



National Student Index  
Integration Testing  
For *Nipper* Users

Test Script for the XML Interface

March 2006

Version 1.4

## Name of Document

National Student Index Integration testing - Test Scripts for On-line Interfaces for *Nipper* users.

## Document Contact

For information and copies of any documents relating to the NSI please contact:

NSI Unit  
 Ministry of Education  
 Level 3, St Paul's Square, Wellington  
 Phone: 04-463 8173  
 Email [nsi.unit@minedu.govt.nz](mailto:nsi.unit@minedu.govt.nz)  
 Fax: 04-463-8726

Meta Office Help Desk  
 51a Waipapa Road            Phone 04 939-1267  
 Hataitai                      Fax 04 386-3519  
 Wellington 6003            Email [helpdesk@meta-office.com](mailto:helpdesk@meta-office.com)  
 New Zealand

## Related Documentation

Document Title	Version	Status	Last Revision
Post-Compulsory Unique Identifier Code 2001	-	Issued	14 August 2001
NSI Business Process	Web	Published	9 May 2001
National Student Index - A Manual for Tertiary Education providers and Student Management System Developers	1.1	Final	8 February 2001
<i>Nipper</i> User Manual	1.5	Current	January 2006

## Table of Contents

<b><u>INTRODUCTION</u></b>	<b>5</b>
<b>ORIGIN OF THIS MANUAL</b>	<b>5</b>
<b>PURPOSE OF INTEGRATION TESTING</b>	<b>5</b>
<b>INTENDED AUDIENCE</b>	<b>5</b>
<b>OVERVIEW OF GOING LIVE WITH THE NSI</b>	<b>ERROR! BOOKMARK NOT DEFINED.</b>
<b>OVERVIEW OF INTEGRATION TESTS</b>	<b>5</b>
<b>PROCEDURE FOR INTEGRATION TESTING</b>	<b>5</b>
<b>SYSTEM REQUIREMENTS</b>	<b>6</b>
<b>TIPS FOR TESTERS</b>	<b>7</b>
<b>SETTING UP A TEST DATABASE</b>	<b>7</b>
<b><u>SEARCH TEST SCRIPTS</u></b>	<b>9</b>
<b>1.1 SEARCH - NSN</b>	<b>9</b>
<b>1.2 SEARCH – NAME, DATE OF BIRTH &amp; GENDER</b>	<b>12</b>
<b>1.3 SEARCH – NAME ONLY</b>	<b>13</b>
<b><u>CREATE RECORD TEST SCRIPTS</u></b>	<b>14</b>
<b>2.1 CREATE – PARTIAL RECORD</b>	<b>14</b>
<b>**2.2 CREATE – PARTIAL RECORD WITH ALTERNATIVE NAME</b>	<b>16</b>
<b>2.3 CREATE – ACTIVE RECORD</b>	<b>19</b>
<b>2.3 CREATE – ACTIVE RECORD</b>	<b>19</b>
<b>2.4 CREATE – ACTIVE RECORD – POTENTIAL MATCH</b>	<b>21</b>
<b><u>UPDATE RECORD TEST SCRIPTS</u></b>	<b>24</b>
<b>3.1 UPDATE - NAME</b>	<b>24</b>
<b>3.2 UPDATE – VERIFICATION INFORMATION</b>	<b>26</b>
<b>3.3 UPDATE – UNSUCCESSFUL UPDATE ATTEMPT</b>	<b>29</b>
<b><u>MERGE RECORD TEST SCRIPTS</u></b>	<b>31</b>
<b>4.1 MERGE – NO MANUAL INTERVENTION REQUIRED</b>	<b>31</b>
<b>4.2 MERGE – MANUAL INTERVENTION REQUIRED</b>	<b>33</b>
<b><u>CHALLENGE CHANGE TEST SCRIPTS</u></b>	<b>34</b>
<b>5.1 CHALLENGE CHANGE</b>	<b>34</b>
<b><u>A NOTE ON SEARCHING THE NSI</u></b>	<b>36</b>

## Introduction

### ***Origin of This Manual***

This manual was prepared by Meta Office (suppliers of *Nipper*) by taking the Ministry of Education's own manual and revising it to incorporate information specific to *Nipper* users. Where a section of the manual is specific to *Nipper* you will see a vertical bar in the left margin – just like this paragraph.

### ***Purpose of Integration Testing***

The purpose of the integration testing described in this document is to formally test that the interface between a provider's implementation of *Nipper* and the National Student Index (NSI) functions correctly. It is expected that before this testing takes place the provider will have completed their own testing to ensure that the interface works in the way that is required by their own organisation. The integration testing is intended to provide both the provider and the Ministry of Education with the confidence that the NSI interface allows data to be successfully transferred without causing either system to malfunction before the provider commences their use of the live NSI system.

### ***Intended Audience***

This document is intended for technical personnel carrying out NSI testing at provider sites.

If you are a small provider, intending to use the Web interface (rather than the XML interface) you may not wish to carry out this integration testing, because you intend to rely on obtaining National Student Index numbers for existing students via the Web. You should contact the NSI Unit to obtain access to the NSI Web site.

### ***Overview of Integration Tests***

The integration tests cover all of the areas of NSI functionality that you are able to access via a standard NSI interface. The tests are divided into each of the following main areas:

- searching for an existing NSI record;
- creating a new record;
- updating an existing record;
- merging two or more NSI records; and
- challenging a change that another user has made to one of your student's NSI records.

There are test scripts that relate to each of these main areas. These scripts are essentially checklists that detail precisely what is being tested and in what sequence.

### ***Procedure for Integration Testing***

The following steps are the procedure for carrying out NSI Integration testing.

1. Obtain a log-in (user name and password) to the NSI test site from the NSI Unit if you do not already have one. **If you have an existing log-in contact the NSI Unit to make sure that it is valid for the XML interface.**
2. Arrange test date with the NSI Unit.
3. Confirm test scripts that will be executed.
4. Prepare test database.
5. Run tests on agreed date.
6. Complete test script templates.
7. Fax or e-mail completed templates to the NSI Unit.
8. Review test results in conjunction with the NSI Unit.
9. Rectify any problems.
10. Resubmit as necessary.
11. NSI Unit agrees that testing is completed.

### ***System Requirements***

In order to successfully complete the integration testing and then use the NSI your system must meet the following requirements:

Your version of *Nipper* must be version 1.2.1 or higher. You can determine your version of *Nipper* by opening *Nipper* and looking at the version number in the title bar of the window. If you need to upgrade you can obtain the relevant download from the Nipper web site ([www.nipper.co.nz](http://www.nipper.co.nz)) or contact the help desk on 04 939-1267.

## **Tips for Testers**

Integration testing will be most successful if you ensure that:

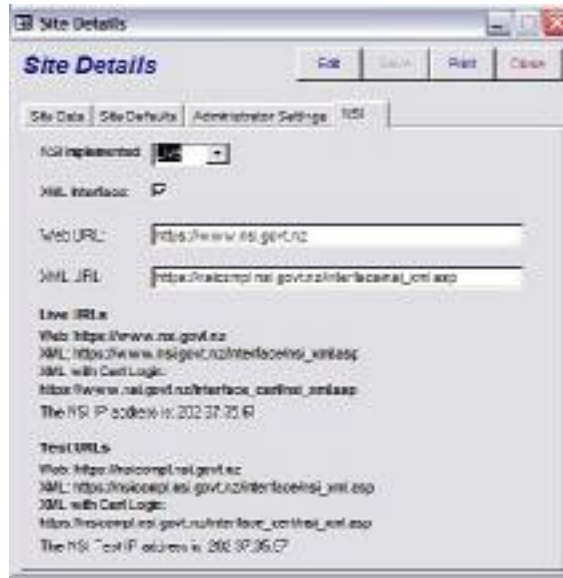
- You enter the exact data in the test script. If all of the data cannot be entered, or alternate data is entered, you should provide an explanation on the template.
- You execute the tests in order because the test scripts have been designed to be carried out sequentially, for example the record you create in 2.1 is subsequently updated in 3.1.
- The test environment is equivalent in all respects to the live/production environment that you will be using. If this is not possible you should discuss with the NSI Unit the differences between your testing and live environments.
- Only people testing the NSI interface have access to your test environment while you are performing the testing.
- You conduct the testing on the date agreed with the NSI Unit.
- You keep a full record of any errors or issues that arise – e.g. take a screen shot of any errors.
- To copy the window or screen contents:
  - To make a copy of the active window, press ALT+PRINT SCREEN.
  - To copy the entire screen as it appears on your monitor, press PRINT SCREEN.
  - Note: To paste the image into a document (e.g. a Word document), click the *Edit* menu in the document window, and then click *Paste*.

If any questions arise during the integration testing please contact the NSI Unit or the Meta Office Help Desk as soon as possible.

## **Setting Up a Test Database**

We suggest that you do your testing by using a copy of your live *Nipper* database. It is also a good idea to use a separate *Nipper* front-end to reduce the chance of mixing up the test database with the live database.

- a) Create a new folder on your PC called “NSITest”.
- b) Copy the live *Nipper* data files (NipperData.mdb and NipperArchive.mdb) into this folder.
- c) Copy the *Nipper* front-end file (Nipper.mde) into this folder.
- d) Create a shortcut to the two front-end, naming it “Test Nipper”
- e) Open the front-end file and you will be prompted to locate the Nipper data file. Select the data file in the NSITest folder.
- f) Notice that when you return to the *Main Menu* after linking, the word “Test” will appear rather than the logo file.
- g) Click the Administration button and go to *Site Details->NSI*. Make sure that the *XML Interface* field is ticked and that “Live” is entered in the *NSI Implemented* field.
  - i. Web: URL: <http://nsicompl.nsi.govt.nz>
  - ii. XML URL: [https://nsicompl.nsi.govt.nz/interface/hsi\\_xml.asp](https://nsicompl.nsi.govt.nz/interface/hsi_xml.asp)



Now you are ready to run through the test script.

## Search Test Scripts

These tests are intended to ensure that the provider can use their NSI interface to locate existing NSI records.

### 1.1 SEARCH - NSN

Provider is enrolling a new student who has given the provider their National Student Index number (NSN). Provider enrolls student and searches for an existing NSI record as part of this process.

Record details are returned from NSI. If all details are correct then the provider uses the existing NSI record.

- Add a student on the *Students* form. Make up the details of name, gender, etc.
- Enter "3596060" in the *NSI Number* field.
- When you click the *Save* button you will be asked "Do the details you have entered for this student apply to the National Student Index?" Reply with "Yes".
- Now you will be asked to verify identify and residency. In fact this is not necessary for this test. You can simply click on the *Save* button again.
- Now click on the *NSI* button. You will be prompted to log-in to the NSI, so enter your user name and password.
- Now the *National Student Index* form opens.

The screenshot shows a web-based form titled "Student: Dracula, Count [ ID: 3 ]". The form is divided into several sections: "Basic Details", "Other Details", "NSI", and "International Students". The "Basic Details" section is currently active and contains the following fields: Family Name (Dracula), First Names (Count), Title (dropdown), Gender (dropdown), Date of Birth (16/10/1955), Age (50), Ethnicity (dropdowns), Iwi (dropdowns), Prior Activity (dropdown), School (dropdown), Sec Award (dropdown), Eligibility (dropdown), Organisation (dropdown), Contact (dropdown), Previous (dropdown), Preferred (dropdown), Intake (dropdown), RO Number (dropdown), Citizenship (NZ), Disability (dropdown), Lost (dropdown), Assistance (dropdown), Language Student (checkbox), Hook On Part (dropdown), Don't send to NZQA (checkbox), and a "Save" button. The "NSI" section is currently empty. The "International Students" section is also empty. The form has a status bar at the bottom with the following information: Record Created: 20/10/2008, Record Updated: 31/01/2008, Web Links: [New Zealand Qualifications Authority](#) and [National Student Index](#), Showing: Active Students, and a page number of 1 of 2.

- g) Click on the *Search* button and a student will be found. The *Data* tab will be displayed. If one student is displayed in the *NSI* section write “One student returned” in the first “Actual Output” box of the Ministry’s test script, below. (That one student may have alternative names such as “Alt Surname” etc. That’s ok – the student still counts as *one student*.)
- h) Write down the name and date of birth of the returned student whose details are displayed on the *Data* tab in the second “Actual Output” box of the Ministry’s test script, below. Note, *Nipper* display the code of the organisation that created NSI records, and code “9999” is NZQA.
- i) Close the *National Student Index* form.
- j) Mark off below whether the test was passed or failed (ie the test was passed if you found one student *and* it was the correct student).

**Nipper NSI Details:**

NSI Number:  NSI Checked:

Surname:  Forename 1:  Forename 2:

DoB:  DoB:  Forename 3:

Gender:  Identity Verification:  NSI Status:

Hook On Paid:  Residential Status:  Residency Verification:

Preferred Name:  Previous Name:

**National Student Index (NSI)**

NSI:  Ranking:  Match Indicator:  Accept:

NSI Surname:  Forename 1:  Forename 2:

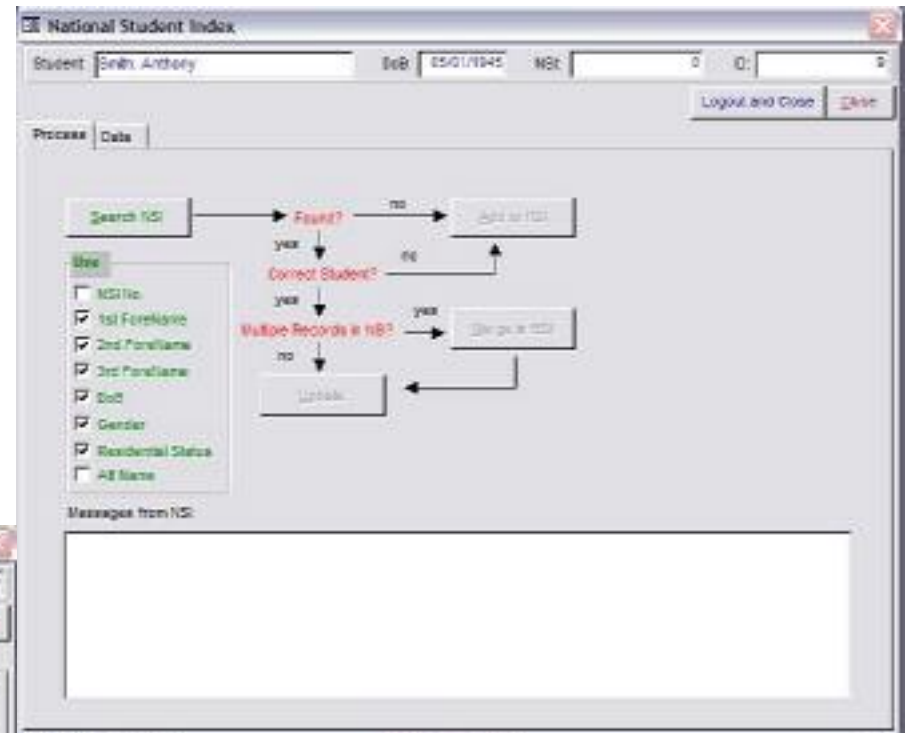
DoB:  DoB:  Forename 3:

Gender:  Identity Verification:  Preferred:  NSI Status:

Hook On Paid:  Residential Status:  Residency Verification:

Created By:  Created Date:

Alt. Surname	Alt. Fore 1	Alt. Fore 2	Alt. Fore 3	Preferred?	Verified



Please complete the 'Actual Output' column and record any comments in the Notes section below.

<i>NSI Action</i>	<i>Input</i>	<i>Expected Output</i>	<i>Actual Output</i>
1. Log into NSI 2. Perform Search for student	<ul style="list-style-type: none"> <li>Student NSN: 3596060</li> </ul>	<ul style="list-style-type: none"> <li>Search executes successfully.</li> </ul>	
3. Search returns one exact match result.	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>One NSI record is returned that relates to the NSN entered by the provider. Record was created by NZQA and should have date of birth 1/1/80.</li> </ul>	

Notes:

Pass/Fail

## 1.2 SEARCH – Name, Date of Birth & Gender

Provider is enrolling a new student who has not given the provider an NSN. Provider enrolls student and searches for an existing NSI record as part of this process.

Record details are returned from NSI. If an NSN exists and all details are correct then the provider uses the existing NSI record.

Follow the *Nipper* steps described above for section 1.1, except that at step a) you must type in precisely the details given below in the first “Input” box, miss out step b), and at step g) you may find several students returned. Record the output (the NSN that was returned) and mark off the pass/fail.

Please complete the ‘Actual Output’ column and record any comments in the Notes section below.

<i>NSI Action</i>	<i>Input</i>	<i>Expected Output</i>	<i>Actual Output</i>
1. Log into NSI 2. Perform Search for student	<ul style="list-style-type: none"> <li>Student Name: Fraser Richards</li> <li>DoB: 1 Aug 1979</li> <li>Gender: Male</li> </ul>	<ul style="list-style-type: none"> <li>Search executes successfully.</li> </ul>	
3. Search returns results from the NSI.	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>NSI record 260362 is returned.</li> <li>Other NSI records may also be returned.</li> <li>The returned data will be in the format described in the Search Function section of GINS.</li> </ul>	

Notes:

Pass/Fail

### 1.3 SEARCH – Name Only

Provider is enrolling a new student who has not given the provider their NSN. Provider enrolls student and searches for an existing NSI record as part of this process.

Record details are returned from NSI. If an NSN exists and all details are correct then the provider uses the existing NSI record.

Follow the *Nipper* steps described above for section 1.1, except that at step a) you must type in precisely the details given below in the first “Input” box, miss out step b), and at step g) you may find several students returned. Record the output and mark off the pass/fail. If several students are found, you will need to double click on each individual student (at the left hand arrow) to see all their details.

Please complete the ‘Actual Output’ column and record any comments in the Notes section below.

<i>NSI Action</i>	<i>Input</i>	<i>Expected Output</i>	<i>Actual Output</i>
1. Log into NSI 2. Perform Search for student	<ul style="list-style-type: none"> <li>Student Name: Ian Carter</li> </ul>	<ul style="list-style-type: none"> <li>Search executes successfully.</li> </ul>	
3. Search returns results from the NSI.	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>NSI record 98108230 is returned.</li> <li>Other NSI records may also be returned.</li> <li>The returned data will include at least student name and date of birth. NSI record status may also be shown, although if you found more than one NSI match for Ian Carter the NSI status may not be shown</li> </ul>	

Notes:

Pass/Fail

## Create Record Test Scripts

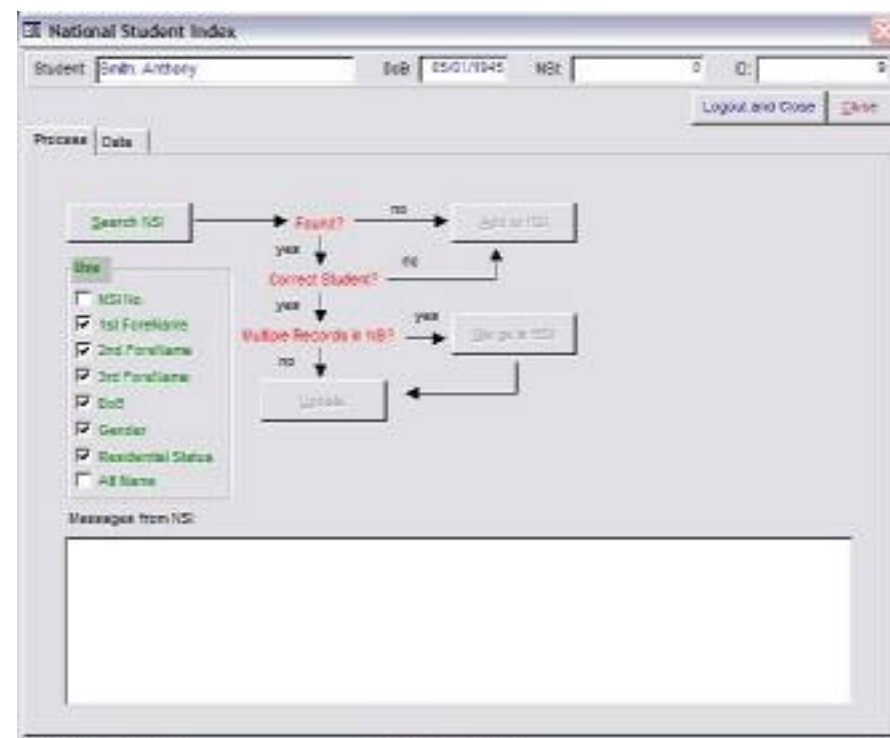
These tests are intended to ensure that the provider can use their NSI interface to create new NSI records. In completing these test you will be creating four new NSI records which are referred to in the following scripts as records A, B, C and D. As you will use these records again in later tests it is important that you keep a note of the NSNs that you create for each of these new records.

### 2.1 CREATE – Partial record

Provider is enrolling a new student who has not given an NSN. Provider creates a new record.

- Add a student on the *Students* form, entering the details described in the first “input” box below.
- When you click the *Save* button you will be asked “Do the details you have entered for this student apply to the National Student Index?” Reply with “Yes”.
- Now you will be asked to verify identify and residency. Do not do so because this is a “partial” record. You simply click on the *Save* button again.
- Now click on the *NSI* button. You will be prompted to log-in to the NSI, so enter your user name and password if you are not already logged in.
- Now the *National Student Index* form opens.
- Click on the *Search* button. No matching student will be found and you will be notified accordingly.
- Click on the *Add* button, the student will be added, and you will be accordingly notified.
- Record the NSI number which has been assigned to the student (it is displayed in the *NSI* field at the top right of the *National Student Index* form).
- Close the *National Student Index* form.
- Mark off below whether the test was passed or failed.

Please complete the ‘Actual Output’ column and record any comments in the *Notes* section below.



<i>NSI Action</i>	<i>Input</i>	<i>Expected Output</i>	<i>Actual Output</i>
1. Log into NSI 2. Create student record using create/insert function.	<ul style="list-style-type: none"> <li>Enter student details into create function.</li> </ul> <p>Details to enter:</p> <ul style="list-style-type: none"> <li>Student Surname: Street name where your provider is located.</li> <li>Student Forename1: Your own first name.</li> <li>Gender: Male</li> <li>Date of Birth: Today's date – 3 years.</li> <li>Residential Status: Citizen</li> </ul> <p><i>Eg.</i></p> <ul style="list-style-type: none"> <li><i>Student Surname: Pipitea</i></li> <li><i>Student Forename1: Karen</i></li> <li><i>Gender: Male</i></li> <li><i>Date of Birth: 30 Jan 1999</i></li> <li><i>Residential Status: Citizen</i></li> </ul> <p>Note that this record is partial, so do not enter verifications for residential status or name/DoB.</p>	<ul style="list-style-type: none"> <li>New NSI record saved in the NSI database</li> <li>NSN and record status returned.</li> </ul>	<ul style="list-style-type: none"> <li>Record the new NSN. (Note – this is the NSN for record A).</li> </ul>

Notes:

Pass/Fail

**\*\*2.2 CREATE – Partial record with alternative name**

Provider is enrolling a new student who has not given an NSN. Provider enrolls student and creates a new record that includes the student's alternative name (i.e. alias or former name).

- a) Add a student on the *Students* form, entering the details described in the “input” box below. Enter the student's preferred (alt) name “Rob Bob MacPherson” into the *Family Name* and *First Names* fields. Note, by entering this name here you are automatically setting it as the student's preferred name. Enter the student's gender.
- b) Now enter the student's other name and their remaining details on the NSI tab.
- c) Once you've entered all the details described below, click on the **Save** button. You will be asked “Do the details you have entered for this student apply to the National Student Index?” Reply with “Yes”.
- d) Now you will be asked to verify identify and residency. Do not do so because this is a “partial” record. You simply click on the **Save** button again.
- e) Now click on the *NSI* button. You will be prompted to log-in to the NSI, so enter your user name and password if you are not already logged in.
- f) Now the *National Student Index* form opens.
- g) Click on the **Search** button. It is likely that no matching student will be found and you will be notified accordingly. If potential matches are found, ignore them and go to the *Process* tab.
- h) Click on the **Add** button, the student will be added, and you will be accordingly notified.
- i) Record the NSI number which has been assigned to the student (it is displayed in the *NSI* field at the top right of the *National Student Index* form).
- j) Close the *National Student Index* form.
- k) Mark off below whether the test was passed or failed.

Please complete the ‘Actual Output’ column and record any comments in the Notes section below.

<i>NSI Action</i>	<i>Input</i>	<i>Expected Output</i>	<i>Actual Output</i>
1. Log into NSI 2. Create student record using create/insert function.	<ul style="list-style-type: none"> <li>Enter student details into create function.</li> </ul> <p>Details to enter:</p> <ul style="list-style-type: none"> <li>Alt Surname: MacPherson</li> <li>Alt Forename 1: Rob</li> <li>Alt Forename 2: Bob</li> <li>Alt Forename 3:</li> <li>NSI Surname: Name of the suburb/town where your provider is located.</li> <li>NSI Forename1: Your own first name.</li> <li>NSI Forename 2: Name of the region where your provider is located</li> <li>Gender: Male</li> <li>Date of Birth: Today's date – 3 years.</li> <li>Residential Status: Citizen</li> </ul> <p><i>Eg.</i></p> <ul style="list-style-type: none"> <li><i>Family Name: MacPherson</i></li> <li><i>First Name: Rob Bob</i></li> <li><i>Student Surname: ThorndanWellington</i></li> <li><i>NSI Surname: Karen</i></li> <li><i>NSI Forename 2: Wellington</i></li> <li><i>Gender: Male</i></li> </ul>	<ul style="list-style-type: none"> <li>New NSI record saved in the NSI database</li> <li>NSN and record status returned.</li> </ul>	<ul style="list-style-type: none"> <li>Record the new NSN. (Note – this is the NSN for record B).</li> </ul>

	<ul style="list-style-type: none"><li>• <i>Date of Birth: 30 Jan 1999</i></li><li>• <i>Residential Status: C</i></li></ul> <p>Note that this record is partial, so do not enter verifications for residential status or name/DoB.</p>		
--	---	--	--

Notes:

Pass/Fail

### 2.3 CREATE – Active record

Provider is enrolling a new student who has not given an NSN. Provider enrolls student and searches for an existing NSI record as part of this process.

No record can be found on the NSI and the provider creates a new record that includes verification of all of the data items.

- a) Add a student on the *Students* form, entering the details described in the first “input” box below.
- b) When you click the *Save* button you will be asked “Do the details you have entered for this student apply to the National Student Index?” Reply with “Yes”.
- c) Now you will be asked to verify identify and residency by entering “B” in the *Identity Verified* and *Residential Verification* fields in the NSI tab. Also enter “P” in the *Residential Status* field. Then click on the *Save* button again.
- d) Now click on the *NSI* button. You will be prompted to log-in to the NSI, so enter your user name and password if you are not already logged in.
- e) Now the *National Student Index* form opens.
- f) Click on the *Search* button. No matching student will be found and you will be notified accordingly.
- g) Click on the *Add* button, the student will be added, and you will be accordingly notified.
- h) Record the NSI number which has been assigned to the student (it is displayed in the *NSI* field at the top right of the *National Student Index* form).
- i) Go to the *Data* tab to see if the *NSI Status* is active – record the status in the output box below.
- j) Close the *National Student Index* form.
- k) Mark off below whether the test was passed or failed.

Please complete the ‘Actual Output’ column and record any comments in the Notes section below.

<i>NSI Action</i>	<i>Input</i>	<i>Expected Output</i>	<i>Actual Output</i>
1. Log into NSI 2. Create student using create/insert function.	<ul style="list-style-type: none"> <li>Enter student details into create function.</li> </ul> <p>Details to enter:</p> <ul style="list-style-type: none"> <li>Family Name: Name of your provider.</li> <li>First Names: Your own first name, then your own surname, then "Marie"</li> <li>Gender: Female</li> <li>Date of Birth: Today's date – 20 days.</li> <li>Residential Status: Permanent res.</li> <li>Name/DoB ver.: Birth certificate.</li> <li>Res Stat ver.: Birth certificate</li> </ul> <p><i>Eg.</i></p> <ul style="list-style-type: none"> <li><i>Family Name: Ministryofeducation</i></li> <li><i>First Names: Karen Wilton Marie</i></li> <li><i>Gender: Female</i></li> <li><i>Date of Birth: 10 Jan 2002</i></li> <li><i>Residential Status: P</i></li> <li><i>Name/DoB ver.: B</i></li> <li><i>Res Stat ver.: B</i></li> </ul> <p>Note that this is an Active record, so both the verification fields must be filled.</p>	<ul style="list-style-type: none"> <li>New NSI record saved in the NSI database. Record correctly shows the student's details.</li> <li>NSN and "active" record status returned.</li> </ul>	<ul style="list-style-type: none"> <li>Record the new NSN (note this is the NSN for record C).</li> </ul>

Notes:

Pass/Fail

## 2.4 CREATE – Active record – potential match

Provider is enrolling a new student who has not given an NSN. Provider fully enrolls the student and searches for an existing NSI record as part of this process.

The search identifies a potential match but after viewing this record the provider determines that in fact the existing NSI record relates to a different student and so creates a new record that includes verification of all of the data items.

- a) Add a student on the *Students* form, entering the details described in the first “input” box below.
- b) When you click the *Save* button you will be asked “Do the details you have entered for this student apply to the National Student Index?” Reply with “Yes”.
- c) Now you will be asked to verify identify and residency. Do so by entering “B “ in the *Identity Verified* and *Residential Verification* fields. Also enter “P” in the *Residential Status* field. Then click on the *Save* button again. A warning may appear asking you whether you want to see a list of duplicates. Click “No”. You will then be asked whether you want to save this entry anyway. Choose “Yes”.
- d) Now click on the *NSI* button. You will be prompted to log-in to the NSI, so enter your user name and password if you are not already logged in.
- e) Now the *National Student Index* form opens.
- f) Click on the *Search* button. A matching student maybe be found and you will be notified accordingly, but after viewing the details on the *Data* tab, you decide that this is not the correct student.
- g) On the *Process* tab click on the *Add* button. You may be asked whether you want to view matches before adding. Choose “No”. The student will be added, and you will be accordingly notified.
- h) Record the NSI number which has been assigned to the student (it is displayed in the *NSI* field at the top right of the *National Student Index* form).
- i) Close the *National Student Index* form.
- j) Mark off below whether the test was passed or failed.

Please complete the ‘Actual Output’ column and record any comments in the Notes section below.

<i>NSI Action</i>	<i>Input</i>	<i>Expected Output</i>	<i>Actual Output</i>
1. Log into NSI 2. Attempt to create student record using create/insert function.	<ul style="list-style-type: none"> <li>• Enter student details into create function.</li> </ul> Details to enter:	<ul style="list-style-type: none"> <li>• Search executes successfully.</li> </ul>	

	<ul style="list-style-type: none"> <li>• Student Surname: Name of your provider.</li> <li>• Student Forename1: Your own first name.</li> <li>• Student Forename2: Your own surname.</li> <li>• Student Forename3: Marie</li> <li>• Gender: Female</li> <li>• Date of Birth: Today's date – 10 days.</li> <li>• Residential Status: Permanent res.</li> <li>• Name/DoB ver.: Birth certificate.</li> <li>• Res Stat ver.: Birth certificate</li> </ul> <p><i>Eg.</i></p> <ul style="list-style-type: none"> <li>• <i>Student Surname: Ministryofeducation</i></li> <li>• <i>Student Forename1: Karen</i></li> <li>• <i>Student Forename2: Wilton</i></li> <li>• <i>Student Forename3: Marie</i></li> <li>• <i>Gender: Female</i></li> <li>• <i>Date of Birth: 20 Jan 2002</i></li> <li>• Residential Status: Permanent res.</li> <li>• Name/DoB ver.: Birth certificate</li> <li>• Res Stat ver.: Birth certificate.</li> </ul> <p>Note that this is an Active record, so both the verification fields must be filled.</p> <ul style="list-style-type: none"> <li>• Can add Alt Names</li> </ul>		
<p>3. Search results in matching records and override code being returned.</p>	<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• Override code &amp; details from potential matching record(s) returned.</li> </ul>	<ul style="list-style-type: none"> <li>• Record the override code OR if your system deals with the override code behind the scenes then record the details of the potentially matching NSI record that has been returned.*</li> </ul>

4. Create student using create/insert function but ensure that the override code <sup>1</sup> is added to the input data.	<ul style="list-style-type: none"> <li>• Input data from step 2 above.</li> <li>• Override code produced from first create attempt.</li> </ul>	<ul style="list-style-type: none"> <li>• New NSI record saved in the NSI database.</li> <li>• NSN and record status returned.</li> </ul>	<ul style="list-style-type: none"> <li>• Record the new NSN (note this is the NSN for record D):</li> </ul>

Notes:

Pass/Fail

---

<sup>1</sup> Your interface may deal with the override code behind the scenes and instead your system may advise you that a closely matching record has been found and ask you to confirm that you really do want to create new record.



<i>NSI Action</i>	<i>Input</i>	<i>Expected Output</i>	<i>Actual Output</i>
1. Log into NSI. 2. Perform Search for student.	<ul style="list-style-type: none"> <li>Student Name – from record A<sup>2</sup></li> <li>DoB, Gender, Residential Status-optional from record A.</li> </ul>	<ul style="list-style-type: none"> <li>Search executes successfully.</li> </ul>	
3. Search returns results.	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>Search returns results, including record A.</li> </ul>	
4. Update the name details on record A using the update function.	<ul style="list-style-type: none"> <li>Update name.</li> </ul> <p>Details to enter:</p> <p>Surname: Johnstone Forename 1:Henry Forename 2: Your own first name.</p> <p><i>Eg:</i></p> <p><i>Surname: Johnstone</i> <i>Forename 1:Henry</i> <i>Forename 2: Karen</i></p>	<ul style="list-style-type: none"> <li>Update executes successfully.</li> </ul>	

Notes:

Pass/Fail

<sup>2</sup> Note that record A is the record that you created as part of test script 2.1.

### 3.2 UPDATE – Verification information

Provider is enrolling a new student who has not given an NSN. Provider enrolls student and searches for an existing NSI record as part of this process.

An existing NSI record is found for the student however the details on the NSI record are not verified. The provider confirms the students' personal information and verifies the data on the NSI record accordingly.

- a) Open the *Students* form and select the student created in section 2.2 above.
- b) Click on the *NSI* button and log-in to the NSI.
- c) Now the *National Student Index* form opens. In the *Use* option group untick the *NSI No* and *Residential Status* fields.
- d) Click on the *Search* button. One or more matches will be found.
- e) Move to the *Data* tab of the *National Student Index* form. See the last page of this document for more information on viewing and selecting matches.
- f) In the *Nipper* section change the NSI number to the number of the correctly matching student (if it is not there already).
- g) In the *Nipper* section change the student's name (as described below)
- h) Also in the *Nipper* section change the *Identity Verified* field to "O" and the *Residential Verification* field to "B".
- i) In the *NSI* section tick the *Accept* field and the *Update NSI* field.
- j) Now return to the *Process* tab of the *National Student Index* form and click on the *Update* button.
- k) You will receive a message telling you that the NSI has been successfully updated.
- l) Close the *National Student Index* form and return to the *Students* form.
- m) Click on the *NSI Details* button and check that the student's NSI name, *Identity Verification* and *Residency Status* fields have been updated.
- n) Mark off below whether the test was passed or failed.

Please complete the 'Actual Output' column and record any comments in the Notes section below.

<i>NSI Action</i>	<i>Input</i>	<i>Expected Output</i>	<i>Actual Output</i>
1. Log into NSI 2. Perform Search for student.	<ul style="list-style-type: none"> <li>Student Name – from record B<sup>3</sup></li> <li>DoB, Gender, Residential Status-optional from record B</li> </ul>	<ul style="list-style-type: none"> <li>Search executes successfully.</li> </ul>	
3. Search returns results.	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>Search returns results, including record B.</li> </ul>	
4. Update the verification details on record B using the update function.	<ul style="list-style-type: none"> <li>Update record data:</li> </ul> <p>Details to enter:</p> <p>Surname: Johnstone  Forename 1:Henry  Forename 2: Your own first name.  Forename3: Alistair  Name/DoB Verification: Other  Res. Status ver: Birth certificate</p> <p><i>Eg:</i></p> <p>Surname: Johnstone  Forename 1:Henry</p> <p style="color: red;"><b>Forename 2: Karen</b></p> <p style="color: red;"><b>Forename 3: Alistair</b></p> <p>Identity Verified: O  Res. Verification: B</p>	<ul style="list-style-type: none"> <li>Update executes successfully.</li> <li>Record status changes to “active”.</li> </ul>	

<sup>3</sup> Record B is the NSI record that you created as part of test script 2.2.

Notes:

Pass/Fail

### 3.3 UPDATE – *Unsuccessful update attempt*

Provider is enrolling a new student who has not given an NSN. Provider enrolls student and searches for an existing NSI record as part of this process.

An existing NSI record is found for the student however the details on the NSI record are now out of date and need to be updated to reflect a change in the student's name. The provider attempts to update the record but does not enter verification information for the new data. As the NSI record has an "active" status an error is returned.

- a) Add a student on the *Students* form with the name "Henry Johnstone" and the same date of birth and gender as used in section 2.2 above.
- b) Enter "AUS" in the *Citizenship* field.
- c) Click on the *Save* button and when prompted to verify identity and residency type leave the *Identity Verified* field and the *Residential Verification* field as "U".
- d) Click the *Save* button again and click on the *NSI* button and log-in to the NSI.
- e) Now the *National Student Index* form opens.
- f) Untick the *Residential Status* box in the list of search criteria.
- g) Click on the *Search* button. One or more matches will be found, including one for the record you entered in section 2.2.
- h) Move to the *Data* tab of the *National Student Index* form.
- i) In the *Nipper* section type the NSI number of the correctly matching student.
- j) In the *NSI* section tick the *Select* field and the *NSI Update* field.
- o) Now return to the *Process* tab of the *National Student Index* form and click on the *Update* button.
- p) You will receive a message telling you that you cannot replace a verified flag with an unverified flag.
- k) Mark off below whether the test was passed or failed.

Please complete the 'Actual Output' column and record any comments in the Notes section below.

<i>NSI Action</i>	<i>Input</i>	<i>Expected Output</i>	<i>Actual Output</i>
1. Log into NSI 2. Perform Search for student.	<ul style="list-style-type: none"> <li>Student Name – Henry Johnstone</li> <li>DoB, Gender, Residential Status-optional from record B<sup>4</sup></li> </ul>	<ul style="list-style-type: none"> <li>Search executes successfully.</li> </ul>	
3. Search returns results.	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>Search returns results, including record B.</li> </ul>	
4. Perform update on record B.	<ul style="list-style-type: none"> <li>Perform update.</li> </ul> Data to enter: Res Stat: Australian Res Stat Verification: Unverified	<ul style="list-style-type: none"> <li>Unsuccessful update – error message returned:</li> <li>Error 274: Can't replace verified data with unverified data.</li> </ul>	<ul style="list-style-type: none"> <li>Record actual error message shown on your system.</li> </ul>

Notes:

Pass/Fail

<sup>4</sup> Record B is the record that was created as part of test script 2.2 and that was also used in script 3.2.

## Merge Record Test Scripts

These tests are intended to ensure that the provider can use their NSI interface to lodge a request for a group of NSI records to be merged. The records that are used in the following tests will have been created or located as part of executing the “Create Record Test Scripts”.

### 4.1 MERGE – No manual intervention required

Provider is enrolling a new student who has not given an NSN. Provider enrolls student and searches for an existing NSI record as part of this process.

An existing NSI record is found for the student however an additional NSI record that also appears to relate to the student is found. The provider lodges a request with the NSI Unit for the multiple records to be merged.

- Find the student on the *Students* form who was added in section 2.3 above.
- Click on the *NSI* button and log-in to the NSI.
- Now the *National Student Index* form opens.
- Untick NSI number and DOB on the search criteria.
- Click on the *Search* button. Several matches will be found, including the record created in section 2.3 and the record found at step 3 in section 2.4 which was not accepted. These records can be identified by their NSNs.
- The matches are displayed on the *Data* tab of the *National Student Index* form. Tick the *Select* field for the two records in question.
- Now return to the *Process* tab of the *National Student Index* form and click on the *Merge* button.
- You will receive a message telling you that you that the merge succeeded.
- Mark off below whether the test was passed or failed.

*You will need your results from test script 2.4 in order to complete this test successfully. Record D is created as part of executing 2.4 and the override code and details referred to in step 3 below should also have been recorded as part of executing 2.4.*

*Please complete the ‘Actual Output’ column and record any comments in the Notes section below.*

The screenshot shows the 'National Student Index' application window. At the top, there is a search bar with 'Student: Smith, Tony', 'DOB: 05/11/2005', and 'NSI:'. Below the search bar are 'Process: DMS' and 'Logon and Close' buttons. The main area is titled 'Nipper NSI Details' and contains various input fields for NSI Number, Surname, Forename 1, Forename 2, Forename 3, DOB, Gender, Identify Verification, NSI Date, Work On Paid, Residential Status, and Residential Verification. Below this is a table of search results for the 'National Student Index (NSI)'. The table has columns for 'Select', 'NSI', 'Age', 'Rank', 'Match', 'NSN', 'Surname', 'Forename 1', 'Forename 2', 'Forename 3', and 'DOB'. The first row is selected, showing a match for 'Smith, Tony' with NSN '05011945' and DOB '05/11/2005'.

Select	NSI	Age	Rank	Match	NSN	Surname	Forename 1	Forename 2	Forename 3	DOB
<input checked="" type="checkbox"/>		0	0	100%	05011945	Smith	Anthony	Edward		05/11/2005
<input type="checkbox"/>		00	2	146274		Smith	Tony			20/12/1992
<input type="checkbox"/>		00	0	1509100		SMITH	Tony			01/08/1975
<input type="checkbox"/>		00	2	1814700		Smith	Tony			04/02/1965
<input type="checkbox"/>		00	2	1882172		Smith	Tony			13/02/1967
<input type="checkbox"/>		00	0	2050062		SMITH	Tony			06/05/1990
<input type="checkbox"/>		00	2	2054455		Smith	Tony			03/08/1970
<input type="checkbox"/>		00	0	3180178		Smith	Tony			03/05/1962
<input type="checkbox"/>		00	2	3514345		Smith	Tony			07/12/1957
<input type="checkbox"/>		00	2	3520345		Smith	Tony			10/01/1947
<input type="checkbox"/>		00	2	3625500		Smith	Tony			20/11/1959
<input type="checkbox"/>		01	0	17112400		Smith	Tony			10/02/1970

<i>NSI Action</i>	<i>Input</i>	<i>Expected Output</i>	<i>Actual Output</i>
1. Log into NSI. 2. Perform Search for student.	<ul style="list-style-type: none"> <li>Student Name (Name On Record D)</li> <li>DoB, Gender, Residential Status (Optional from Record D)</li> </ul>	<ul style="list-style-type: none"> <li>Search executes successfully.</li> </ul>	
3. Search returns results.	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>Search returns results, including record D &amp; the record with an NSN that relates to the override code or details returned in step 3 of script 2.4.</li> </ul>	
4. Perform merge request for the two records.	<ul style="list-style-type: none"> <li>The NSNs of the records D and the record that relates to the override code in 2.4.</li> </ul>	<ul style="list-style-type: none"> <li>Merge request executes successfully.</li> </ul>	

Notes:

Pass/Fail

#### 4.2 MERGE – Manual intervention required

Provider is enrolling a new student who has not given an NSN. Provider enrolls student and searches for an existing NSI record as part of this process.

An existing NSI record is found for the student however an additional NSI record that also appears to relate to the student is found. The provider lodges a request with the NSI Unit for the multiple records to be merged.

*Nipper* handles this process in exactly the same way as section 4.1, above. Simply repeat the steps described there. Don't forget to untick the *NSI Number* and *DoB* boxes in the NSI list of search criteria.

Please complete the 'Actual Output' column and record any comments in the Notes section below.

<i>NSI Action</i>	<i>Input</i>	<i>Expected Output</i>	<i>Actual Output</i>
1. Log into NSI. 2. Perform Search for student.	<ul style="list-style-type: none"> <li>Student Name: Henry Johnstone (i.e. Updated Name On Record A)</li> <li>DoB, Gender, Residential Status (Optional from Record A)<sup>5</sup></li> </ul>	<ul style="list-style-type: none"> <li>Search executes successfully.</li> </ul>	
3. Search returns results.	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>Search returns results, including record A &amp; record B.</li> </ul>	
4. Perform merge request for the two records.	<ul style="list-style-type: none"> <li>The NSNs of the records A and B.</li> </ul>	<ul style="list-style-type: none"> <li>Merge request executes successfully.</li> </ul>	

Notes:

Pass/Fail

<sup>5</sup> Note that record A is the record that you created as part of test script 2.1.

## Challenge Change Test Scripts

This test is intended to ensure that the provider can access their change notification files and successfully submit a challenge change request.

### 5.1 CHALLENGE CHANGE

Provider is processing their change notification file and reviews the outcome of the merge request that they lodged. The provider disagrees with this outcome and so challenges the change.

This section does not involve the use of Nipper.

The website you need to go to is at <http://nsicompl.nsi.govt.nz/security/login.asp>

Choose “Batch” from the menu (top right of screen), then choose “Download”.

If any files are showing, select one and click on the *download* button. Choose “save to my computer”. It is up to you what location you save it to.

If no files are showing, proceed to the “Challenge” step below. A file *may* appear in the next 15 min or so, so you may want to go back and check. If not, just record that no files were displayed in the Output box.

Now select “Challenge” from the menu (top right of screen).

Enter challenge change details. The NSN you need to enter is the one you recorded in record A.

Record the output and pass/fail.

*Please complete the ‘Actual Output’ column and record any comments in the Notes section below.*

<i>NSI Action</i>	<i>Input</i>	<i>Expected Output</i>	<i>Actual Output</i>
1. Log into NSI Web application.	<ul style="list-style-type: none"> <li>User name &amp; password.</li> </ul>	<ul style="list-style-type: none"> <li>Log-on executes successfully.</li> </ul>	
2. Open file download screen.	<ul style="list-style-type: none"> <li>Select option from batch menu.</li> </ul>	<ul style="list-style-type: none"> <li>File download screen opens.</li> <li>Result file (i.e. file name beginning with REC) displayed in file list.</li> </ul>	
3. Download file.	<ul style="list-style-type: none"> <li>Select file and select Download button</li> </ul>	<ul style="list-style-type: none"> <li>File download successfully.</li> </ul>	<i>Note: You may have an option in your Student Management System to process the change notification file. If this is the case this process should be run at this point in your integration testing.</i>

4. Open challenge change screen.	<ul style="list-style-type: none"> <li>Select challenge option from menu.</li> </ul>	<ul style="list-style-type: none"> <li>Challenge change screen opens.</li> </ul>	
5. Enter challenge change details.	<ul style="list-style-type: none"> <li>NSN you recorded in record A (mandatory field)</li> <li>Description of change (mandatory field)</li> <li>User's email address</li> </ul>	<ul style="list-style-type: none"> <li>Challenge successfully lodged.</li> <li>NSI Unit receives notification of challenge.</li> </ul>	<i>Note: Include in your reason for challenging the change that it is part of your integration testing.</i>

Notes:

Pass/Fail

## A NOTE ON SEARCHING THE NSI

In some of the tests your search of the NSI may return more than one possible match. If that happens the *Data* tab of the *NSI* form will display a datasheet like this:

The screenshot shows the 'National Student Index' application window. The search criteria are Student: Smith, Tony and DoB: 05/01/1945. The 'Process' tab is active, showing 'NSI Details' and a table of search results.

Select	NSI	Age	Rank	Match	NSI	Surname	Forename 1	Forename 2	Forename 3	DoB	Ptn
<input type="checkbox"/>	01	8	127578		Smith	Anthony	Edward			05/01/1945	1
<input type="checkbox"/>	05	3	141274		Smith	Tony				26/12/1962	1
<input type="checkbox"/>	05	8	1589159		Smith	Tony				01/08/1975	1
<input type="checkbox"/>	05	2	1814109		Smith	Tony				04/02/1965	1
<input type="checkbox"/>	05	2	1882172		Smith	Tony				12/02/1947	1
<input type="checkbox"/>	05	8	2688962		Smith	Tony				06/08/1990	1
<input type="checkbox"/>	05	2	2834458		Smith	Tony				03/08/1970	1
<input type="checkbox"/>	05	8	3180476		Smith	Tony				02/05/1985	1
<input type="checkbox"/>	05	3	3514345		Smith	Tony				07/12/1957	1
<input type="checkbox"/>	05	2	3520245		Smith	Tony				10/01/1947	1
<input type="checkbox"/>	05	2	3625329		Smith	Tony				22/11/1959	1
<input type="checkbox"/>	01	8	10742405		Smith	Tony				10/02/1975	1

You can hunt through the returned records in the datasheet to find the match you want to accept and then place a tick in the *Select* field to indicate that this is the record you want to use for any subsequent action.

If that action includes updating the NSI, also place a tick in the *NSI Update* field.

By double clicking on a record in the datasheet you display the full details for that record. Click on the *DataSheet* button to return to the datasheet view.

The screenshot shows the 'National Student Index' application window with the 'Data' tab active. The 'NSI Details' section is populated with the following information:

- NSI Number: 01
- Surname: Smith
- Forename 1: Anthony
- Forename 2: Edward
- DoB: 05/01/1945
- DoD: [Empty]
- Forename 3: [Empty]
- Gender: M
- Identify Verification: U
- NSI Status: 1
- Mark On Paid: 0
- Residential Status: U
- Residency Verification: U
- Previous Name: [Empty]
- Previous Name: [Empty]

The 'National Student Index (NSI)' section shows:

- NSI: 01
- Ranking: 00
- Match Indicator: 0
- Accept: [Empty]
- NSI Surname: Smith
- Forename 1: Anthony
- Forename 2: Edward
- DoB: 05/01/1945
- DoD: [Empty]
- Forename 3: [Empty]
- Gender: M
- Identify Verification: U
- Preferred? 1
- NSI Status: 1
- Mark On Paid: 0
- Residential Status: U
- Residency Verification: U
- Created By: 9022
- Created Date: 25/02/2013

At the bottom, there is a table with columns: Alt. Surname, Alt. Fore 1, Alt. Fore 2, Alt. Fore 3, Preferred?, and Verified.