are not provided by telecommunications service providers, it cannot be assumed they will be compatible with the telecommunications networks (including nbn's network) and Retail Service Provider (RSP) service offerings over which these legacy services operate.

Providers of legacy services and suppliers of legacy equipment will need to take steps to test compatibility of their equipment over nbn's network and this document sets out suggested arrangements for suppliers to undertake these checks.

While it is ultimately the customer's responsibility to advise RSPs of any special needs that are associated with their telecommunications services (including OTT services), RSPs will play an important role in making sure their customers have the right level of information to make informed decisions about their telecommunications and OTT service needs.

This IGN includes information on the roles of the various parties who may be involved in the migration of legacy services and has been developed by the telecommunications industry in collaboration with suppliers of legacy services, regulators and Government agencies.

This revised edition incorporates changes from the Government's Migration Assurance Policy¹ and considers the implications for the migration of legacy services under nbn's Multi-Technology Mix (MTM) model.

Conventions used in this IGN

This IGN, its contents and guidance apply equally to wholesale open access networks, including nbn's. In this same context references to nbn's network should be interpreted as applying equally to all providers of open access networks.

Those who use OTT services, such as personal medical alarms, security alarms, lift emergency phones and monitored fire alarms, are generically referred to as 'customers' in this IGN, in the context that they are either existing or future customers of ASPs or RSPs.

2. Objective of this IGN

This IGN is designed to achieve the following:

- Assist the various parties who will need to interact with customers migrating their telecommunications and legacy services onto nbn's network;
- Provide information to suppliers of legacy services wired into and relying on the existing telecommunications service cabling in a customer's premises to operate effectively; and
- Improve the provision of accurate information and answers to customers' questions where issues arise in regard to their legacy services.

These parties include the following:

- **nbn**, depending on technology, may be installing certain equipment into customers' premises (see sections 11, 12 and 13 for more details) and supplying the wholesale network on which RSPs build their customer telecommunications provided services. This Industry Guidance Note is designed to be consistent with information being provided to customers by nbn as part of its Public Information on Migration (PIM) program, which is reaching out to customers in areas where nbn's network is available and a schedule is in place for the decommissioning of the local copper-based access networks.
- **Retail Service Providers (RSPs)** who supply telecommunications services to their customers and will arrange for these services to be migrated onto nbn's network. This IGN will assist RSPs in identifying and meeting their customers' needs. The IGN is designed to explain what factors and key communications messages RSPs should be mindful of when migrating customers with legacy services to the nbn.
- **Application Service Providers (ASPs)** including OTT services, device suppliers (including installers) who contract with customers to supply and manage such services where these services rely on the customer's telephone service including the in-premises cabling. Given the contractual arrangements applying between these service providers and their customers, it is recommended that such suppliers ensure their equipment will continue to

¹ The Migration Assurance Policy can be found on the DoCA website at <https://www.communications.gov.au/publications/migration-assurance-policy-statement-framework>.

operate over nbn's network by accessing the testing capabilities that are being made available (see additional information on testing arrangements below). This includes arranging for that equipment to be tested against RSP telecommunications service offerings provided over nbn's network. There is also a need for these legacy service suppliers to identify those geographic areas where nbn's network is being deployed, and to advise customers in those areas about the compatibility (test results) of their equipment with their nbn network retail based offerings and, where necessary, any changes that will need to be made.

- **Customers** who are migrating their telecommunications services onto nbn network-based services and who also have contracts with legacy service companies or arrangements in place with government agencies (e.g. the Department of Veterans Affairs for medical alarm devices in their premises). The information in this IGN outlines the steps a customer who has OTT services needs to take, including contacting the ASP (or government agency) if they have questions, and the need to advise their telecommunications service provider that they have OTT services prior to migrating.
- **Registered Cablers** who are carrying out cabling work in a customer's premises. Some parts of this document make reference to registered cablers. The **Cabling existing telecommunications services in the customer's premises for the NBN via FTTP** Guideline (G649) provides information for registered cablers attending the customer premises when disconnecting the existing customer cabling from the existing lead-in cabling at the Network Boundary Point and connecting it to nbn's network being provided via Fibre to the Premises (FTTP).

This IGN can be read in conjunction with related legislative requirements and industry documentation including the **Telecommunications Consumer Protections Code** (C628).

This IGN may be updated over time to incorporate relevant learning gained from the practical experience of migrating legacy services to nbn's network.

3. What are security and personal medical alarms?

Security and personal medical alarms are commonly installed in a customer's premises and are usually monitored 'back-to-base' by an alarm company. There are also other types that are not monitored e.g. pre-programmable and direct dial devices where the customer is responsible for those arrangements.

Monitored alarm devices e.g. personal medical response (pendant) units are usually supplied under contract with the end user by a medical alarm service provider who may also be responsible for the maintenance of such services. These types of alarm devices are installed by the medical alarm supplier to operate OTT of the copper telephone line to the customer's premises. In most instances the telecommunications service provider supplying the underlying telephone services to that premises plays no part in the installation of the alarm service, is not aware of its existence and has no record of such services being connected to the telephone service.

When a security system is 'monitored', this is achieved through the customer's telephone service which connects the alarm device to a copper telephone line in the premises. When a monitored 'back-to-base' alarm is activated, the alarm dials 'back-to-base' (in many cases to a monitoring centre) to inform the alarm company that the alarm has been activated and to initiate appropriate alarm response procedures. Currently, the bulk of back-to-base security and medical alarms operating over the telephone network are analogue devices that send a sequence of telephone tones (also known as DTMF tones) down the line, using one of several alarm communication protocols. For clarity these monitored services do not include some types of installations in retirement or assisted care facilities where a resident's room is hard

wired back to a central point within that facility and where local staff respond to calls for assistance. These types of arrangements should not be impacted by migration of services onto nbn's network and will remain the responsibility of the management of such facilities.

Most centrally monitored medical alarms operate in a similar way to monitored security alarms and are usually triggered by a trigger event at the customer's premises e.g. an end user pressing an emergency button. When the alarm is activated, a call is automatically placed to a monitoring centre where an operator or computerised system will respond to the end user.

Newer generation security alarms and some medical alarms are able to implement their back-to-base capabilities by using IP-based connections over broadband networks - including optical fibre, ADSL, HFC and cellular mobile (3G or 4G) networks. The development of newer alarms includes products capable of both IP (fixed wire) and mobile signal paths, so that there is an alternative communication path in the event that one is not functioning for any reason.

The large majority of the devices currently in operation are older-generation analogue devices.

4. What are monitored fire alarms and lift emergency phones?

Monitored fire alarms are usually connected via telecommunications services back to a monitoring centre for remote management of fire alarm conditions. Various telecommunications services can be used to provide this connectivity, including by fixed or wireless networks, and sometimes a combination of both. Where fixed networks within nbn's fixed rollout footprint are being used for this connectivity, the migration of those fixed services off legacy copper networks needs to be carefully managed.

Lift emergency phones can be connected via telecommunications services back to a monitoring centre for remote management where end users in those lifts need assistance in an emergency. Various telecommunications services can be used to provide this connectivity, although these are predominantly fixed based services. Where fixed networks within nbn's fixed rollout footprint are being used for this connectivity, the migration of those fixed services off legacy copper networks needs to be carefully managed.

Monitored fire alarms and lift emergency phones are safety critical services and their continued operation during and after the migration from the legacy PSTN is important.

The Department of Communications and the Arts (DoCA) established a Fire Alarm and Lift Phone Migration Roundtable to effect implementation of the Australian Government's policy framework for the migration of monitored fire alarms and lift emergency phone services from the copper network to the nbn and to support service continuity outcomes during the migration of these services. One of the outputs of this work is the development of a *Good Practice Guide* for the migration of these services, anticipated during 2016. On the publication of the *Good Practice Guide*, this IGN will be reviewed to ensure consistency in the information being provided to stakeholders.

5. Can these services work on nbn's network?

While many legacy services may work on telecommunications services provided over nbn's network, this is not the case for all types of equipment. A range of factors are relevant, including the age and type of device, the technology platform used by the alarm supplier and whether the legacy device is compatible with the voice service being provided to the customer by their RSP over nbn's network.

IP-based devices are able to operate on nbn's network and will normally do so if the specifications of the device are compatible with the design of nbn's fixed network and the services that operate over that network.

Mobile 3G/4G based devices are designed to operate over mobile networks and do not rely on fixed networks such as nbn's and these devices can operate independently of the fixed network.

Analogue legacy devices are able to operate effectively on nbn's fixed network offerings, subject to a number of variables, including but not limited to:

- the age and specifications of the legacy device itself and whether the device is compatible with:
 - the fixed network; and
 - the RSPs retail telecommunications service offering.
- the way the device is connected - where the industry standard 'Mode 3' wiring is in place then it will need to be maintained.

6. Roles and responsibilities for the transition of legacy services to nbn's network

A number of legacy devices have already been successfully transitioned onto telecommunications services based on nbn's network.

Customers (and their representatives) using legacy equipment should contact their ASP and seek information on how their services will be impacted on migration off the legacy copper networks.

The following table identifies at a high level the responsible party for each of the main activities that are likely to be involved when migrating legacy services.

Table 1
Responsibilities

Responsibility	Responsible Party	Further detail
Installation / upgrade of legacy services equipment and Testing of legacy service to ensure compatibility with nbn network-based telecommunications service offerings	ASP (OTT provider) Note where customers have installed their own legacy devices that are not monitored e.g. devices that allow a customer to pre-set multiple numbers to be dialled in an emergency, then the users of these devices will be responsible for their operation following migration of telephony services. (see Note 1)	Appendix A
Installation of RSP equipment (where required) to enable the operation of retail nbn network-based telecommunications services at a premises. Ensuring that the end-to-end telecommunications service is working for the customer.	RSP The installation model will vary for each RSP: some may send their own staff to undertake installation of the service; some may request the customer engage their own registered cabler should additional wiring be required which is outside the scope of the RSP installation service; while others may send the equipment to the customer to self-install in which case the physical connection will be the customer's responsibility.	Appendix B
Installation of nbn's network equipment into a customer's premises	nbn or in case of an nbn network-equivalent network , the relevant network wholesale provider.	Appendix C
Connection and/or installation of in-premises wiring to nbn's or RSPs equipment	Customer If wiring upgrades are needed, the customer will need to have this work carried out by a registered cabler to ensure work is completed to the required cabling standard. (This work may be arranged by an RSP or by the customer through a third party registered cabler).	See in-premises wiring section below

Note 1: There are several key variations in the supply of legacy equipment and services. Some are self-installed by the customer, or are supplied, professionally installed and monitored by a single ASP. In other situations legacy equipment may be installed by a third party and the customer separately contracts with a monitoring company to provide a monitoring service only (i.e. without equipment maintenance). For these reasons the principles in this IGN are provided as a guideline only and not intended to cover all installation scenarios in detail.

Where a legacy device is not under a maintenance or monitoring contract, the customer will have responsibility for ensuring the legacy device continues to operate over telecommunications services based on nbn's network. In the case of retirement and assisted care facilities operating in-house monitoring arrangements, this responsibility will remain with the management of those facilities.

7. Testing of legacy equipment to determine compatibility with nbn network-based RSP services

nbn has established a facility where legacy service providers and legacy equipment suppliers can test their equipment against a variety of RSPs' nbn network-based retail telecommunications services. This test facility enables legacy service providers to perform a basic compatibility test against telecommunications RSP service offerings to determine whether the legacy equipment is compatible with these offerings. This service compatibility testing may not identify all potential issues, for example, potential operational problems arising from specific in-premises wiring configurations (see Section 8 below). If ASPs want to conduct more detailed tests, these would need to be subject to arrangements with individual RSPs. Further information regarding nbn's test facility can be requested from nbn via the following email address: plugbench@nbnco.com.au

It is recommended that ASPs test their equipment (existing and previously installed equipment) against individual RSP's nbn network-based telecommunications service offerings and advise their customers about the compatibility of their alarm services with these offerings. This information will also need to include advice on the need to make any changes to existing legacy equipment.

Providers of other 'non-nbn' fixed networks are also encouraged to make available similar test arrangements when these networks are being implemented.

There may be situations where an RSP has not made their nbn network-based telecommunications services available for testing on nbn's test facility. In these circumstances an ASP would need to make representations to the RSP directly to test their equipment/services.

Refer to nbn's information at www.nbnco.com.au/compatibility.

8. In-premises wiring

Monitored legacy devices that operate over the copper network are typically wired into the existing fixed copper telecommunications wiring. ASPs may recommend and/or use prescribed wiring standards commonly referred to as 'Mode 3 wiring configurations'. When installed correctly, and if the legacy device is compatible with nbn network-based retail offering, this wiring configuration allows the legacy device to communicate with the monitoring centre and effectively takes priority over all other devices sharing the same line.

Mode 3 sockets and wiring configurations can also be applied to a legacy device operating over RSPs nbn network-based services. However there is still a need to check if the legacy device is compatible with new services being provided for that legacy equipment to operate correctly.

Where nbn installs equipment into a premises (FTTP and HFC), that installation does not include the provision of additional home network wiring or connection of existing wiring to nbn's NTD.

Depending on the contractual arrangements with customers, RSPs may either send a field staff member to the customer's premises to connect the telecommunications services that will operate over their nbn network-based services or alternatively dispatch equipment (e.g. a pre-configured or self-configuring gateway/router) to the customer with instructions on how to plug that device into the NTD supplied by nbn (FTTP and HFC) or the first telecommunications outlet (FTTN/B).

RSPs are not responsible for reconnecting the existing in-premises wiring that the legacy device is connected to into their equipment (although they may provide this service to their

customers, with or without charge). This is because in-premises wiring is a customer's responsibility.

If the existing in-premises wiring is not connected to the RSP's new nbn network-based service, then any fixed devices connected elsewhere in the premises reliant on existing telecommunications cabling will no longer function. RSPs may offer to assist customers with such in-premises wiring arrangements and, where that applies, may apply charges to the customer for this work to be completed.

Where an ASP is aware that their customer is migrating onto an RSP's nbn network-based service, the ASP is best placed to organise any change of in-premises wiring on behalf of the customer, where such a change is necessary. Charges may be applied where the ASP takes steps to reinstate or update wiring arrangements following a customer migrating their telecommunications services.

9. nbn's network access technologies

Under nbn's MTM model, several different access technologies are used to connect premises. Some of these are defined as fixed networks, and thus will trigger the mandatory disconnection of legacy copper services, and some are not fixed network replacement (and thus will not trigger the mandatory disconnection of legacy copper networks).

Under the different MTM models, the delineation between fixed and non-fixed networks and details of which in-premises equipment is required is summarised in the following table:

nbn's access technology	Fixed network replacement? (i.e. does Migration Plan apply?)	nbn supplied in premises NTD?	nbn supplied UNI-V port?	nbn supplied in premises battery back up?	RSP/end user supplied in-premises gateway? Note: equipment required will vary by RSP
FTTP	Yes	Yes	Yes	optional	Yes & No
FTTN/B	Yes	No	No	No	Yes
HFC	Yes	Yes	No	No	Yes

Each of the fixed network replacement scenarios will be considered in detail in the following sections.

Note: Readers should be aware that nbn has not yet launched its HFC Access Service at the time of publication. Final details may be subject to change.

10. Operation of nbn-based services under a power outage

Under nbn's MTM model, different technologies require different in-premises equipment. As nbn is only providing a wholesale layer 2 capability, much of the in-premises equipment required to provide a functioning end user service is not supplied by nbn. This in-premises equipment would need to have its own battery back-up to continue to operate in a power outage, where nbn has provided power resiliency of differing durations in its networks. As such, nbn is unable to advise which services will and will not operate, or for how long, during a power outage at an end users premises.

The simplest message to customers is 'telephone and internet services over the nbn network are unlikely to work during a power outage. Customers should consider keeping alternative communications technology such as a charged mobile phone'.

It is recommended that RSPs and ASPs communicate this message to their customers to minimise the chance of confusion. RSPs and ASPs should prepare for enquiries from their customers regarding the operation of services using nbn's network in a power outage. Where RSPs or ASPs offer additional capabilities to their customers to ensure their services do continue to operate under main power outages, they should advise their customers of those options.

11. FTTP

Under nbn's FTTP model, nbn will be providing an in-premises NTD and the option for a Battery Backup Unit (BBU).

11.1 FTTP (UNI-V or UNI-D Port)

nbn's FTTP model offers multiple ways for an RSP to deliver voice and broadband services over the equipment nbn installs into the customer's premises. An RSP is able to use either the UNI-V or UNI-D ports on nbn's provided NTD to deliver a telephony service. These services may be used by ASPs to support legacy devices or services as long as that equipment is compatible with the customer's RSP nbn network-based retail telecommunications service.

11.2 FTTP (Battery Back-Up)

The nbn installed NTD is provided with the option for battery back-up (BBU) to both the UNI-V and UNI-D ports. This will allow telecommunications services to operate for approximately five hours in the case of a mains power outage, irrespective of the port being used.

The majority of back-to-base medical and security alarms are designed with an internal battery to support their operation in a power outage. Recognising that customers may rely on alarm services during a blackout, it is important that customers understand whether the service configuration they choose will enable this to occur.

Note: A legacy service connected to the UNI-D port via an intermediary device such as an RSP's residential gateway will only work if that gateway device also has its own battery back-up arrangement.

Where nbn's battery back-up capability is not sufficient for the needs of the customer, legacy service equipment suppliers should give consideration to making available to the customer products that either offer an IP or mobile signal path or a combination of both with their own appropriate battery back-up.

Customers may elect to install an uninterruptible power supply (UPS) in the AC mains connection to the NTD as an alternative to connecting a battery direct to the NTD, although it is recommended that the UPS also be connected to the RSP and ASP equipment.

While it is possible to operate back-to-base medical and security alarms over a UNI-D based telephone service, the security and medical alarm industry has

communicated a preference at this time for security and medical alarm services to be provided over nbn's UNI-V port.

12. FTTN/B

The key difference between nbn's FTTP and FTTN/B models is that under FTTN/B, nbn will not be providing an in-premises NTD. This also means nbn will not be providing UNI-V ports or a BBU option.

Key implications to ASPs and RSPs are that for legacy services, ASPs and RSPs will need to develop new product variants to manage these differences in migrating legacy services.

It is recommended that RSPs and ASPs communicate the following to their customers:

- That their devices are unlikely to work in a power outage and they should maintain a charged mobile phone for emergency communications
- Where RSPs provide battery backup to in-premises equipment they should continue to advise the provision of mobile phone alternate communications as the length of the outage may be greater than the battery back-up supplied in the network or in the premises

RSPs and ASPs may choose to upgrade analogue devices to IP-based with appropriate battery backup, or to provide alternate mobile paths.

13. HFC

The key difference between nbn's FTTP and HFC models is that under HFC, although nbn will be providing an in-premises NTD, nbn will not be providing UNI-V ports or a BBU option.

Key implications to ASPs and RSPs are that for legacy services, ASPs and RSPs will need to develop new product variants to manage these differences in migrating legacy services.

It is recommended that RSPs and ASPs communicate the following to their customers:

- That their devices are unlikely to work in a power outage and they should maintain a charged mobile phone for emergency communications
- Where RSPs provide battery backup to in-premises equipment they should continue to advise the provision of mobile phone alternate communications as the length of the outage may be greater than the battery back-up supplied in the network or in the premises

RSPs and ASPs may choose to upgrade analogue devices to IP-based with appropriate battery backup, or to provide alternate mobile paths.

Note: Readers should be aware that nbn has not yet launched its HFC Access Service at the time of publication. Final details may be subject to change.

14. Medical Alarm Register

nbn established a Medical Alarm Register in March 2014 (located on the nbn's website at www.nbnco.com.au/medicalregister) that enables the registration of premises with medical alarms (both remote monitored and unmonitored auto diallers). Two registration methods are available, the first as a public website where customers can register a premises where a medical alarm is present (including contact details of the person registering) and secondly, as

an industry bulk registration method, where medical alarm service providers can register the premises where they are aware of the presence of medical alarms. Medical alarm service providers that have not already engaged with nbn for bulk registrations, should contact legacyservices@nbnco.com.au.

The Register is an important government initiative to help support users of medical alarms when the existing phone network is replaced by nbn's network (or other networks). The information on the Medical Alarm Register is being collected to help identify households with medical alarms and where support may be needed to assist in the migration.

In order for the Register to work most effectively, it requires information from the members of the Personal Emergency Response Services Association (PERSA) and other medical alarm service providers. Many medical alarm service providers have already engaged with nbn to provide data. Both the medical alarm service providers and nbn have undertaken to work constructively in providing timely, accurate and complete data.

15. Fire and lift register

nbn established a monitored fire alarm and lift emergency phone register (the Fire and Lift Register) in July 2015 (located on nbn's website at www.nbnco.com.au/fireandlift) that enables the registration of premises with fire alarms and lift phones.

Two registration methods are available. The first is a public website where building managers can register a building with Fire and Lift services (including contact details of the person registering and most importantly the phone number of each fire and lift service). A second 'bulk registration' method, is also available, where fire and lift service providers can register the premises where they are aware of the presence of fire and lift services (including those services' phone numbers). ASPs that have not already engaged with nbn for bulk registrations should contact legacyservices@nbnco.com.au.

The Register is an important government initiative to help support affected building owners and managers with fire and lift phones when the existing phone network is replaced by nbn's network (or other networks). The information on the Fire and Lift Register is being collected to help identify buildings with fire and lift services to provide support to owners and managers of those buildings and to assist them in the migration off the legacy copper networks.

16. Where to get further information?

ASPs should provide their customers with information about the compatibility of their legacy device with services being offered by RSPs over nbn network-based services and what a customer needs to do before migrating their telecommunications services. It is expected ASPs will also provide information proactively to customers in areas where nbn's network is being rolled out.

RSPs can contact their nbn account team for further information or to discuss strategies to support legacy services.

nbn has more detail at www.nbnco.com.au/compatibility

Further information regarding nbn's test facility can be requested from nbn via the following email address: plugbench@nbnco.com.au

A dedicated email address has also been established for legacy service migration enquiries: service-transition@nbnco.com.au

17. Glossary

For the purposes of this IGN, the following abbreviations and acronyms apply.

ASP	Application Service Providers
BBU	Battery Backup Unit
DoCA	Department of Communications and the Arts
EFTPOS	Electronic Funds Transfer At Point Of Sale
FTTN/B	Fibre to the Node / Building
FTTP	Fibre to the Premises
HFC	Hybrid Fibre-Coaxial
IGN	Industry Guidance Note
IP	Internet Protocol
MAR	Medical Alarm Register
MFA/LEP	Monitored Fire Alarm / Lift Emergency Phone
MTM	Multi-Technology Mix
nbn	NBN Co Limited (the company)
NTD	Network Termination Device
OTT	Over-The-Top
PERSA	Personal Emergency Response Services Association
PIM	Public Information on Migration
PSTN	Public Switched Telephone Network
RSP	Retail Service Provider
UNI-D	User Network Interface - Data
UNI-V	User Network Interface - Voice

Appendix A

Application Service Provider responsibilities and recommended key messages

Responsibilities

- Test legacy offerings over nbn network-based telecommunications services at test facilities with RSPs and/or provided by nbn to satisfy themselves of device operation.
- Proactively contact customers as nbn's network rolls out and advise customers about potential impacts on their legacy service, and if their legacy service is expected to work with their chosen RSP. If an incompatibility is expected, discuss options with the customer.
- Publish legacy services compatibility information which has been determined both by testing over RSP's nbn-based telecommunications services and from field experience.
- Produce and promote legacy services specific telecommunications wiring requirements and manuals for legacy device installers, and legacy test procedures, for use during new services installation and migration.
- Advise customers that wiring modifications need to be undertaken by a registered cabler in accordance with the cabling standards.
- Contribute data to nbn's medical alarm register about the premises where medical alarms are present

Recommended Key Messages [for use in communicating to customers]

- nbn's network is capable of supporting the operation of many existing back-to-base legacy services, as well as a wide range of internet-connected services.
- There may be cases where existing legacy devices may not be compatible with an nbn network-based telecommunications service and, if that is the case, the ASP will need to work with their contracted customers to provide an alternative solution (where possible).
- Legacy service customers that currently have a back-to-base monitored legacy service in their home or business, and are switching to an nbn network based service, should speak to:
 - their telecommunications service provider
 - their legacy service provider

about the issues to consider when migrating to an nbn network-based (or other network based) service.

- Customer premises wiring may need to be reconfigured in order to work correctly on a chosen RSP's nbn network-based telecommunications service. ASPs are not responsible for in-premises wiring, but where ASPs do provide such a service, then additional charges may apply for the completion of in-premises wiring.

Appendix B

Retail Service Provider (RSP) responsibilities and recommended key messages

Responsibilities

- Make information available to customers about migration arrangements and what services may be impacted.
- Make reasonable efforts to identify and verify the customer's needs and advise whether the RSP's offer can meet that need.

a) Sales process

- As part of the sales conversation with the customer
 - identify that some OTT devices may be impacted by a migration/connection to an nbn network-based service. Ask the customer about the presence of any legacy services (e.g. alarms).
 - Advise the customer to speak to their ASP about the compatibility of their legacy service (noting again that the compatibility of legacy services is not something RSPs are responsible for or have knowledge about).
 - Identify to the customer what, if any, in-premises wiring is provided as part of the RSP's telecommunications service. If this is not the case, explain the steps that the customer can take to have the wiring completed by a registered cabler.
 - If a customer discloses they have an alarm, then advise the customer what options are available for battery back-up and any potential limitations of those options.

Note: It is the customer's responsibility to advise their Supplier of their telecommunications needs.

b) Professional Installation

If an installation technician visits a customer premises to install the RSP equipment, as part of the telecommunications service offered to a customer:

- Ask the customer about the presence of any legacy services (e.g. alarms).
- Communicate the presence of any legacy services to technicians or subcontractors who visit the premises.
- After installing the equipment, make test calls from any telephone outlets that have been identified as being associated with legacy services (e.g. alarms), and provide guidance on how to fix any of these outlets that are found to be faulty.
- Recommend that the customer test any legacy services with their ASP – either on the spot while the technician is still present (preferred) or as soon as possible.
- Check that the customer is comfortable with the status of their legacy service before completing the migration. The installation is to be deferred if the customer is not comfortable, after taking into account other relevant factors such as mandatory disconnection dates.

c) Self-Installation

Where the RSP provides the end user with a self-installation kit, the RSP should make the end user aware that existing phone sockets in the premises are unlikely to work unless a registered cabler is contracted to upgrade the in-premises wiring to connect to an nbn's network-based service.

Recommended Key Messages [for use in communicating to customers]

- Ask the customer about the presence of any legacy services (e.g. alarms).
- Some legacy equipment/services may not continue working on RSPs nbn network-based services.
- Customers with legacy back-to-base services installed in their home or business, and who are switching to an nbn network-based RSP service, should speak to their ASP to determine whether their legacy service is compatible with their chosen RSPs nbn network-based service.
- Customers who disclose they have back-to-base legacy services will need to arrange for their in-premises wiring to be reconnected to their new RSPs nbn network-based service. Explain the RSP options available to the customer to have that in-premises wiring work completed by a registered cabler.
- RSP's are not responsible for in-premises wiring, but where RSP's do provide such a service, then additional charges may apply for the completion of in-premises wiring.
- Before completing the migration, ask the customer to test the legacy service with their ASP and confirm that they are comfortable with the status of the legacy service.

Appendix C

nbn (and other fixed network providers) responsibilities and recommended key messages

Responsibilities

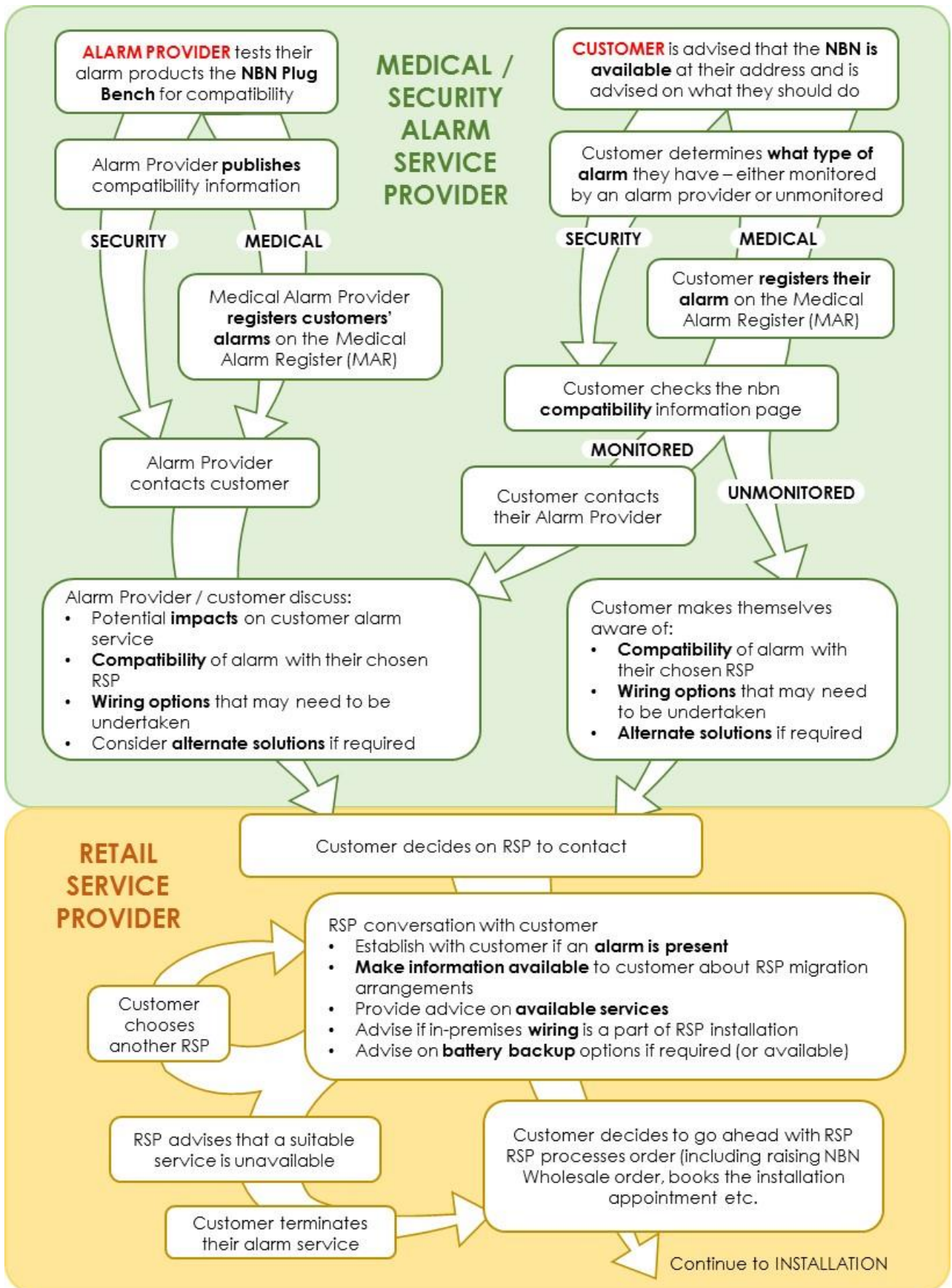
- Provide information on legacy services via the nbn's website and through the Public Information on Migration (PIM) process that will include the following:
 - That nbn is rolling out a new network.
 - That customers are responsible for the costs of replacing/upgrading Customer Equipment and premises wiring.
- Conduct a local awareness campaign which will inform affected residents that:
 - That nbn's network is being rolled out in their area.
 - The effect on telecommunications services currently available.
 - The extent to which customers will need to make preparations for RSPs nbn network-based services including new Customer Equipment or physical wiring.
- Publish information regarding planned deployment of nbn's network and periodically issue updates to that information.
- Provide assistance to ASPs and RSPs to facilitate their testing of legacy equipment against RSP nbn network-based service offerings.
- Maintain a register of premises with medical alarms, including an option that allows members of the public to self-nominate.

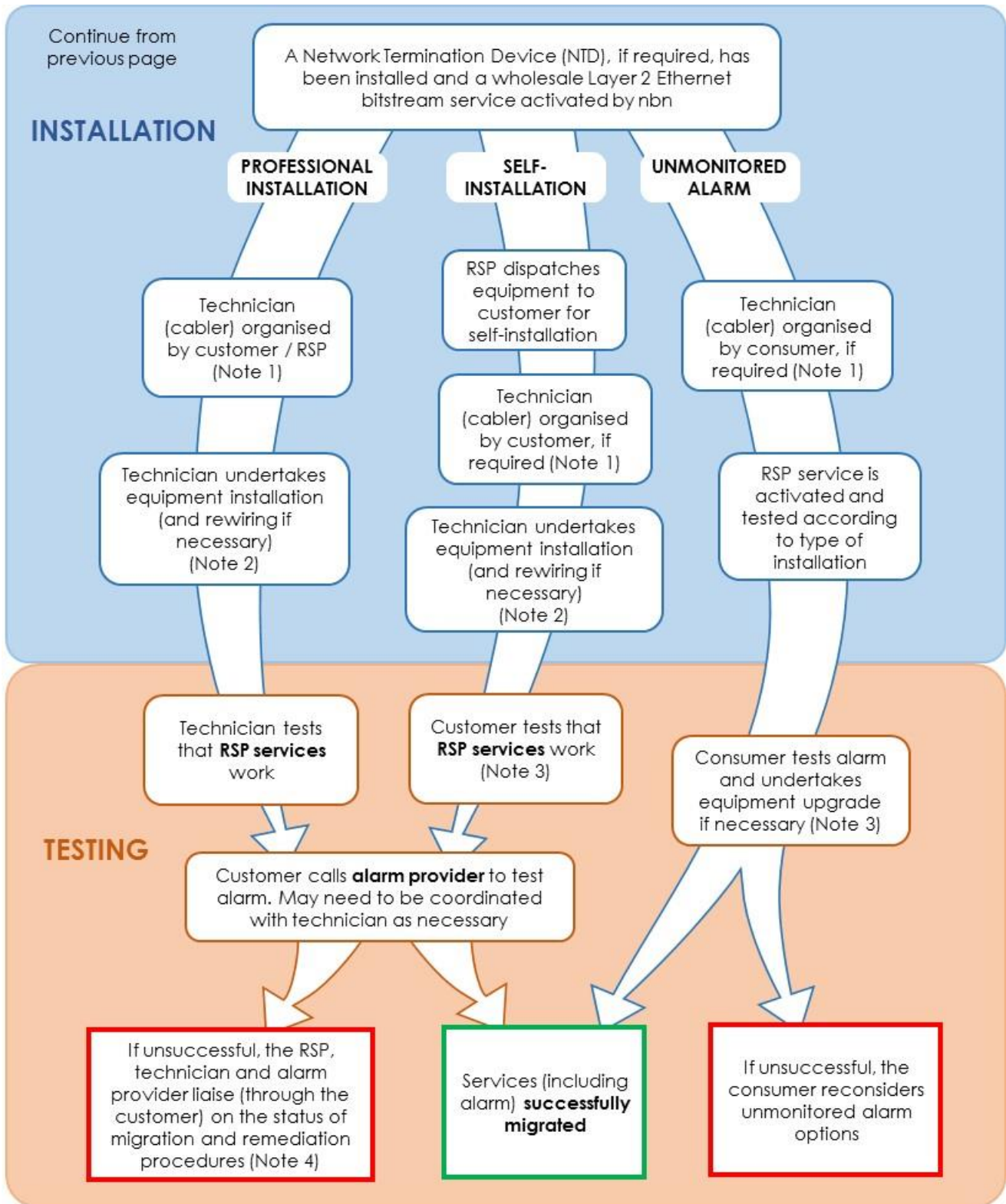
Recommended Key Messages [for use in communicating to customers]

- nbn's network is capable of supporting the operation of many existing back-to-base legacy services, as well as a wide range of internet-connected services.
- If you currently have a back-to-base legacy service installed in your home or business and you are switching to an RSP's nbn network-based service, you should speak to your ASP about the issues to consider when moving to an nbn network-based phone service.
- ASPs are able to undertake basic testing of the compatibility of their legacy devices on telecommunications services supplied over RSPs nbn network-based services by accessing the nbn test facility. Further details available through nbn.
- The most certain way to find out if your legacy service will work on your chosen RSPs nbn network-based service is to ask your ASP. They are best placed to know the legacy services' technical requirements and may have already undertaken compatibility testing with various RSPs' telecommunications services provided over nbn's network.

FIGURE 1

Overview of service migration steps for Medical and Security Alarms

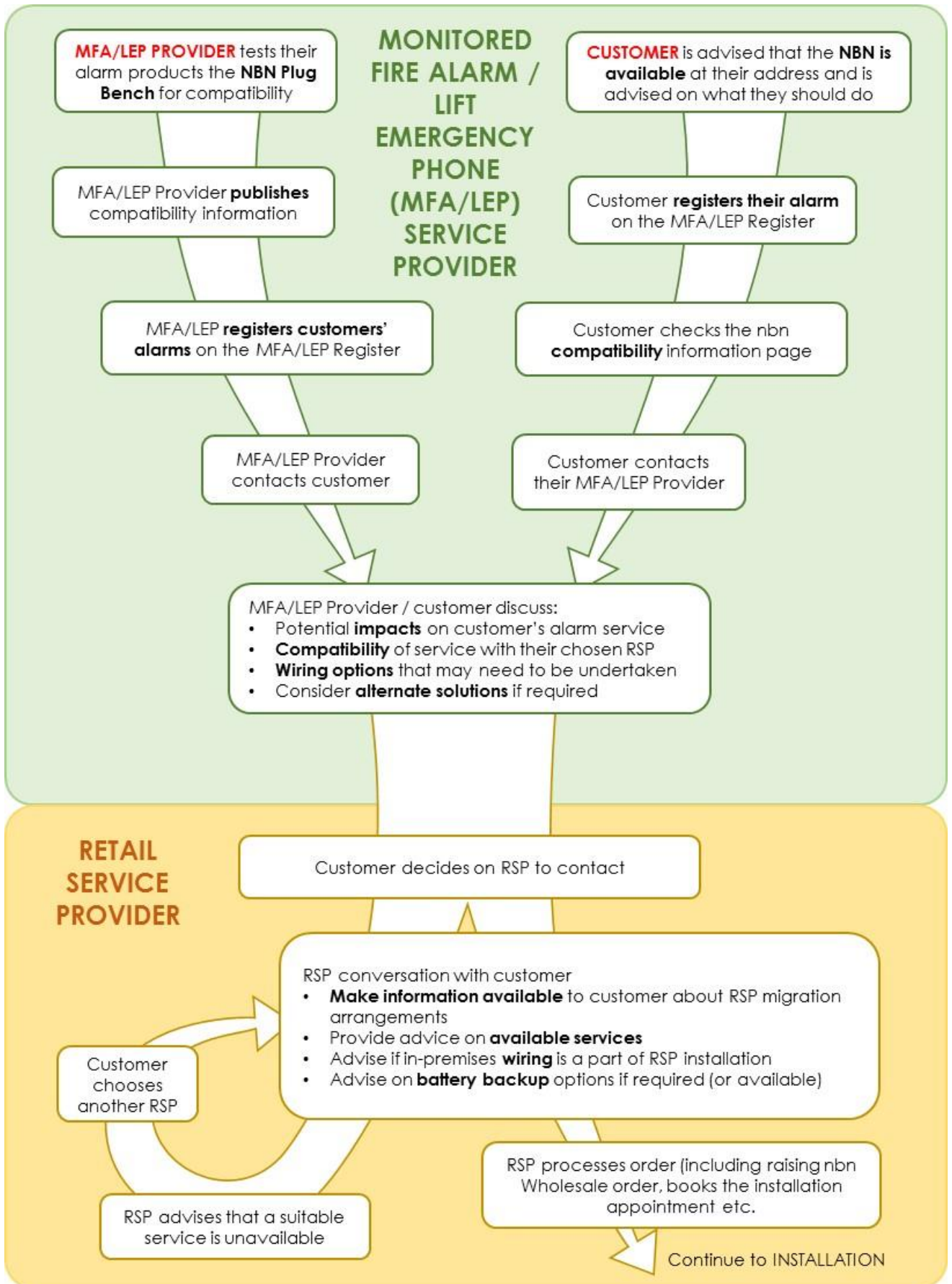


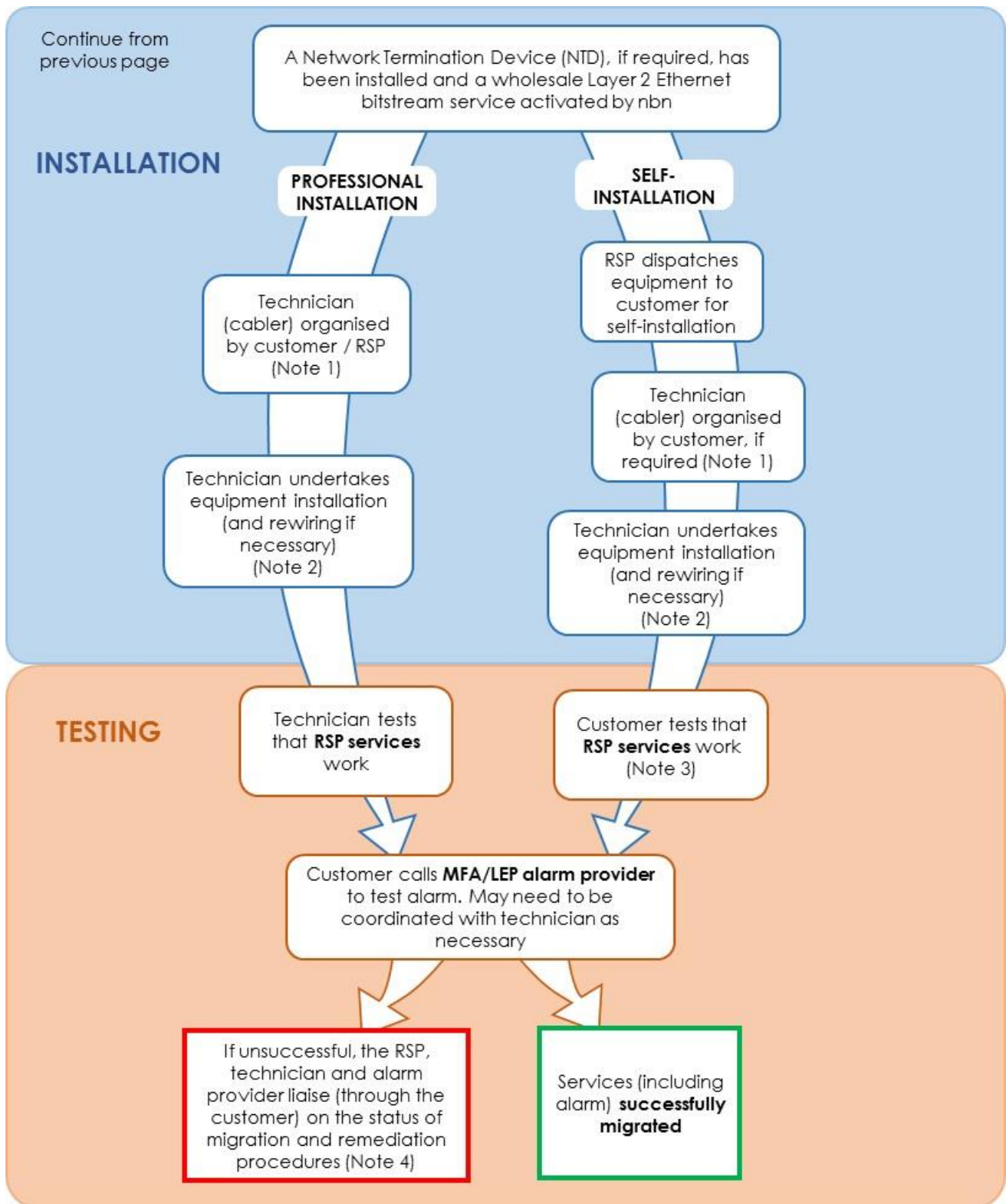


- Note 1: If the installation requires cabling work in addition to equipment installation (new fixed cabling or changes to existing fixed cabling), then the technician needs to be a registered cabler.
- Note 2: Guidance for cabling work is provided in G649 'Cabling existing telecommunications services in the customer's premises for the NBN via FFTP'. This Guideline is being revised at the time of publication.
- Note 3: If additional cabling work is required, then the customer should discuss with their RSP or a registered cabler.
- Note 4: The testing of the legacy service needs to be completed in conjunction with the installation of the RSP service, and before the final cutover of the customer to the RSP's nbn network-based service. Once the PSTN number has been transitioned to the new services, it may not be possible to reconnect the legacy device to the copper.

FIGURE 2

Overview of service migration steps for Monitored Fire Alarms and Lift Emergency Phones





Note 1: If the installation requires cabling work in addition to equipment installation (new fixed cabling or changes to existing fixed cabling), then the technician needs to be a registered cabler.

Note 2: Guidance for cabling work is provided in G649 'Cabling existing telecommunications services in the customer's premises for the NBN via FFTP'. This Guideline is being revised at the time of publication.

Note 3: If additional cabling work is required, then the customer should discuss with their RSP or a registered cabler.

Note 4: The testing of the legacy service needs to be completed in conjunction with the installation of the RSP service, and before the final cutover of the customer to the RSP's nbn network-based service. Once the PSTN number has been transitioned to the new services, it may not be possible to reconnect the legacy device to the copper.

Note 5: The information for monitored fire alarms and lift emergency phones may be separated into two figures in a subsequent edition of the IGN subject to new information becoming available for these services.

NOTES

Communications Alliance was formed in 1997 to provide a unified voice for the Australian communications industry and to lead it into the next generation of converging networks, technologies and services.

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COMMUNICATIONS
ALLIANCE LTD**

**Level 12
75 Miller Street
North Sydney
NSW 2060 Australia**

**Correspondance
PO Box 444
Milsons Point
NSW 1565**

**T 61 2 9959 9111
F 61 2 9954 6136
E info@commsalliance.com.au
www.commsalliance.com.au
ABN 56 078 026 507**

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