SIF NZ DATA MODEL – ATTENDANCE OVERVIEW – v1.5

Student Attendance and Absence is recorded at different levels of time granularity in different sectors of the New Zealand education system:

- Primary & Intermediate schools tend to record attendance on a per-half-day basis; taking the roll for each class immediately prior to and post the lunch break each day.

- Secondary schools tend to record attendance on a per-period basis; taking the roll for each timetable period throughout the school day.
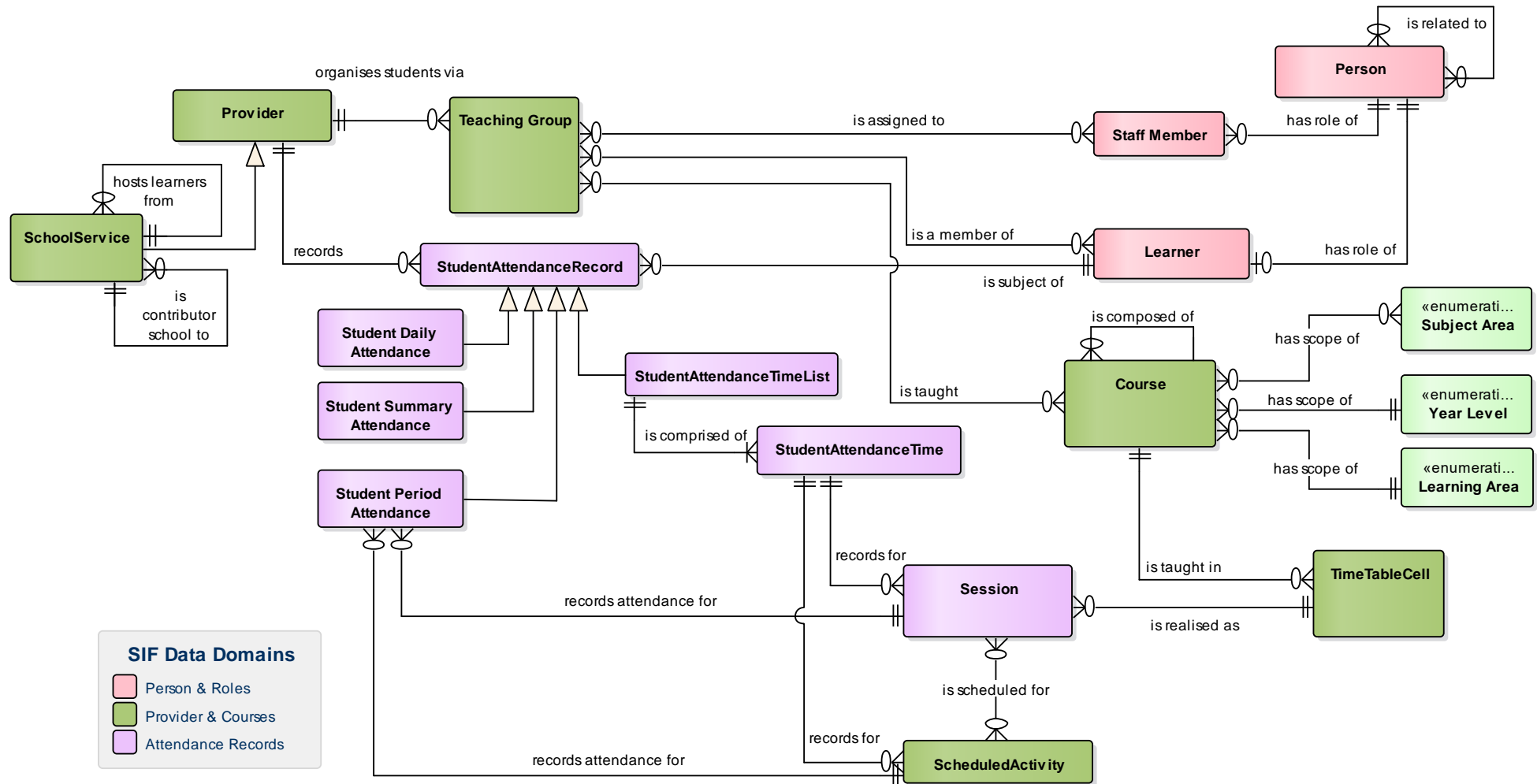
1   Conceptual Data Model

Figure 1: Attendance - Conceptual Model

1.1 Detailed Attendance Record Keeping

Student Attendance and Absence is recorded at different levels of time granularity in different sectors of the New Zealand education system:

- Primary & Intermediate schools tend to record attendance on a per-half-day basis; taking the roll for each class immediately prior to and post the lunch break each day.

- Secondary schools tend to record attendance on a per-period basis; taking the roll for each timetable period throughout the school day.

The StudentAttendanceTimeList data object contains a list of Attendance Times for a Student, at a Provider, for a Teaching Group. The Attendance Times are linked either to:

- A Scheduled Period, which is defined in the SchedulePeriod object and will contain the all the pertinent information about the period regardless of whether it is four a half-day or one of five periods, or to

- An ad hoc event. When it is an ad hoc event the start and end times are provided as part of the StudentAttendanceTimeList record.

The following information must always be provided as part of Attendance Time:

- Attendance Date

- Attendance Type; Ad Hoc or Scheduled

- Attendance Code

- Unique identifier for the Attendance Time Record

- Schedule Period Identifier or Start/End Times

1.2 Attendance Summary Records

Detailed attendance records from the early childhood education (ECE) sector are collected by the Ministry's ELI system. Summary attendance data for specific learners can be made available to school SMS, via the StudentSummaryAttendance data object.

The SIF NZ data model makes it possible for a data collection system to collect detailed attendance records on per-half-day or per-period basis, using the StudentAttendanceTimeList data object, and to report attendance in aggregate on a per week, month, term or year basis using the StudentSummaryAttendance data object.

1.3 Attendance / Absence Codes

Each attendance record records whether the student was Present (and on time) to class, Present (with some condition), or Absent (with or without a valid reason).

Value	Label
A	Absent - Not in class
L	Late - in class
P	Present - in class
S	Sickbay - in class
D	Doctor/Dentist appointment
I	Internal school appointment
E	Explained absence
M	Medical absence

Value	Label
J	Justified explained absence
T	Truant
V	Non Supervised Study
N	School based activity
Q	School trip/camp
W	Work experience
R	Removed from class
X	Examination leave
G	Overseas holiday
O	Overseas during posting
K	Attending teen parent unit
AA	Attending alternative education
Y	Attending activity centre
F	Attending offsite course/class
H	Attending health camp/ regional health school
C	Attending justice court
U	Stood down or suspended

1.4   Attendance Record Status

In addition to the attendance/absence code above, each detailed attendance record has a code describing the status of the attendance.

Value	Label
01	Excused
02	Unexcused
99	Unknown
NA	Not Applicable

2 Logical Data Model

The concepts introduced in the conceptual models above are realised in the StudentAttendanceTimeList and StudentAttendanceSummary data objects.
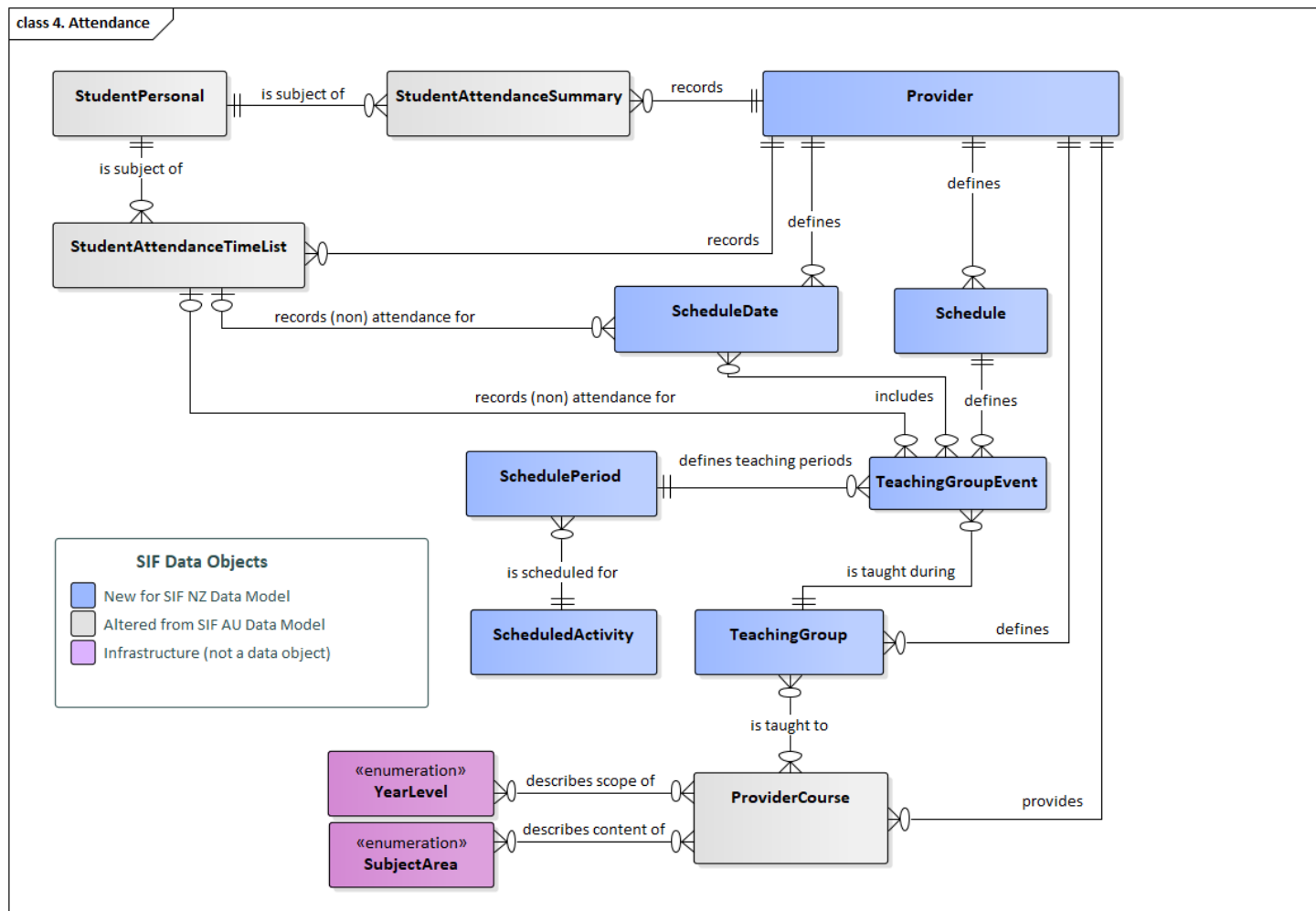

Figure 2: Student Attendance - Logical Model

3 StudentAttendanceTimeList Data Object

Individual Student Attendance records are kept using the StudentAttendanceTimeList data object (with API endpoints).
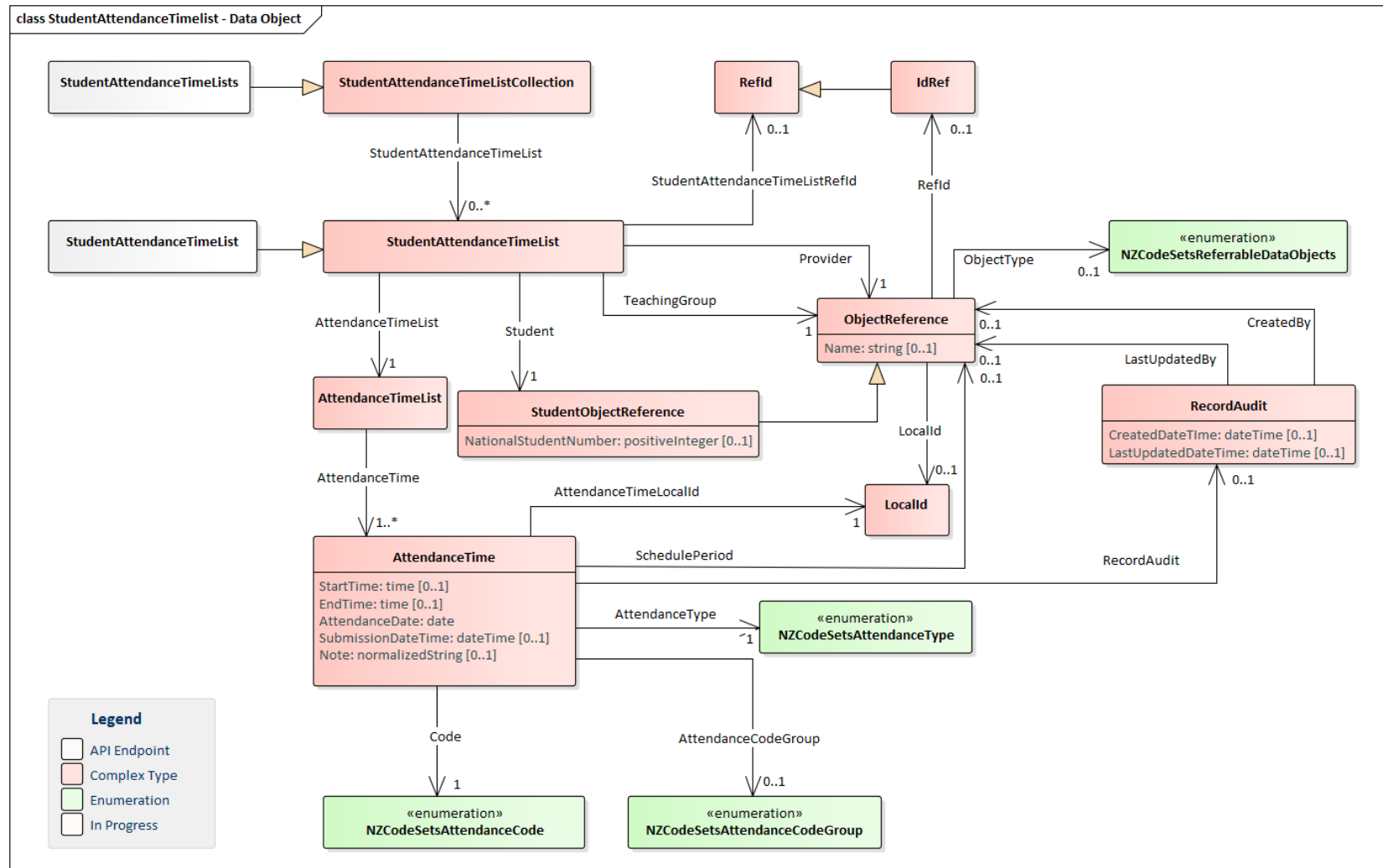

Figure 3: StudentAttendanceTimeList Data Object

4 StudentAttendanceSummary Data Object

Summary Student Attendance records are available using the StudentAttendanceSummary data object (with API endpoints).
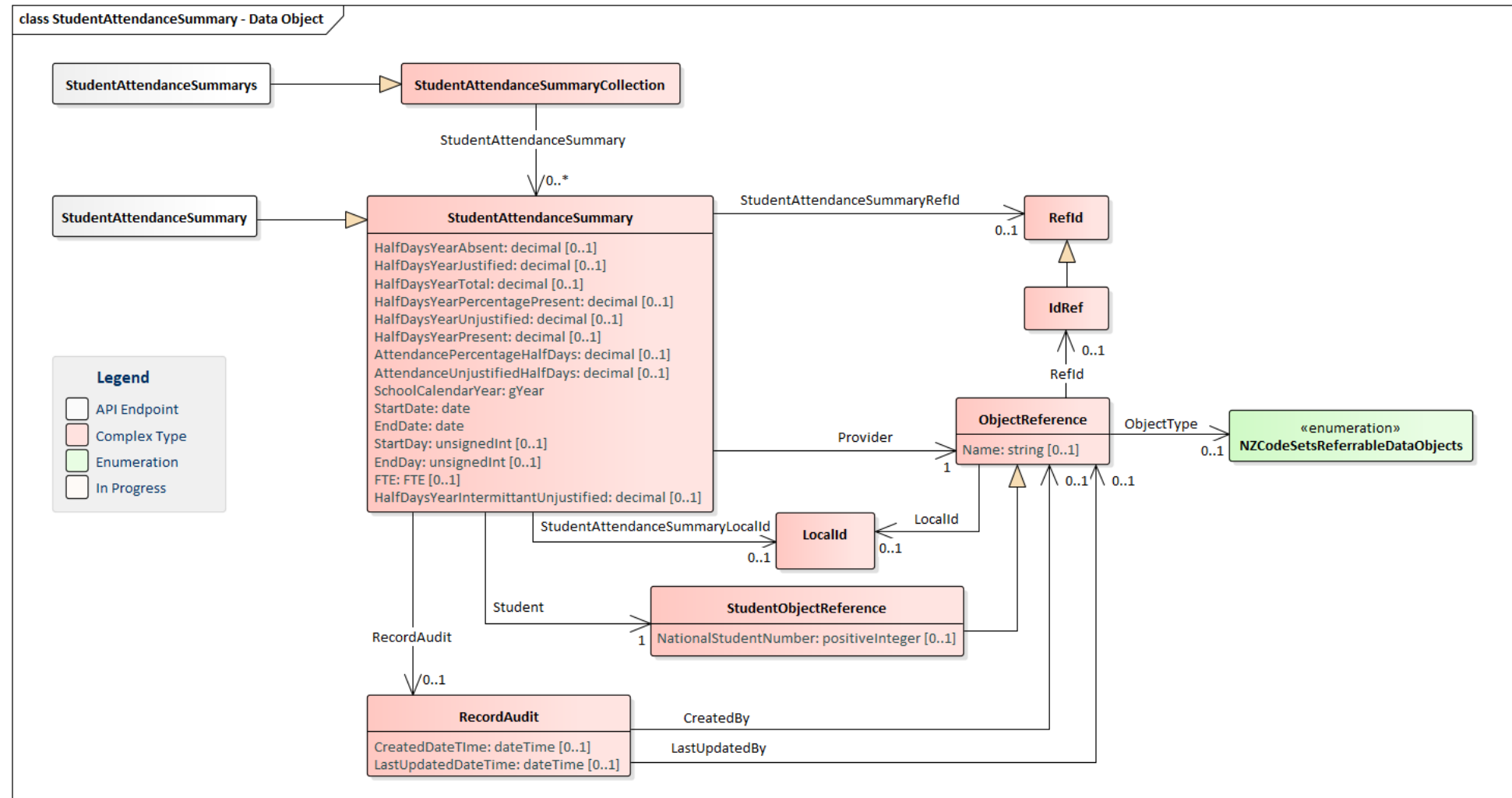

Figure 4: StudentAttendanceSummary Data Object

5   Document Control

5.1   Amendment History

Version No	Description of Change	Changed By	Date
0.1	Assembled from various working documents as part of SIF NZ Data Model v3.0.1 publication process.	Stuart McGrigor	31 Jul 2018
1.0	Period based attendance now references Schedule data objects; updated to generic object references;	Stuart McGrigor	4 Jul 2019
1.1	Updated to match SIF NZ v3 (rc2). Names of RefId and LocalIds changed to be unique for each object. Updated cardinality of data objects.	Amy Orr	19 Jul 2019
1.2	Updated data object models to match SIF NZ v3 (rc3). Main changes are to StudentAttendanceTimelist with the addition of the NCEA Subject Area enumeration, the removal of the TimetableDayId, and TimetablePeriodId associations, and the addition of TeachingGroupEvent association.	Amy Orr	05 Aug 2019
1.3	Updated diagram for StudentAttendanceTimeList to match SIF NZ v3 (rc4). Updated document to reflect changes made to the structure of StudentAttendanceTimeList.	Amy Orr	06 Sep 2019
1.4	Updated diagram for StudentAttendanceTimeList to match SIF NZ v3 (rc5).	Amy Orr	20 Nov 2019
1.5	Updated all diagrams to match SIF NZ v3 (rc6).	Amy Orr	03 Dec 2019