

Device Life cycle – All You Need To Know

Who Is Payments NZ?

Payments NZ Limited (Payments NZ) is responsible for setting and overseeing the rules and standards that are central to the way payment instructions are exchanged and settled.

We ensure that everyone involved in payments in New Zealand has complete confidence in the integrity of the payments system.

We are the central body dedicated to establishing the best possible guidelines and rules of engagement for all.

What is the Consumer Electronic Clearing System?

The Consumer Electronic Clearing System (CECS) includes all consumer electronic payments.

Today this covers EFTPOS and ATMs. It also includes emerging technology like mobile payments and road toll payments.

To make an electronic payment happen, different entities have to “talk” to exchange information about the payment.

CECS creates the rules and standards that govern how this should happen.

The table below lists some examples:

THE RULES AND STANDARDS FOR...	INCLUDE...
Issuers	<ul style="list-style-type: none"> • What a card must have and do, and • What they must ensure the customer has; e.g., PIN.
Acquirers	<ul style="list-style-type: none"> • What a merchant must be required to do; e.g., make available a receipt, and • Stringent encryption requirements to keep cardholder information secure.
Devices	<ul style="list-style-type: none"> • The minimum requirements of the actual hardware that merchants have to enable cardholders to initiate their transactions.
Switches	<ul style="list-style-type: none"> • What information gets exchanged, • How, when, and how quickly it is exchanged, and • Formats for the data.

Why register models of device?

Payments NZ's device registration process regulates 2 types of PIN transaction security device to ensure they are secure enough to protect sensitive data on customer payment instruments from unauthorised disclosure or use in New Zealand.

Under the Payments NZ rules and EFTPOS device life cycle standards:

- only devices of a model registered on the Payments NZ Device Register may connect to the EFTPOS switching network, and
- if Payments NZ removes a model of device from the Device Register, all devices of the model must disconnect from the EFTPOS switching network.

What device types require registration?

Two device types must be registered on the Device Register:

- PIN entry devices (PED), and
- unattended payment terminals (UPT).

Why is there a NZ specific registration process?

In New Zealand we adhere to standards as prescribed by PCI Security Standards Council (SSC) (PCI standards). While the CECS EFTPOS device life cycle standards are closely aligned with current New Zealand and/or international standards, from time to time there will be differences within the local market.

The New Zealand EFTPOS device life cycle standards will recognise those differences, clarify the interpretation of the international standards and, where required, define how they apply in New Zealand.

In aligning our requirements in this way, we make sure that we are applying both national and international best practice in a fair and transparent manner.

When is device registration required?

If you have a device model that is not registered on the Payments NZ Device Register it must be registered before it can connect to the EFTPOS switching network.

Use the Device Registration Application Form to apply for registration of a model of device.

What are the registration criteria?

The criteria for registering a device model are:

- a letter from the PCI SSC confirming that the model conforms with a version of a PCI standard,
- the version of the PCI standard is specified on the Device Dates Register, and
- the date of registration of the device model will be before the sunset date for that model (when Payments NZ stops registering models of device that conform with the version of the PCI standard).

How does the registration process work?

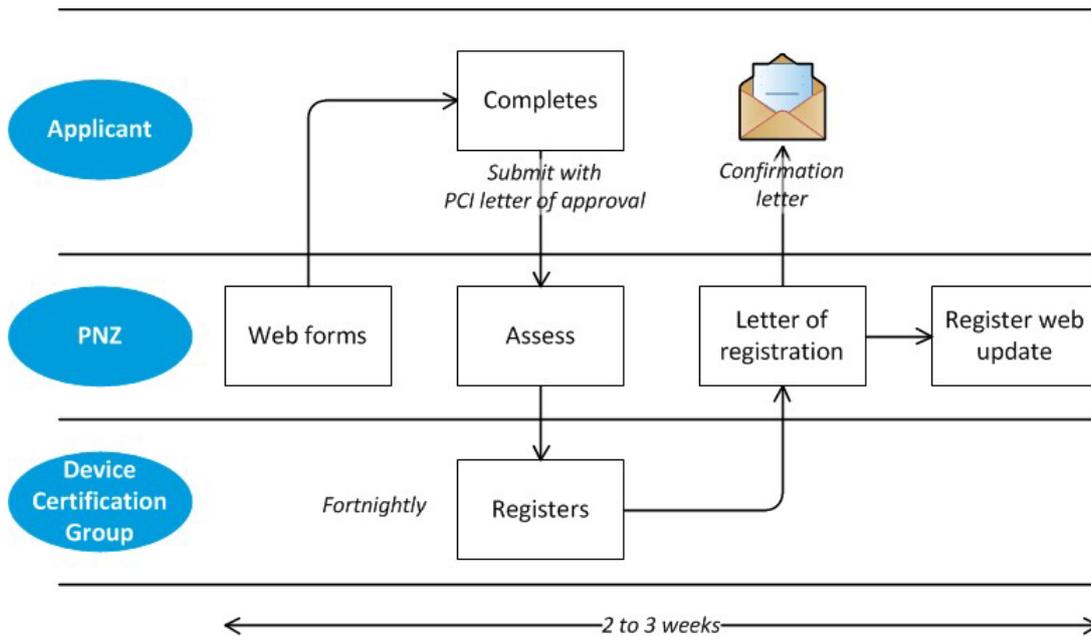
When Payments NZ receives a completed Device Registration Application Form, Payments NZ:

- checks whether the application contains the required information, and

- determines whether the application satisfies the registration criteria.

Determinations will be made within a 10 day period. If the application satisfies the registration criteria, Payments NZ must register the model of device on the Device Register and the device may proceed to the switch for testing.

The diagram below illustrates the registration process:



What information is required to adequately identify a model of device?

An application to register a model of device must identify the model by specifying the following information about the model of device:

- manufacturer,
- model number,
- hardware and firmware,
- version of PCI standard with which the model conforms,
- PCI approval number, and
- approval version and class.

The device identifiers will be included in the PCI approval letter and on the Device Register.

If an identical PED is used across a family of devices, vendors are cautioned against using a hardware version number that may restrict approval only to that device model.

Where can I find a list of registered models of device?

This can be found on the [Device Register](#) on the Payments NZ website.

Why a device life cycle?

We need to make sure that each model of device is secure enough to protect every PIN from unauthorised use. The device life cycle describes the framework in which we do this.

It also allows greater control over the distribution of devices in the market and ultimately better protects CECS and cardholders.

What is the device life cycle?

The device life cycle describes the process a model of device goes through from market entry to market removal. The table below lists the defined life cycle stages.

STAGE	LIFE CYCLE	DESCRIPTION
1	Device registration	Payments NZ registers a model of device on the Device Register if it conforms with a PCI PTS standard (PCI standard) recorded on the Device Dates Register.
2	No new registration date	The date Payments NZ stops registering models of device that conform with a PCI standard; i.e., Payments NZ will decline any application for registration received after the date published on the Device Dates Register.
3	No new connections date	The date that new devices of all registered models that conform with a PCI standard must stop connecting to EFTPOS switching network for the first time.
4	Sunset date	The date that devices of all registered models that conform with a PCI standard must disconnect from the EFTPOS switching network.

5	Disconnection when device compromised	Process for disconnecting devices of a registered model from the EFTPOS network if the model fails to protect sensitive data on a payment instrument from unauthorised use or disclosure in New Zealand or overseas.
6	Disconnection when PCI standard changes	Process for disconnecting devices of a registered model that conforms with a PCI standard when: <ul style="list-style-type: none"> • the PCI standard changes before the sunset date, and • the model is not updated to conform with the amended PCI standard.

What are the device life cycle dates?

The device life cycle dates are the following dates that apply to all registered models of device that conform with a PCI standard on the Device Dates Register:

- no new registration date,
- no new connections date, and
- sunset date.

They are published on the [Device Dates Register](#).

Payments NZ may also set a disconnection date (before the relevant sunset date) for a single registered model if:

- a device of the model is compromised, or
- the relevant PCI standard changes but the model is not updated to conform with it.

Why are the Payments NZ dates sometimes different from PCI dates?

PCI provide date guidelines and do not mandate the removal of devices from a market. It is the role of Payments NZ to set dates that make sense for New Zealand. The underlying device life cycle framework ensures that the dates are achievable and that we have clear, robust processes to support the transition through each device life cycle stage.

What are the details of each stage of the device life cycle?

1. Device registration

PCI develops the standards for PIN security in devices and manages the technical and operational requirements for protecting cardholder data.

Each version of a PCI standard has a 36-month life cycle to keep pace with technological innovation and changes in security threats. If PCI approves a model of device under a version of a PCI standard, PCI gives the vendor a letter that includes when the approval expires. Payments NZ maintains a Device Register that records the models of device that may connect to the EFTPOS switching network.

For each registered model of device, Payments NZ must record the following details as a minimum:

- manufacturer,
- model number,
- hardware/firmware,
- version of the PCI standard with which the model conforms,
- PCI approval number,
- approval version and class,
- any no new connections date determined by Payments NZ from which new devices of the registered model must not connect for the first time to the switching network,
- any date determined by Payments NZ from which all devices of the registered model must disconnect from the switching network, and
- if the relevant PCI standard changes, any date determined by Payments NZ by which the model must be modified to comply with the change.

Acquirers ensure the devices that are used by their merchants are registered on the Device Register.

2. No new registrations

When PCI phases out an old PCI standard, Payment NZ sets a date from which it will stop registering models of device that conform with the old standard.

Payments NZ communicates the 'no new registrations' date by:

- recording it on the Device Dates Register, and
- notifying (in writing) participants, switch companies and terminal vendors.

On and from the 'no new registrations' date, Payments NZ stops registering models of device on the Device Register that conform with the old PCI standard.

3. No new connections

Payments NZ then sets a date from which new devices of registered models of device that conform with the old PCI standard must not connect for the first time to the EFTPOS switching network.

Payments NZ communicates the 'no new connections' date by:

- recording it as follows:
 - in relation to the old PCI standard, on the Device Dates Register, and
 - in relation to each registered model of device that conforms with the old PCI standard, on the Device Register, and
- notifying (in writing) participants, switch companies and terminal vendors.

Each acquirer ensures that, from the 'no new connections' date, its switch does not connect new devices of any registered model that conforms with the old PCI standard.

4. Sunset

Payments NZ sets a date from which devices of all registered models of device that conform with the old PCI standard must disconnect from the EFTPOS switching network.

Payments NZ communicates the 'sunset' date by:

- recording it as follows:
 - in relation to the old PCI standard, on the Device Dates Register,
 - for registered models of device that conform with the old standard, on the Device Register,
- for a sunset date (3 years or more after expiry of the old PCI standard), notifying (in writing) participants and switch companies; and

- for a sunset date on any other date, notifying (in writing) participants, switch companies, and terminal vendors, and
- (before the sunset date) publishing it on the Payments NZ website.

On the sunset date, Payments NZ removes the models of device from the Device Register.

Acquirers ensure that their switches disconnect devices of all models that conform with the old standard by the sunset date.

5. Disconnection when device compromised

Under the rules and EFTPOS device life cycle standards, an EFTPOS device is compromised if it fails to protect sensitive data on a payment instrument from unauthorised disclosure or use in New Zealand or overseas.

Payments NZ is responsible for leading the high-level EFTPOS industry response to the compromise (see the Compromised Device Disconnection Plan).

Payments NZ responds to the compromise by:

- notifying the following by email message of the compromise:
 - all CECS participants,
 - switches that connect the model of device to the EFTPOS switching network, and
 - the vendor of the compromised model,
- deciding whether to disconnect all devices of the compromised model from the EFTPOS switching network before the sunset date that applies to the model,
- notifying all CECS participants, relevant switches and the device vendor of the decision,
- for a decision to disconnect the model of device:
 - updating the Device Register with the disconnection date (and any 'no new connections date') for the model,
 - requiring acquirers to ensure:
 - switches disconnect the devices by the disconnection date,
 - the device vendor arranges new devices to replace the compromised model, and
 - merchants are notified of the disconnection and replacement process, and

- on the disconnection date, removing the model from the Device Register.

The switches are responsible for disconnecting devices of the compromised model from the EFTPOS switching network.

Switches also manage the operational response to the compromise.

6. Disconnection or modification when PCI standard changes

If PCI changes a PCI standard after registration of a model of device but before the sunset date that applies to the PCI standard, Payments NZ leads the high-level EFTPOS industry response by:

- determining the 'most appropriate action', for example:
 - modification of devices of the non-compliant model to conform with the changed PCI standard, or
 - disconnection of devices of the model from the EFTPOS switching network,
- notifying the following by email message of the agreed action:
 - CECS participants and the CECS management committee,
 - switches that connect the model of device to the EFTPOS switching network, and
 - the vendor of the non-compliant model,
- for a decision to disconnect:
 - updating the Device Register with the disconnection date for the model,
 - requiring acquirers to ensure:
 - switches disconnect the devices by the disconnection date,
 - the device vendor arranges new devices to replace the non-compliant model, and
 - merchants are notified of the disconnection and replacement process, and
 - on the disconnection date, removing the model from the Device Register, and
- for a decision to modify, updating the Device Register with the modification date.

The switches are responsible for disconnecting devices of the non-compliant model from the EFTPOS switching network.

Switches also manage the operational response to the non-compliance.

Where can I find a list of Device Life cycle Dates?

Life cycle dates that apply to *all* models of device that conform with a version of a PCI standard, are recorded on the Device Dates Register being any:

- 'no new registrations date',
- 'no new connections' date, or
- 'sunset' date.

The [Device Dates Register](#) can be found on the Payments NZ website.

Life cycle dates that apply to each *registered* model of device are recorded on the Device Register being:

- any relevant 'no new connections' date or 'sunset' date (also recorded on the Device Dates Register) for the model of device,
- any disconnection date (falling before the sunset date), if a model of device is compromised, or non-compliant,
- any modification date for a non-compliant model,
- if a model of device is compromised, any revised 'no new connections' date and any disconnection date that is earlier than the sunset date, and
- if a model of device is non-compliant, any modification date or disconnection date that is earlier than the sunset date.