

Focused Policy Assessment of Data on Special Needs Assistants



Irish Government Economic & Evaluation Service

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Executive Summary

The Government decided on the seventh of July 2015 that a review of the Special Needs Assistant (SNA) scheme would be carried out to ensure that the scheme continues to meet its objectives and that resources are being utilised effectively and efficiently, in line with the guidelines. In addition to the terms of the Government decision, discussions at the Cabinet Committee on Social Policy and Public Service Reform suggested that the review should seek to establish a better understanding of the factors driving increased demand for SNA support and the means by which these factors may be recorded and reported in the future.

This Focused Policy Assessment (FPA) is a pre-cursor to a National Council for Special Education (NCSE) led review which will, if considered necessary, consider the model of allocating SNAs and make recommendations on whether an alternative model might provide for better outcomes for children. This FPA forms part of the Department of Education and Skills (DES) commitment to the Public Spending Code (PSC) and evidence informed policy making.

The objectives of the FPA which have been agreed between the DES, the NCSE and the Department of Public Expenditure and Reform (DPER) are:

1. Identify, collate and evaluate all available data underpinning the scheme in relation to performance indicators for the SNA scheme;
2. Identify what is required to develop the forecasting capacity of the DES and the NCSE in order to anticipate the level of demand and cost of future SNA requirements; and
3. Provision of this data is to be aligned with the planning needs of the DES, the DPER and the NCSE with specific reference to the annual budgetary process.

This FPA has been overseen by a technical group which includes members from the DES, the DPER, the NCSE and the National Disability Authority (NDA).

These aims have been achieved, the headline outcomes of each of the aims are:

- The data underpinning the scheme indicates that over the period between 2011/2012 and 2015/2016 both the number of students in the scheme and the number of SNAs in the scheme are increasing but at different rates. The growth in the numbers of SNAs across all sectors has increased the cost of the scheme from €332m in 2011 to €402m¹ in 2015. The FPA has identified the primary factors influencing demand in SNAs through an analysis of the available data. The single most important factor is the increasing number of students with ASD being supported by the scheme.
- The second aim of identifying the requirements to develop the forecasting capacity of the DES and the NCSE has been achieved through analysis of the age related trend data. The report has identified a methodology for estimating the likely SNA demand into the future. The total number of SNAs that could potentially be required in 2019 is in the order of 13,300 to 17,400, which could cost an additional €47m to €183m by 2019, depending on which of the different scenarios materialises.
- The third and final objective of aligning the provision of data with Departmental and budgetary timelines has been achieved by agreeing a proposal between the NCSE and the DES and the DPER. The agreed proposal will provide the DES with an End of Year Statement of Demand and an estimate of future SNA demand by the second week in April and a further estimate of future demand by the end of the second week in June for the following calendar year. Applications received up to June should further inform the accuracy of the estimate.

In summary this FPA has identified the factors driving increased demand for SNA support and the means by which these factors may be recorded and reported in the future.

¹ Excluding the cost of Child Care Workers (€2m per year)

Recommendations

The Technical Working Group proposes that:

1. The NCSE Provide an End of Year Statement of Demand and a forecast of future demand in mid-April each year. The forecast should be updated by mid-June to take account of trends arising during the current year's application process.
2. Minister for Education and Skills, under section 20 of the EPSEN ACT 2004, ask the NCSE, in partnership with other relevant Departments and State Agencies, including the NDA, to carry out a comprehensive review of the SNA scheme. The review should seek to identify the most appropriate form of support options to provide better outcomes for students with Special Educational Needs (SEN) or disability, having regard to the significant amount of State investment in this area. With a potential additional price tag of between €47m and €183m in the next four years, it is timely to conduct a review of the scheme, and to look at what would constitute the best form of investment in children with SEN or disabilities.
3. The NCSE record data on the outcomes of the Special Educational Needs Organiser (SENO) reviews at a school level and on the intensity of the students care need requiring access to SNA support.

Overview of Special Needs Assistant Scheme

In 1998, the then Minister for Education and Science announced an initiative in special education, which provided the first ever automatic supports for students with Special Educational Needs (SEN) irrespective of educational placement. The scheme, as currently delivered, is provided specifically to cater for the care needs of students with disabilities in an educational context, where the nature of these care needs have been outlined in professional reports as being so significant that a student will require adult assistance in order to be able to attend school and to participate in education. The SNA scheme is one of the programmes provided by the DES to achieve the goal of supporting inclusion and diversity as outlined in the DES Statement of Strategy 2015-2017.

SNAs are allocated to schools, both mainstream and special, in accordance with the DES Circular 0030/2014. Schools make an application to the SENO in order to provide support for students with identified care needs. Special classes in mainstream schools and special schools are generally entitled to a standard allocation of SNA in accordance with ratios defined in the DES Circular 0038/2010². For example a special class for children with Autism Spectrum Disorder (ASD) is entitled to an allocation of two SNAs for six students, whereas special classes for students with Emotional Behavioural Disorder (EBD) are entitled to an SNA for every four classes. Where relevant, the SENO tops up the allocation in accordance with the care needs of individual students.

Current policy provides that children with SEN are educated in an inclusive environment unless the nature or degree of those needs are such that to do so would be inconsistent with the best interests of the child or the children with whom the child is to be educated. The majority of students with SEN attend a mainstream class in their local mainstream school, a number with more complex needs attend special class or a special school settings. Special classes provide the opportunity for a greater level of inclusion within mainstream than special schools and the demand for mainstream based special classes has been growing in recent years.

² The DES Circular 0038/2010 introduced the SNA to class ratio for ASD and restated the ratios defined in the Special Educational Review Committee report (1993)

Primary factors Influencing Demand

There are a number of separate factors behind the increase in the number of SNAs which has taken place to date:

- **The underlying change in the school-age population** - A baby boom which peaked in 2009 is causing a wave of growth in the underlying school-age population, from 2011 to 2015 the school age population increased by 7%. This population is estimated to rise by 3% between 2016 and 2019.
- **The increasing proportion of children who are qualifying for SNA and SEN support** – The percentage of students accessing SNA support in primary and post-primary has increased from 2.7% in 2011 to 3.3% in 2015. Those accessing SEN supports have increased from 17% of the total primary and post-primary population in 2011 to 20% in 2015.
- **Increased number of students with an ASD diagnosis** – the principal reason behind the growth in the proportion of children qualifying for SNA support is the increasing proportion of children presenting with a diagnosis of ASD. This is driving almost all the increase in the number of students in special classes, special schools and 50% of the increase in mainstream classes. SNA support for children with ASD tends to be primarily around behaviour or communication. Another factor has been the increasing number of children with ASD starting school earlier, including a growing number in early intervention classes. Children with ASD may attend primary school from the age of three within the context of an early intervention class. The number of children attending these classes grew from just under 200 in 2011 to over 600 by 2015.

In mainstream classes the growth in students accessing SNA support has been significantly accommodated by an increase in the average number of students per SNA. Special classes and special schools receive an automatic SNA allocation based on the disability category and this has added to the increased number of SNAs in special classes in mainstream. The ratio of students in special classes to SNAs has declined from 3.8 to 3.2 during the period 2011-2015. In special schools the student to SNA ratio remained relatively constant at 3.3 over the period.

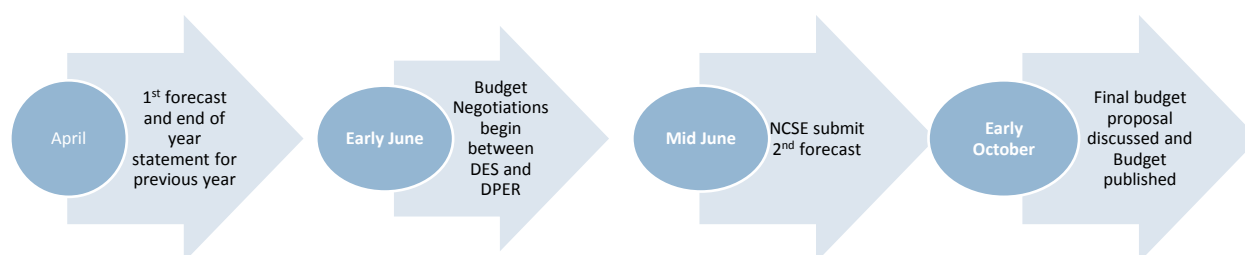
Aligning Data Provision with Planning Needs

One of the aims of this FPA was to align the provision of data with the planning needs of the DES, the DPER and the NCSE with specific reference to the annual budgetary process. This FPA proposes a timeline for submission of data and the forecast of SNA Demand over a 3 year period.

In mid-April of every year the NCSE should submit an end of year report which identifies SNA allocations in mainstream, special classes and special schools to end December of the previous calendar year and provides the final position on the previous academic year.

This FPA technical group also proposes that two forecasts of future SNA demand be submitted to the DES each year. The first forecast should be submitted to the DES by the end of the second week in April to inform Special Education Division about the range and level of SNA provision estimated to be required, and the associated costs. The second forecast will be submitted to the DES by the end of the second week in June to ensure that emerging trends from the current year are accounted for in the forecast to inform budgetary allocations for the following year.

Figure 1: Timelines for submission of SNA data and forecast



Anticipating the Likely Level of Demand and Cost of Future SNA Requirements

This FPA has used trend data on the age profile of students accessing SNA compared to the total number of students in each age group, to estimate a range of SNA demand to 2019. It is clear from this FPA that the scheme has experienced significant increases in demand over the 2011 to 2015 period, at fluctuating rates. Several scenarios are estimated and combined to give a range of estimates based on a no policy change. Data from the annual applications process will be more informative, because the application data refers to actual rather than estimated demand.

On a range of different assumptions, the number of WTE SNAs required by 2019, on unchanged policies, could potentially rise by between 1,400³ and 5,400. The total cost of these additional SNAs over the 2016 to 2019 period is estimated to be between €47m and €183m which would bring the total number of WTE SNAs to between 13,300 and 17,400. If population growth was the only factor responsible for the increase, the total number of SNAs required by 2019 is estimated to be 12,600 which could cost an extra €24m in 2019 compared to 2015.

The assumptions used for forecasting the number of students started with the underlying growth in the population of school-going children, and then looked at different scenarios for changes in the proportion of students receiving SNA support. Four different scenarios were used. The annual percentage change, relative to 2015, in the ratios of children in their birth year cohort having SNA support would be:

- **Zero.** In other words, these ratios would remain at their 2015 level. Any change forecast in SNA numbers would be due to underlying population growth only (**Population** scenario);
- The **lowest** yearly percentage change observed over the 2011 to 2015 period (**Minimum** scenario);
- The **average** yearly percentage change observed over the 2011 to 2015 period (**Average** scenario);
- The **highest** yearly percentage change observed over the 2011 to 2015 period (**Maximum** scenario).

To these scenarios was added three assumptions about the evolution of the student to SNA ratio in each of mainstream schools, special classes in mainstream schools, and special schools. These assumptions are:

- The **Constant** scenario assumes the SNA ratio will remain at the 2015/2016 level;
- The **Minimum** scenario assumes the SNA ratio will change at the minimum annual change observed in the ratio between 2011 and 2015;
- The **Average** scenario assumes the SNA ratio will change at the average annual change in the ratio observed between 2011 and 2015.

This approach gives a range of estimates of the potential numbers of SNAs over the 2016 to 2019 period. The table below provides the number of estimated additional WTE SNAs in 2019 under each of the scenarios. The examples given are not exhaustive. An actual forecast of demand is likely to be based on a hybrid scenario with conditions varying between sectors. The scenario presented below are:

- **Student demand scenarios:** the estimated number of students who have access to SNA support; and
- **Student to SNA ratio scenarios:** the estimated ratio of students to SNAs.

If the number of students increased at the maximum plus population growth and the SNA ratio remains constant, the number of SNAs is estimated to increase by 7,100 and the estimated cost of these additional SNAs is €242m. However, if the number of students grow in line with population and the SNA ratio changes at the average, the number of SNAs is estimated to decline by 1,200 due to increasing student to SNA ratios. The estimated saving from this would be €42m.

Table 1: Summary of estimated additional SNAs and additional costs (2019)

	2019	Student to SNA Ratio Scenarios					
		Constant		Minimum		Average	
	Additional	SNAs	Cost	SNAs	Cost	SNAs	Cost
Student Demand Scenarios	Population	700	€24m	250	€9m	-1,200	€-42m
	Minimum	2,800	€96m	2,100	€71m	400	€13m
	Average	4,900	€168m	4,300	€144m	2,200	€75m
	Maximum	7,100	€242m	6,600	€222m	4,100	€139m

It should be noted that these are estimates based on the observed trends over the past four to five years. It was not possible to take account of all factors impacting on the demand and cost of SNAs in developing the forecasting model. These factors include but are not limited to the changing nature of SNA posts from part time to full time posts, the effect of the Employment Control Framework on SNAs, geographic spread of special classes, the impact of complementary initiatives such as early childhood education schemes and the capacity of special schools.

Data Underpinning the SNA Scheme (2011-2015)

The estimated costs of the scheme have increased since 2011 by 21% to €402m⁴ in 2015. Overall the number of students in primary and post-primary schools increased by an annual average of 2% between 2011/2012 and 2015/2016. Those accessing Special Educational Need (SEN) supports in primary and post-primary increased annually by an average of 6%. Over the same period the number of students accessing SNAs has increased by an annual average of 8%.

The programme funded 10,260 WTE SNAs in 2011/2012 and 11,864 WTE SNAs in 2015/2016, a 16% increase. Over the period, the 21% increase in programme costs funded an additional 1,604 SNAs. These additional posts were allocated as follows:

- 34% (551) to mainstream classes;
- 53% (845) to mainstream and early intervention special classes; and
- 13% (208) to special schools.

The total number of SNAs increased by an annual average of 4% between 2011/2012 and 2015/2016. In special classes in mainstream schools SNAs increased by an annual average of 19% compared to 2% annual growth in mainstream and special schools. The high percentage increase of SNAs in special classes in mainstream schools is a function of the types of new ASD classes being introduced. ASD classes in special classes and special schools receive the highest level of SNA resources with a minimum of two SNAs for every class.

The number of students in the scheme increased by 34% from 22,284 in 2011/2012 to 29,953 in 2015/2016, 7,669 additional students. Of these 7,669 additional students:

- 62% (4,724) were in mainstream classes;
- 29% (2,186) were in special classes in mainstream and early intervention; and
- 10% (759) were in special schools.

In 2015, 4,585 additional students joined the scheme and 1,898 students that had access in 2014 were no longer accessing SNAs in 2015.

Table 2: Summary trends of the Special Needs Assistant scheme, 2011/2012 – 2015/2016

Metric	Category	Mainstream Classes	Mainstream Special Classes	Special Schools	All Sectors
2015/2016	Special Needs Assistants	7,846	1,718	2,300	11,864 ⁵
	Students with access to SNA	16,874	5,472	7,607	29,953
Additional (2011-2015)	Special Needs Assistants	551	845	208	1,604
	Students with access to SNA	4,724	2,186	759	7,669
Average annual change (2011-2015)	Special Needs Assistants	2%	19%	2%	4%
	Students with access to SNA	9%	14%	3%	8%

The primary driver of the increased number of SNAs is the proportion of students presenting with an ASD diagnosis. In mainstream classes, 50% of the additional students between 2011/2012 and 2015/2016 had a

³ Numbers referring to the forecasts are rounded, for more detailed explanations and exact numbers refer to Chapter 4

⁴ Figure excludes 60 Child Care Workers (CCW)

⁵ Figure excludes 60 CCWs

diagnosis of ASD. In special classes in mainstream schools there were an additional 460 classes opened between 2011/2012 and 2015/2016, of which 76% were mainstream ASD classes and 18% were Early Intervention ASD classes. In special schools the number of students increased by 760, 100% of this increase was driven by students with ASD.

Overall the student to SNA ratio has increased from 2.2 in 2011/2012 to 2.5 in 2015/2016 due to changes in student numbers, the profile of disability of students and the SNA allocation. In mainstream the ratio has increased from 1.7 students per SNA in 2011/2012 to 2.2 in 2015/2016. In special classes in mainstream schools, the ratio has declined from 3.8 students per SNA in 2011/2012 to 3.2 in 2015/2016. This decline was a result of the increased demand for SNAs for students with an ASD diagnosis. In special schools the ratio has been relatively constant at 3.3 student per SNA over the period.

Table 3: Student to SNA Ratio, 2011/2012 – 2015/2016

SNA Ratio	Mainstream Classes	Mainstream Special Classes	Special Schools	All Sectors
2011/2012	1.7	3.8	3.3	2.2
2012/2013	1.8	3.7	3.3	2.3
2013/2014	1.9	3.7	3.4	2.4
2014/2015	2.0	3.3	3.4	2.5
2015/2016	2.2	3.2	3.3	2.5

Looking to the administrative process of the scheme, the number of applications are increasing and the percentage of successful applications are increasing⁶. Allocations of SNAs to schools are traditionally made in June, for the following school year, for applications received from November through to May. Further applications are made after June. These take account of additional information received, emergencies, students moving between schools, etc. The NCSE carry out a number of different reviews in schools each year. In 2015 the SNA allocations in over 3,200 schools were reviewed by SENOs. The FPA notes that there is no data to examine the outcomes of these reviews.

⁶ Between 2011/2012 and 2015/2016 the number of successful applications increased from 52% and 63%

1 Introduction

This Focused Policy Assessment (FPA) is a review of the data in relation to the Special Needs Assistant (SNA) scheme. As set out in the Department of Education and Skills (DES) Circular 0030/2014, SNA support is provided specifically to assist recognised primary, post-primary and special schools to cater for the care needs of students with disabilities in an educational context, where the nature of these care needs have been outlined in professional reports as being so significant that a student will require adult assistance in order to be able to attend school and to participate in education.

This FPA provides a detailed analysis of the available data to inform stakeholders about the primary drivers of the scheme and the likely future demand and costs of the scheme. The FPA also sets out a timetable for submission of data to government Departments which should allow stakeholders to gain a better understanding of the drivers of current demand, the likely future demand and cost of the programme for budget negotiations.

In 2011 a Value for Money (VFM) review of expenditure on the SNA scheme was published. The review considered the scheme from 2007/2008 to 2010. The VFM review made recommendations on; economy, efficiency, effectiveness, continued relevance, management, training and development and the future of the scheme. This FPA uses the performance indicators recommended in the VFM and uses 2011 as the base year for analysis.

This FPA forms part of the DES commitment to the Public Spending Code (PSC) and evidence informed policy making. A FPA is a sharper and more narrowly focused assessment compared to a Value for Money review which was introduced as an assessment tool after the 2011 Comprehensive Review of Expenditure (CRE). The overarching processes of FPAs are flexible however it is expected that they:

- Operate under a clear mandate from the relevant official with responsibility for Programme area and the Head of Central Expenditure Evaluation Unit (CEEU);
- Are conducted by a Department's evaluation unit and / or by an evaluator from CEEU;
- Have tightly framed terms of reference focusing on the key issue at hand;
- Do not require a steering committee; and
- Are routinely published on <http://publicspendingcode.per.gov.ie> subject to any necessary redactions arising under FOI legislation.

This report is presented in five chapters, the first chapter introduces the FPA, outlines the SNA scheme, objectives of the FPA and the data sources, the second chapter outlines the timelines for submission of data to the DES and the types of data which should be included when reporting, the third chapter outlines the main performance indicators of the scheme, the fourth chapter outlines the methodology used in the estimate of demand and cost of the SNA scheme over the next three years and the final chapter will outline the conclusions and other issues.

1.1 Overview of SNA scheme

The most recent DES statement of Strategy (2015) states that *"We want an education and training system that welcomes and meaningfully includes learners with disabilities and special educational needs, learners from disadvantaged communities/backgrounds, and those with language, cultural and social differences"*. In this context, the Department funds a range of resources and supports for learners with Special Educational Needs (SEN) including the SNA scheme. In 1991 the Special Education Review Committee (SERC) was established by the Minister for Education to report and make recommendations on education provision for students with SEN. In 1993 the SERC recommended that SNA posts should be created in both special and mainstream schools, in accordance with appointment ratios.

Current policy provides that children with SEN are educated in an inclusive environment unless the nature or degree of those needs are such that to do so would be inconsistent with the best interests of the child or the children with whom the child is to be educated. The majority of students with SEN attend a mainstream class in their local mainstream school, a number with more complex needs attend special class or a special school settings. Special classes provide the opportunity for a greater level of inclusion within mainstream than special schools and the demand for mainstream based special classes has been growing in recent years.

In 1998 the Minister for Education and Skills announced the first ever automatic supports for students with SEN irrespective of educational placement. This initiative introduced a formalised system of child-care support

for all students with SEN including those in special schools, special classes in mainstream and mainstream schools. Table 4 below illustrates the cumulative growth in the number of SNA in all sectors from 1997 to 2015.

Table 4: Number of SNAs at end of December, 1997 - 2015

Year	Number of Special Needs Assistants	Annual percentage growth
1998	293	
1999	558	90%
2000	1,495	168%
2001	2,988	100%
2002	4,979	67%
2003	5,367	8%
2004	5,869	9%
2005	7,294	24%
2006	8,390	15%
2007	9,824	17%
2008	10,442	6%
2009	10,342	-1%
2010	10,543	2%
2011	10,320	-2%
2012	10,503	2%
2013	10,669	2%
2014	11,175	5%
2015	11,924	7%

The NCSE administers the allocation of SNAs to schools in accordance with DES policy and in particular DES Circular 0030/2014. SNAs are allocated to primary, post primary school and special schools. Schools apply to their Special Educational Needs Organiser for access to SNA on behalf of individual students. Supporting evidence from the diagnosing clinician is submitted in support of the application. These reports set out that a student has significant care needs arising from a significant medical need or a significant impairment of physical or sensory function. School based information will also be taken into account to determining the outcome of the application and, generally, the SENO will have visited the relevant student in a pre-school or school setting and will have a first-hand experience of how the care needs of the student are impacting on their ability to access education.

Special classes in mainstream and special schools are generally entitled to a standard allocation of SNAs in accordance with ratios defined in the DES circular 0038/2010 which are outlined in table 5 below. For example a special class for children with Autism Spectrum Disorder (ASD) is entitled to an allocation of two SNAs for six students, whereas a special class for students with Emotional Behavioural Disorder (EBD) are entitled to an SNA for every four classes, or a quarter post per class. Where relevant, the SENO tops up the allocation in accordance with the care needs of individual students. However the class group would have an entitlement to a minimum ratio based on designation.

It is a matter for each school to manage the deployment of the SNAs so that students are effectively supported. SNA allocations to schools are reviewed at least once a year by the NCSE. In addition the introduction of the Employment Control Framework (ECF) in 2011 effectively introduced a cap on the numbers of SNA posts.

Table 5: Circular 0038/2010 and SERC Appointment Ratios

Type of special class/school	Student-Teacher ratio	Class-SNA ratio
Autism/Autistic Spectrum Disorders	6 : 1	1 : 2
Severe/Profound GLD	6 : 1	1 : 2
Multiple Disabilities	6 : 1	1 : 1
Physical Disability	10 : 1	1 : 1
Severe Emotional Disturbance	6 : 1	1 : 1
Moderate GLD	8 : 1	2 : 1
Borderline/Mild GLD	11 : 1	4 : 1
Emotional Disturbance	8 : 1	4 : 1
Hearing Impaired	7 : 1	4 : 1
Speech and Language Disorders	7 : 1	3 : 1
Visual Impairment	8 : 1	4 : 1
Profoundly Deaf	6 : 1	2 : 1
Specific Learning Disability	9 : 1	No automatic allocation

1.2 Objectives

The Central Policy Unit, with the support and assistance of the Special Education Division and Statistics Division, of the DES and the National Council for Special Education (NCSE) were tasked to carry out a FPA of the SNA scheme administered by the NCSE and funded by the DES.

The objectives of the FPA are:

1. Identify, collate and evaluate all available data underpinning the scheme in relation to performance indicators for the SNA scheme as set out in Appendix 1.
2. Identify what is required to develop the forecasting capacity of the Department and the NCSE in order to anticipate the level of demand and cost⁷ of future SNA requirements.
3. Provision of this data to be aligned with the planning needs of the Department, the DPER and the NCSE with specific reference to the annual budgetary process.

A technical group which included members from DES, DPER, NCSE and the National Disability Authority (NDA) was formed as part of the project to guarantee a comprehensive approach. The remit of the group was to confirm that the data and the analysis were interpreted and represented correctly in the report.

1.3 Data Sources

This FPA has collated data from several sources to inform both the performance indicators and the forecast of demand and costs. Information and data as part of the analysis came from the following sources: DES individual school data, the Annual School Census, Central Statistics Office, DES payroll and NCSE Special Education Administrative System (SEAS).

In some cases the data for 2015/2016 is analysed, this data is referenced to the 31/12/2015 and while the academic year was not finished at this date over 99% of the SNA resources have been allocated. Over the course of the analysis data shared with the evaluation team was grossed up to either school or sectoral level to ensure data protection laws were respected throughout the period of analysis.

⁷ Costings of the scheme are based on assumptions about the cost of an average Whole Time Equivalent Special Needs Assistant currently.

Annual School Census (Mainstream and Special Schools)

The annual school census of mainstream schools provided the number of students enrolled by age, sex, nationality, class, entrant source type and leaver destination type. The data also provides the level of incidence support (high or low) for mainstream students in receipt of learning support and the type of special classes students are in. This data is only available at an aggregate level.

The annual school census of special schools records data on the numbers of students across variables such as age, sex, nationality, SEN types, level of education for those pursuing a post-primary programme. The census also records entrant source type (e.g. other special schools, special classes in mainstream, schools outside Ireland, etc.) and leaver destination type (e.g. special classes, special classes in other National Schools, special training, employment, etc.).

The annual schools census will be replaced by the Primary Online Database (POD) in the 2016/2017 academic year.

Central Statistics Office Data

The CSO provide data by age in relation to births, deaths and migration. These data were used to estimate the population by age from 0 -18 for 2011 to 2019. These estimates are used in the projection model for future SNAs.

DES Individual School Data

The DES maintains a database of all the schools in the country. The data is presented by School Registration Number, official school name, address, county, phone number, email address, ethos, Irish classification, total boys, total girls and total students. The data base contains data on all recognised primary and post-primary schools in Ireland.

DES payroll

While SNAs are employed by schools, they are paid by the DES. The DES can query the payroll system to establish the numbers of SNAs employed in schools with the exception of those employed in Education and Training Board Schools (ETBS). The payroll division provided the number of SNAs by the number of hours worked by school from 2007 to 2015.

Special Education Administrative System (SEAS)

The NCSE maintains records for the purpose of identifying persons to whom special educational and supports services are being provided, identifying schools and other places where such services are provided and planning the provision of special educational and support services⁸. The NCSE developed the Special Education Administration System (SEAS) to manage these requirements. SEAS is an Oracle based relational database. It is used by SENOs to administer the SNA allocation process. SEAS records student information, application information, special class information and resource allocation information to Schools. Student data is anonymised for the purposes of providing statistics. SEAS is the primary source of data used in this report.

⁸ Section 41 of EPSEN Act 2004

2 Timelines for Submission of Budgetary Forecasts

One of the objectives of this FPA is to outline a timeline for the submission of data and estimates of costs of the scheme to the DES.

The SNA Scheme is funded from the DES Vote and Special Education Division in the DES is the line section responsible for this policy area. The NCSE are the national body tasked with administering the scheme in accordance with DES policy. The NCSE and Special Education Division therefore work closely together to determine SNA allocation requirements for each school year which in turn is used to inform the budgetary process. In addition, other line sections such as External Staff Payroll also have a role in estimating costs.

2.1 Current Process

The NCSE manage the SNA scheme within DES policy. The NCSE is not permitted to allocate SNAs above the level sanctioned by the DES. The NCSE keep the Special Education Division informed of requirements. Early in the calendar year the NCSE makes a submission to the DES advising on requirements for the next school year (e.g. March 2015 for school year 15/16 commencing September 2015). The NCSE provide the DES with the following data at a school level:

- Students leaving at end of school year;
- Trends in numbers of applications for SNA support in the new school year;
- Establishment of new special classes/ requirements in special schools; and
- Short term projected SNA resource requirements

The numbers of WTE posts required are set out in the following terms:

- in September (start of school year)
- from October to December
- from January to June (end of school year)

The data is finalised following the first round of applications received from schools (up to June) and a submission is then made by the NCSE to the DES setting out requirements for the new school year. The submission will indicate if the ECF allocation is sufficient to meet demand. DES will determine if the ECF allocation should be increased or if another course of action is required.

If additional funding to meet the cost of an increase is required then a procedure to request a supplementary estimate might be sought to meet the increase. This procedure has been followed in recent years. However, following the introduction of more restrictive fiscal rules, there is very limited capacity for supplementary estimates. This makes it essential that full provision is made for SNA requirements in budgetary discussions in advance of the current year.

The NCSE currently publishes performance data on the allocations process in its annual report (e.g. the 2014 annual report provides key data on allocations, applications and student with SEN numbers for the 2013/2014 academic year and the position to end December 2014 for the 2014/2015 school year position). The NCSE also provides the DES with key performance data in its submissions on demand for January to May and September to December each year.

The budgetary discussions commence from April in the previous year. For the DES, in late April the DES Finance Division requests all DES divisions to submit an estimate by sub-head of their expenditure for the following calendar year to inform the July submission to DPER regarding the budget. Discussions on the expenditure proposals for the budget commence between DPER and DES in early summer and these discussions and proposals continue up to early October. In order to inform this budgetary process the submission of SNA data must be made within this timeframe. Therefore in order to factor in any changes to budget requirements for SNAs for example in 2017, the DES should make provision in budgetary discussions which occur in 2016.

The current ceilings for 2016, 2017 and 2018 are set out in the Expenditure Report 2016 and are now subject to more restrictive fiscal rules than previously applied. Consequently, unplanned expenditure leading to supplementary estimates in 2016 may not be met by additional revenue arising from the economic cycle but rather would need to be met through expenditure savings and efficiencies elsewhere or via discretionary revenue measures (i.e. introduce a new tax/charge).

2.2 Proposed Process

2.2.1 End of Year Data Statement

Considering the current process of data submission and the SNA application process, the FPA proposes that the NCSE submit a formal end of year data statement of the SNA scheme to the DES each year. The end of year statement should be provided to the DES Special Education Division by the second week in April of each year. The statement should meet the key goal of improving the data availability and predictability of SNA allocation needs. The statement should report on the SNA allocations in mainstream, special classes and special schools to end December of the previous calendar year (mid-year position for the current school year) and provide the final position on the previous academic year. The statement should consider a five year trend.

The proposed End of Year Statement of SNA Demand should provide a more comprehensive suite of data, setting out the factors identified as impacting on the allocation of SNAs using metrics agreed with the DES. It should incorporate NCSE data, DES data and other relevant data in the statement. The metrics listed in table 6 below are considered to be the minimum requirement for the End of Year Statement of SNA Demand. This document proposes collecting other forms of data which will assist in measuring the scheme. The data for the End of Year Statement of SNA Demand should be presented over a 5 year trend. In cases where the data not been collected, the data should be referenced to the first year until enough time has elapsed to present a 5 year trend. This process doesn't limit the request for other or more detailed data as the need arises.

Table 6: Performance metrics for End of Year Statement of SNA Demand

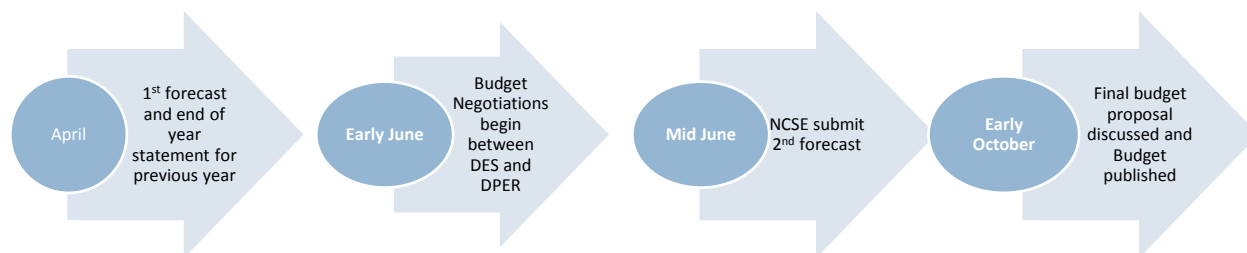
Themes	Data	Metric	Responsibility
Overview	Statement from NCSE on the operation of the scheme in a given year, identifying any new issues e.g. impact of new circulars, policies, processes/ IT etc.		
	Student data	Numbers of students accessing SNAs across the various sectors	NCSE
	SNA data	Number of SNAs allocated across the various sectors	NCSE
	Schools data (include geographical spread)	Numbers of schools with SNA allocations	NCSE
Inputs/ Costs	Direct Costs of the SNA scheme	DES to provide cost of scheme for inclusion in the annual statement	DES
	Cost of NCSE administering the scheme	NCSE to calculate pay and non-pay costs e.g. portion of staff time/ salaries, T&S etc.	NCSE
Activities	Applications – received and outcome	Numbers of application across sectors	NCSE
	Reviews – completed and outcome	Numbers of Type of Reviews across sectors and outcome	NCSE
	Appeals – received and outcome	Numbers of Appeals across sectors	NCSE
Outputs/ Results	Students accessing SNAs – age/ profile/care needs	Numbers and % of students by profile (age and disability) accessing SNAs across sectors	NCSE
	School age Special Class data – type	Numbers of classes established, students and type (age, disability profile and care needs) across sectors	NCSE
	Early Intervention Special Classes	Numbers of classes established, students and type (age and disability profile)	NCSE
	Students no longer accessing SNAs	Numbers & age profiles of students no longer accessing SNAs	NCSE
	Student to SNA ratios by sector	Student: SNA by sector	NCSE

2.2.2 Forecast of SNA demand

The FPA also proposes that two forecasts of SNA demand should be submitted to the DES each year. The first forecast should be submitted to the Department by the end of the second week in April to inform Special Education Division about the range of costs that could arise as a result of estimated additional SNAs and the second forecast should be submitted to the Department by the end of the second week in June to ensure that emerging trends from that year are accounted for in the forecast.

For budget estimates purposes the projected demand should be broken down by the number of SNAs needed in January to August and September to December for each year. The forecast should detail the level of demand across sectors (i.e. primary, post-primary, mainstream special classes, early intervention special classes and special schools) over a three year period to inform multi-annual budget negotiations (i.e. in April and June 2016 the NCSE will forecast the level of demand for 2017, 2018 and 2019).

Figure 2: Timelines for submission of SNA data and forecast



3 Performance Indicators

The performance indicators discussed below were selected from the VFM report on SNA Scheme (2011). Through discussions at the technical group some of the indicators were amended as they were not relevant to how to scheme operates in its current form and qualitative indicators were omitted from this analysis due to the difficulties in measuring such indicators from desk based research. Appendix 1 details the final metrics that were agreed.

The following section will be presented in six sub sections, DES Strategic Objective, Programme Objective, Inputs, Activities, Outputs, Impacts and Results and finally a summary of the chapter is presented. The time period on which the analysis is based varies but is primarily focused on 2011/2012 to 2015/2016. In cases where the statistics for 2015/2016 are included in this analysis, these numbers refer to the SNA scheme as of 31/12/15 and as a result are only indicative as they are likely to increase further as the academic year progresses.

3.1 DES Strategic Objective

The overall objective of the DES in relation to this scheme is to provide a range of resources and supports for students with SEN to access formal education (VFM 2011).

3.1.1 Overview

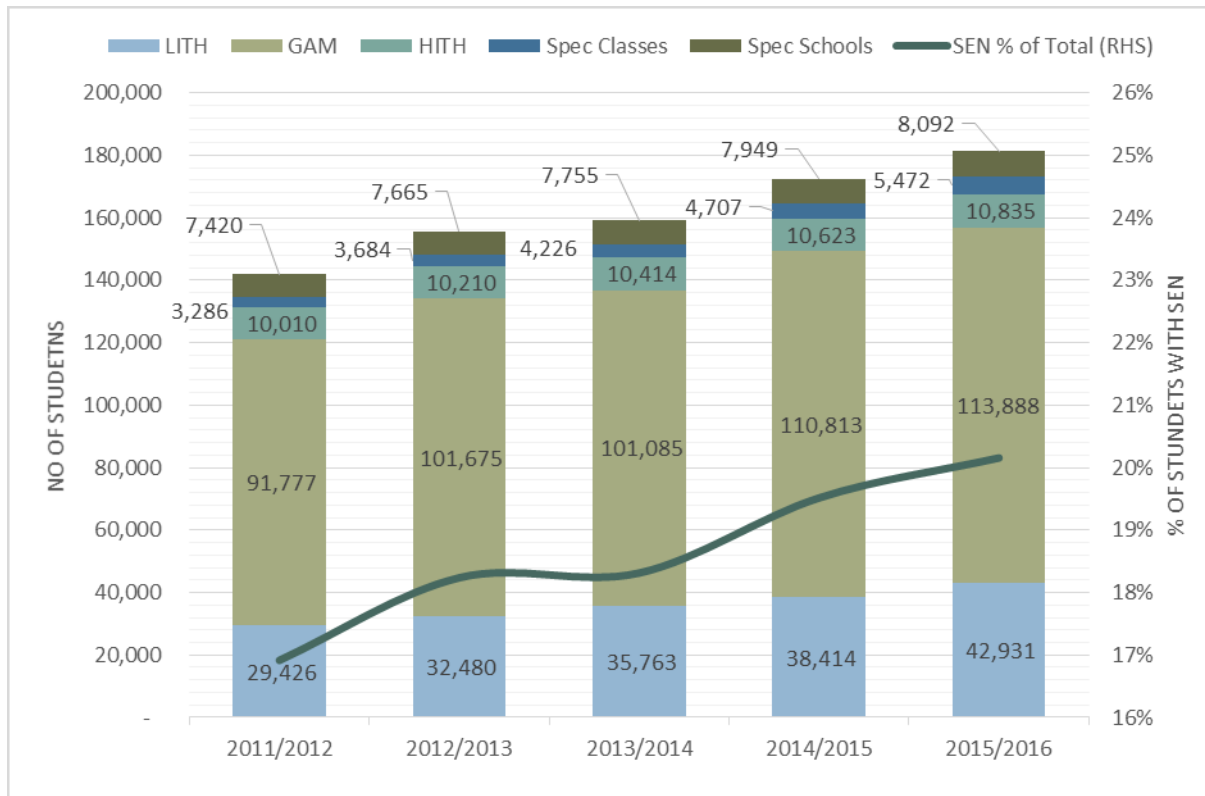
The figure below provides the number of students with SEN from 2011/2012 to 2015/2016. Over the period the number of students with SEN has increased by 28% from 141,919 to 181,218. Over the same period the total student population in primary and post-primary increased by 7% from 838,977 to 899,106. The number of students with SEN relative to the total student population has increased from 17% to 20%.

The number of students accessing SEN support under the General Allocation Model (GAM) are estimated to have increased by 24% from 91,777 to 113,888⁹. Those accessing Low Incidence Teaching Hours¹⁰ (LITH) increased from 29,426 to 42,931, a 45% increase and it is estimated that those accessing High Incidence Teaching Support (HITH) increased by 8% from 10,010 to 10,835. The numbers of students accessing support in special classes in mainstream increased by 67%, the largest percentage increase of all the cohorts, from 3,286 to 5,472. Those accessing special schools increased from 7,420 to 8,092, a 9% increase. It should be noted that these categories do not capture a category of students who have medical needs that are accessing SNAs.

⁹ The GAM figures are provisional

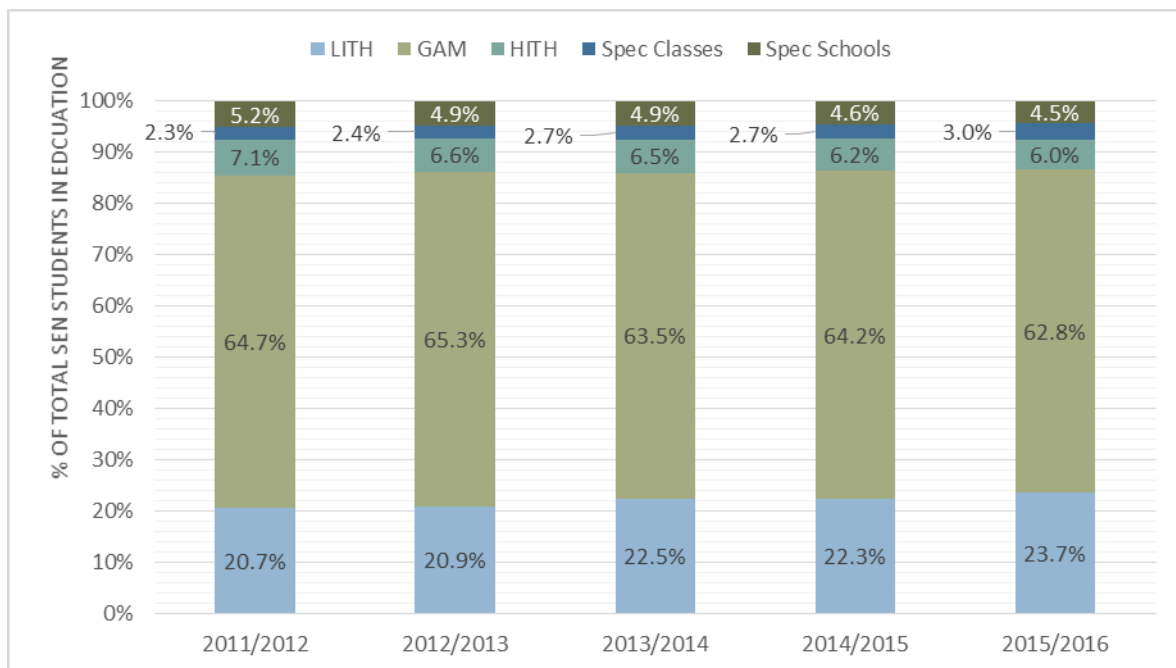
¹⁰ More details on LITH and HITH can be found in Appendix 4 of the NCSE Annual Report 2014. Available at <http://ncse.ie/wp-content/uploads/2015/06/NCSE-Annual-Report-2014.FINALWEBVERSION15.04.15.pdf>

Figure 3: Composition of students accessing SEN resources, 2011/2012 – 2014/2015



In terms of percentage share of students accessing SEN resources there has been no significant change in the proportion of students in each category. Students accessing LITH have increased their percentage share by 3 percentage points. Those accessing special schools, GAM and HITH saw their percentage share decline. The largest decline in percentage share was in the GAM which had a decline of 1.8 percentage points.

Figure 4: Percentage share of students accessing SEN resources, 2011/2012 – 2014/2015



The following table presents the number of students with SEN not attending school¹¹. Over the period the number of SEN students not attending school increased by 32% from 606 to 799. On average the HTS accounts for 88% of the SEN students not in school.

Table 7: Students with SEN not in an education setting, 2011/2012 – 2014/2015

Scheme	2011/2012	2012/2013	2013/2014	2014/2015
Home Tuition Scheme ¹² (SEN cases only)	533	658	662	697
Home Schooled	73	85	94	102
Total	606	743	756	799
Total as % of total SEN students	0.43%	0.48%	0.48%	0.47%

In summary the number of students:

- With SEN are increasing relative to the overall primary and post-primary population;
- Qualifying for GAM supports account for 63% of the SEN population in 2015/2016;
- Accessing LITH and special classes are increasing relative to all other support categories;
- In the HTS and those who are home schooled make up a small proportion of the total student numbers and these students make up the additional demand for SEN services outside of the mainstream and special schools.

¹¹ For this report the definition that has been assigned to those not attending school with SEN, are those children who have SEN and are educated at home or who attend non-recognised schools as recorded by Tusla.

¹² Home Tuition Scheme, which is a scheme that provides a compensatory educational service for children who, for a number of specific reasons are unable to attend school. It is also likely that there are a small number of children in HSE provided centres with SEN that are not attending full time education but it was not possible to collect data on this cohort. The criteria for eligibility under the Home Tuition scheme are:

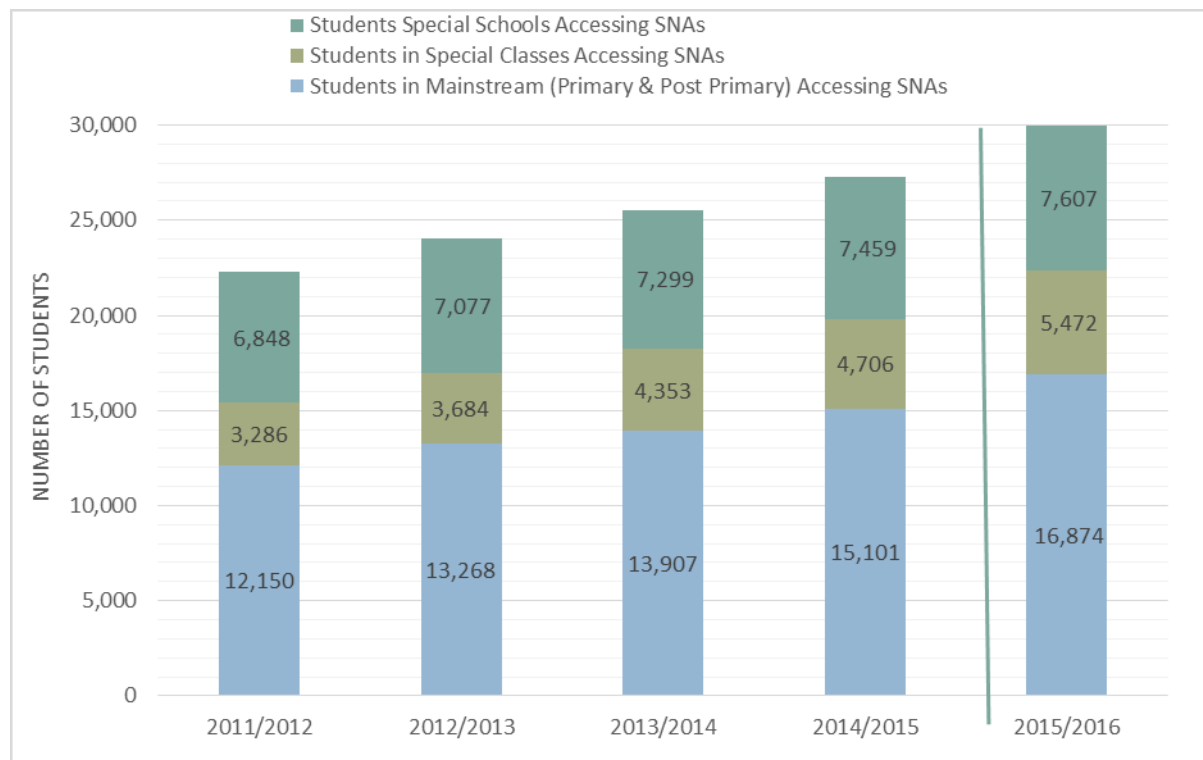
- Students with a significant medical condition which is likely to cause major disruption to school attendance
- Children with special educational needs seeking an educational placement
- Children aged between 2.5 and 3 with a diagnosis of ASD

3.2 Programme Objective

The objective of the SNA Scheme is to provide a system of additional care support within an education context for students with SEN¹³.

The figure below provides the number of students accessing SNA support in the school sector. The number of students accessing SNA support has increased by 34% from 22,284 to 29,953 between 2011/2012 and 2015/2016. The largest proportionate increase within each of the cohorts was in special classes where the number of students increased by 67% from 3,286 to 5,472. The number of students in mainstream increased from 12,150 to 16,874 a 39% increase and the number of students in special schools increased by 11% from 6,848 to 7,607.

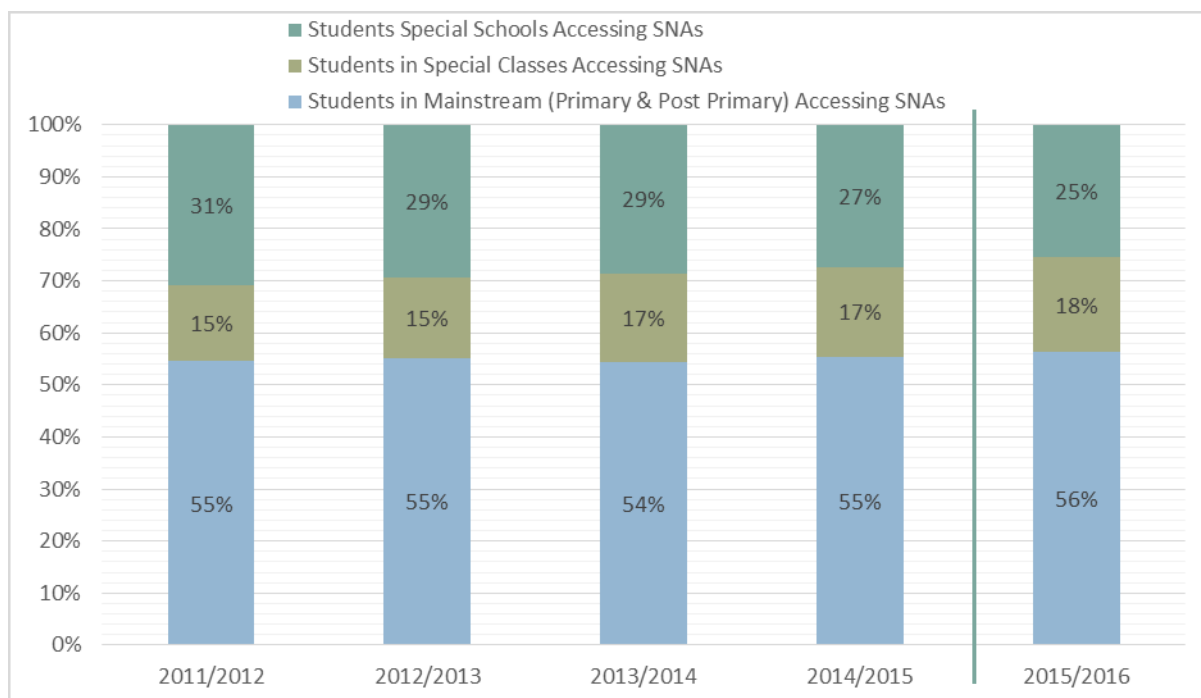
Figure 5: Number of students accessing SNA support by sector, 2011/12 – 2015/16



Looking at the relative sizes of each of the cohorts below, the number of students in special schools have declined as a percentage of the total number of students accessing SNA support. Those in special classes have increased from 15% of students in the scheme to 18% in 2015/2016. The proportion of students in mainstream have slightly increased from 55% to 56%.

¹³ A Value for Money Review of Expenditure on the Special Needs Assistant Scheme (2011)

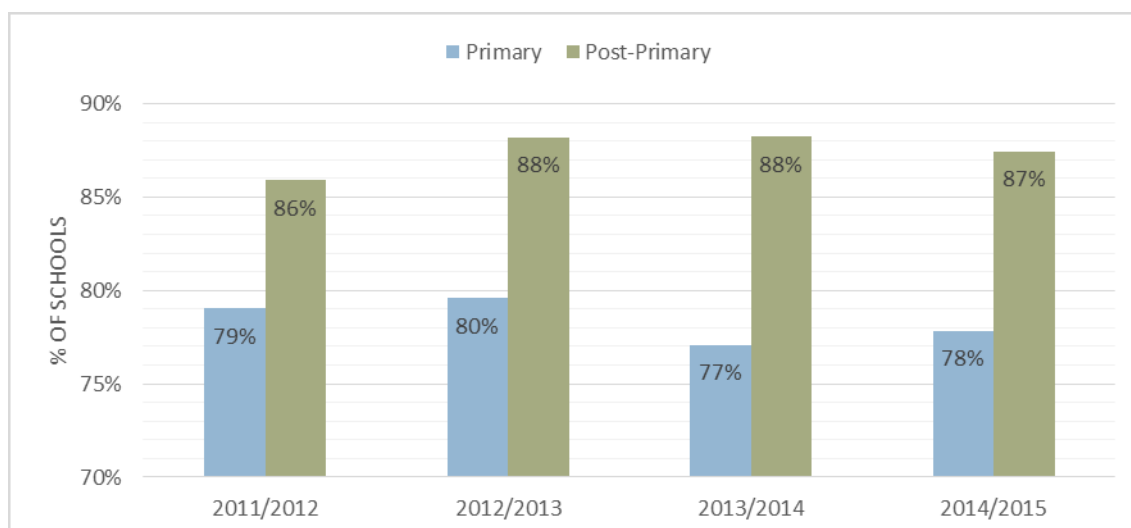
Figure 6: Percentage share of students accessing SNA support by Sector 2011/2012 – 2015/2016



A further interesting metric which also sums up the overall picture of SNA access is the number of schools that have been allocated SNA resources. Between 2011/2012 and 2014/2015 the number of mainstream primary and post-primary schools allocated SNA support has increased by 4% from 3,118 to 3,255. Primary schools represent 80% of the schools allocated SNAs. In addition there are 118 special schools with SNA allocations from the NCSE.

The figure below presents the percentage of schools allocated SNAs compared to all mainstream primary and post-primary schools. Overall between 80% and 82% of all schools received SNA allocations. A higher proportion of post-primary schools receive SNA allocations. This is due to the greater number of primary schools compared to post-primary schools.

Figure 7: Percentage of mainstream primary and post-primary schools accessing SNA support, 2011/2012 – 2014/2015



To consider this objective further the 2011 VFM review suggested examining the extent to which the additional care support has been allocated through ongoing monitoring and review processes. Circular

0030/2014 requires all SNA allocations to be subject to an annual review. The number of reviews that took place in 2015 are recorded on SEAS.

There are four types of reviews carried out by SENO:

- A focused review involves SENO observing particular students in a school;
- A full review in the school requires the SENO to observe all students accessing SNAs in the school;
- An office-based review is where the SENO reviews files on the cases in the school and contacts the school for an update on the students; and
- A review meeting is where the SENO meets school staff to receive updates on students and discuss the allocation

In 2015 the NCSE carried out 470 focused reviews, 1,039 full reviews, 1,321 office based reviews and 437 review meetings. In total 3,267 of 3,268 schools with SNA allocations have been reviewed in 2015.

Table 8: Number of reviews by review type, 2015

Review Type	2015
Focused Review in the School	470
Full Review in the School	1,039
Office-Based Review	1,321
Review Meeting in the School	437
School Review not recorded on SEAS	1
Total	3,268

The 2011 VFM review recommended establishing the extent to which the additional care support had been allocated through ongoing monitoring and review processes. Due to the manner in which SNAs are allocated to schools it is not possible to distinguish between students that had been assigned additional care support, diminished care support and those that had received support for the first time. This report proposes that the NCSE should consider how to measure the outcomes of these reviews on schools.

In summary the number of students accessing SNA support has increased since 2011/2012. While all sectors are growing the number of students in special classes are increasing at a faster rate than those in mainstream and special schools. In 2014/2015, 78% of primary and 87% of post-primary schools were accessing SNA support compared to 79% of primary and 86% of post-primary in 2011/2012. Over 3,200 school reviews were carried out across all schools in the scheme in 2014 and 2015. Further data collection is necessary to establish the outcomes of these reviews.

3.3 Inputs

This section considers the direct budget that is allocated to support the SNA scheme and the indirect costs to the NCSE and the DES.

3.3.1 Direct Costs

From 2011 to 2015 the direct cost of the SNA scheme has increased by 21% from €332m to €402m. Over the same period the cost per student decreased from €14,889 to €13,421, a 10% decline. Among the factors influencing the decline is the higher ratio of students to SNAs in mainstream.

The cost per Whole-Time-Equivalent (WTE) SNA over the same period increased by 5% from €32,360 to €33,885. The increase in the student to SNA ratio and the decline in the cost per student indicates that the scheme is supporting more students with less resources per student than in 2011.

It is important to note that the costs are from DES payroll for the end of the calendar year. Other figures presented in the report are for the academic year end with the exception of the figures for 2015. The slight difference between the payroll figures and the NCSE figures for 2015 is consistent with the NCSE allocating posts to schools but schools not yet notifying payroll of the appointment.

Table 9: Direct cost of SNA Programme, 2010-2015

Direct Costs	2011	2012	2013	2014	2015
Est. Direct Cost (€m)	332	341	354	372	402
Number of Students	22,284	24,029	25,559	27,266	29,953
Est. Cost per Student (€)	14,899	14,191	13,850	13,643	13,421
Number of WTE SNAs ¹⁴	10,260	10,443	10,609	11,115	11,864
Est. Cost per WTE ¹⁵ (€)	32,360	32,653	33,369	33,468	33,885
Student to SNAs	2.2	2.3	2.4	2.5	2.5

3.3.2 Indirect Costs

Indirect costs refer to the costs associated with the cost of administration staff that operate the Scheme in the NCSE and the DES. The methodology for estimating indirect costs is set out in the Public Spending Code (section E-01). The technical reference section recommends including PRSI and administrative overhead to arrive at total indirect costs. Pension costs are not included. To arrive at the numbers in table 10 below, the analysis assumed:

- PRSI of 10.75% for employees hired after April 1995 and PRSI of 2% for employees hired pre April 1995; and
- Administrative overhead according to E01 in the Public Spending Code of 25%.

Over the period 2011 to 2014 the indirect costs of the programme declined by 7% from €3.8m to €3.5m.

Table 10: Indirect costs of SNA scheme

Indirect Costs	2011	2012	2013	2014
DES (€)	92,724	92,724	87,384	73,676
NCSE (€)	3,765,295	3,624,091	3,537,210	3,521,385
Total (€)	3,858,019	3,716,816	3,624,594	3,595,061

When all of the costs detailed above are applied, the total cost of the scheme between 2011/2012 and 2014/2015 was €1.4bn or an average of €353m per annum.

¹⁴ The number of WTE SNAs refers to calendar year end figures of SNA and also excludes 60 SNAs working in the Child Care Programme.

¹⁵ WTE costs are estimated by dividing the estimated direct cost of the programme by the number of WTE SNAs in the scheme in that school year. For example in 2011 the cost of the scheme was €332m, and at the end of school year 2010/2011 there were 10,260 WTE SNA, which gives a WTE cost of €32,360. Figures are inclusive of employers PRSI.

3.3.3 Other Potential Future Costs to the Scheme

As detailed in the DES Strategic Objective section (footnote 13) above, the Home Tuition Scheme (HTS) provides funding for resources for children who potentially would be supported by SNAs if these students were in a school setting. The table below provides the costs of the scheme associated with children with SEN. The costs associated with the scheme have increased by 21% from €9.3m to €11.3m. The cost per student increased by 4% over the period in 2015.

A proportion of the students accessing the scheme are pre-school age. Those at school age require access to a range of supports including learning support, teachers and SNAs were they to be enrolled in school.

Note that students in the HTS are receiving their full education in this setting and the number for 2015/2016 is not finalised as the applications are still being received and approved.

Table 11: Home tuition costs, 2011-2015

Home Tuition Costs	2011	2012	2013	2014	2015*
SEN Funding (€)	€9,360,181	€8,930,278	€9,641,087	€10,326,853	€11,307,380
Cost per Home Tuition student (€)	€9,231	€7,350	€7,365	€7,877	€9,607

*Estimate

3.3.4 SNA scheme costs compared to DES budgets

Between 2011 and 2015 voted expenditure on Special Education in the DES increased from 14.7% to 16.5% of the gross current allocation to DES¹⁶. Direct costs of the SNA scheme increased from 25.8% to 29% of the voted expenditure on Special Education. However, growth in direct SNA scheme costs and reductions in the gross current allocation to DES has increased the relative cost of the SNA scheme compared to the total DES budget from 3.8% in 2011 to 4.8% in 2015.

Table 12: Comparison of SNA costs with DES budgets

DES Budget Allocations	2011	2012	2013	2014	2015
DES Gross Current Allocation Allocations (€, bn)	8.75	8.60	8.46	8.22	8.40
Special Education Allocations % of Gross Current DES Allocations	14.7%	15%	15.1%	15.5%	16.5%
Total Special Education Allocations (€, bn)	1.29	1.29	1.28	1.27	1.38
SNA % of gross current DES Allocations	3.8%	4%	4.2%	4.5%	4.8%
Total SNA Allocations (€,m)	332	340	353	371	401
SNA % of total Special Education Allocations	25.8%	26.5%	27.7%	29.2%	29%

Over the period, the direct costs of the scheme increased by 21% while the indirect costs decreased by 7%. WTE costs of SNAs increased by 60% and the cost per student declined by 10%. The cost of funding students in the HTS increased by 4% to €9,607 per student in 2015. Students in the HTS are receiving their full education in this setting so comparison between the SNA scheme student costs and the HTS student costs is not comparing like with like. When the SNA scheme is compared to the voted Special Education expenditure, the direct scheme costs increased from 25.9% to 29% in 2015. Special Education and SNA scheme costs account for 1 percentage point more of the total DES budget in 2015 than in 2011.

¹⁶ The gross current allocation is inclusive of the National Training Fund and exclusive of capital expenditure and appropriations in aid.

3.4 Activities

This section presents the metrics that summarise the activities associated with the SNA scheme. The first subsection outlines the number of applications each year by the number of students, the second subsection provides applications each year by the number of schools, the third subsection presents the number of the number of exits from the scheme in 2015, the fourth subsection presents the breakdown of data in relation to SNA applications that were appealed 2015/2016 and finally the time it take for a SNA decision is presented.

3.4.1 Applications – Students

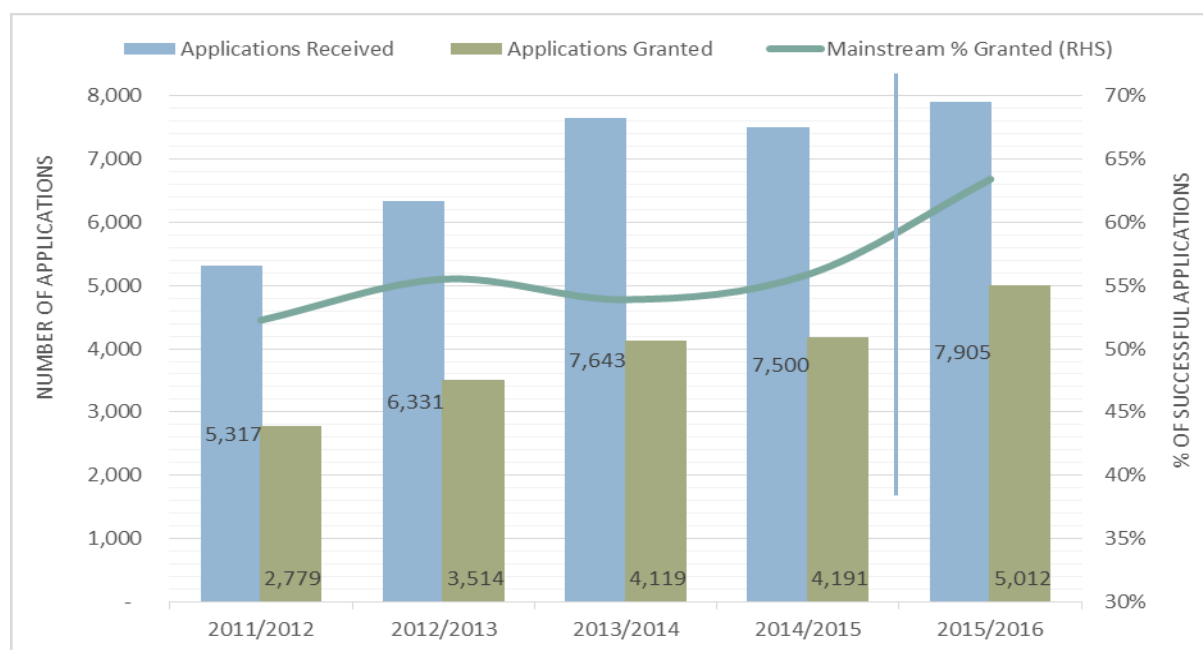
For a school to provide a SNA resource to a student in a mainstream class they must apply to the NCSE. A SENO will then assess the application and decide if SNA access is necessary and the level of resource required to provide for the care needs of the student in the school. Students in special classes and special schools are assigned a specific level of SNA resource automatically depending on their disability. A small proportion of applications are submitted to the NCSE for additional support for these students.

In 2011/2012 the NCSE received 5,317 applications, 3,610 of these were for children in primary schools and 1,707 of these were for children in post-primary schools. From 2011/2012 to 2015/2016 on average, 70% of applications were from primary and 30% were from post-primary, the largest number of applications (7,905) were made in 2015/2016.

Between 2011/2012 and 2015/2016 the number of successful applications increased from 52% and 63%. In 2015/2016 the number of applications reached 7,905, which is a 49% increase on the number of applications received in 2011/2012. These figures exclude applications received from students in special classes and special schools.

Factors affecting the increase in the percentage of successful applications are a more detailed application process, an information campaign for parents and schools rolled out by the NCSE and the DES circular 0030/2014 which set out qualifying criteria in clearer terms.

Figure 8: Number of applications received and granted for primary and post-primary students, 2011/12 – 2015/16



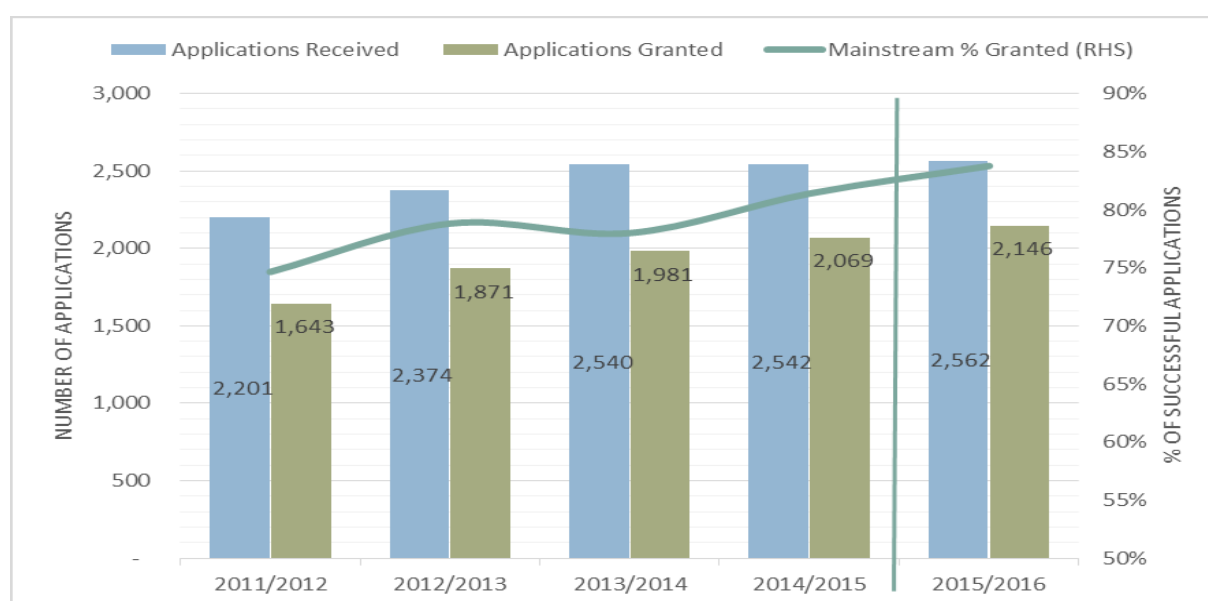
3.4.2 Applications – Schools

The data presented below is the number of schools that made applications in respect of students seeking access to SNA resources. It is important to note that even if a school has a successful application they may or may not receive additional SNA allocations. The SENO will assess whether or not the existing allocation of SNA resources in the particular school is sufficient to cover the additional demand.

Form 2011/2012 to 2015/2016 the overall number of schools applying for SNA resources has increased by 16% from 2,201 to 2,562. The number of successful applications has increased by 31% from 1,643 to 2,146. The result of these changes has increased the percentage of schools with applications granted from 75% in 2011/2012 to 84% in 2015/2016. Note that schools must only make an application in respect of students that require access and currently do not have access. Existing students can stay on the caseload from year to year although they are subject to review.

Over the period primary school applications account for 78% of applications and post-primary schools account for 22% of applications.

Figure 9: Number of primary and post-primary schools making applications, 2011/12 – 2015/16



3.4.3 Number of Students Not Accessing SNAs

The following metric considers the number of student exits from the scheme. As noted above SNAs are allocated to schools, both mainstream and special, in accordance with the DES Circular 0030/2014. Schools make an application to the SENO in order to provide support for students with identified care needs. Special classes and special schools are generally entitled to a standard allocation of SNAs in accordance with ratios defined in the Special Educational Review Committee (SERC) report (1993) and the DES Circular 0038/2010. Where relevant, the SENO tops up the allocation in accordance with the care needs of individual students. However the class group would have an entitlement to a minimum ratio based on designation.

Circular 0030/2014 requires all SNA allocations to be subject to an annual review. Based on these reviews a number of students may exit the scheme.

From Tables 13 and 14 below the number of students that were receiving SNA support as a result of a successful application in 2014/2015 and were not accessing SNA support in 2015/2016 was 1,898. Every student in mainstream with access to a SNA will have made an application and a small proportion of children in special classes and special schools will also have an application, if the level of care automatically assigned under the ratios provided in Circular 0038/2010 is not suitable to the care needs of the individual.

The number of students at primary age (4-12) that were not accessing SNA support in 2015/2016 but had access in 2014/2015 was 903. The numbers no longer accessing SNA increase by age with those at 12 years of age having the most significant drop off.

Table 13: Number of students who had access to SNA in 2014/2015 but not in 2015/2016, by primary school age

Age on 01/01/2015	4	5	6	7	8	9	10	11	12	Total
Not accessing in 15/16	9	37	42	71	56	59	79	188	362	903
% of those no longer accessing	1%	4%	5%	8%	6%	7%	9%	21%	40%	

The number of students at post-primary age (13-22) that were not accessing SNA support in 2015/2016 but had access in 2014/2015 was 995. Similar to the primary cohort the numbers of students not accessing SNA support increase by age up to 17 which is when the numbers tail off, this is because the individuals are likely to start leaving the school system.

Table 14: Number of students who had access to SNA in 2014/2015 but not in 2015/2016, by post-primary school age

Age on 01/01/2015	13	14	15	16	17	18	19	20	21	22	Total
Not accessing in 15/16	89	57	93	138	287	260	55	11	3	2	995
% of those no longer accessing	9%	6%	9%	14%	29%	26%	6%	1%	0.3%	0.2%	

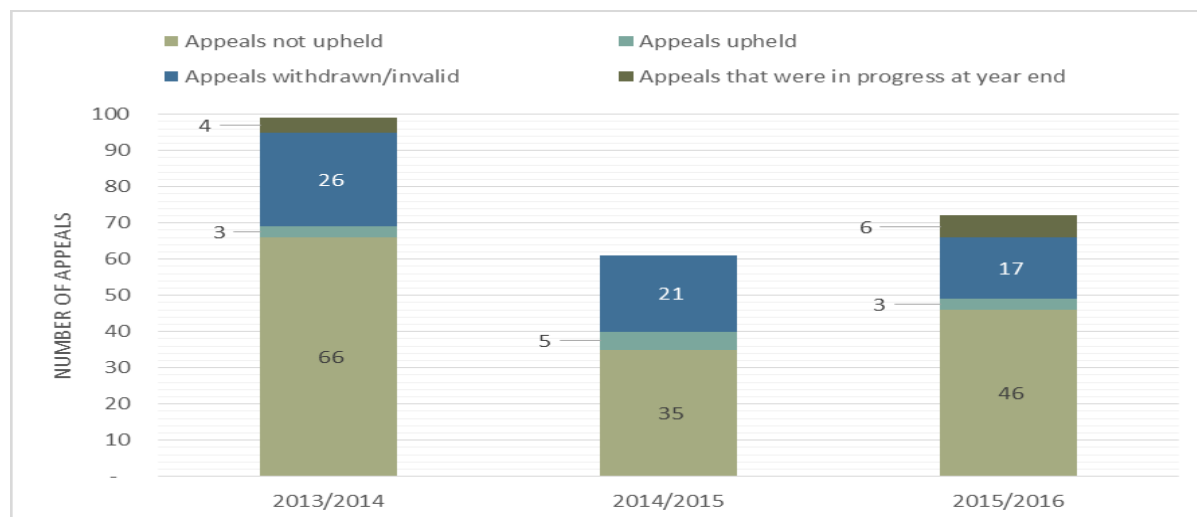
Across both cohorts the numbers of students that had access to SNA support in the previous year but are not accessing SNA support in the current year increases by age. In the years when students are transitioning from primary to post-primary (11 and 12) or when students traditionally leave post-primary (17/18+) the numbers not accessing SNA are the highest. It's estimated that the between 11% and 12%¹⁷ of students that made an application and had access in the 2014/2015 didn't access SNA resources in 2015/2016.

¹⁷ By assuming between 10% and 15% (1,217/1,825) of those in special schools and special classes in 2014/2015 have an application and all mainstream students have an application (15,101).

3.4.4 Appeals of NCSE SNA Decisions

Between 2013/14 and 2015/2016 the average number of appeals of SNA applications was 1.1% and the average number of appeals upheld as a percentage of appeals received is 5%. Over the period of 2013/2014 to 2015/2016, 232 appeals were received; 147 (63%) were not upheld, 64 (28%) were withdrawn or invalid, 11 (4.7%) were upheld and 10 (4.3%) were in progress at the end of the year.

Figure 10: Breakdown of SNA resource appeals, 2013-2014 – 2015-2016



3.4.5 Timeliness of Application Process

The table below presents the average number of days it takes for the NCSE to make a decision regarding access to SNA resources in 2015/2016¹⁸. Overall, 8,279 applications were submitted to the NCSE, 39 were submitted prior to January 2015 for the 2015/2016 school year and it took the NCSE 154 days, on average to make a decision. From January to June, 6,229 applications were made and on average the NCSE made a decision on these application in 58 days. The high number of average days to make a decision is a function of annualised allocation process. These applications will relate to the next school year (i.e. application received in March for a student the following September).

The NCSE then made an overall allocation of SNAs in July 2015 for the 2015/2016 academic year. Between July and September 1,474 applications were received and on average a decision was made in 27 days. These additional posts were then allocated in October 2015. In the months including October to December, 319 application were submitted and the NCSE took an average of 14 days to make a decision. If the student was deemed suitable, access to SNA was either provided through existing allocation of SNA or the student was allocated SNA support in the next round of applications. At the end of 2015 there were 218 pending applications.

The annualised allocation process ensures that allocation and decisions on SNA applications received prior to June for the next school year will take a number of months. Applications for the given school year will be processed much more quickly.

¹⁸ Applications from schools for students to access mainstream SNAs are received from November through to May. Those for the next school year are dealt with in the first round of allocations. By the end of June these applications are processed and schools are notified of their allocation for the following September. In addition, SNAs are allocated to special classes and special schools in line with the DES criteria in June and during the school year as students fill these classes. Further applications are received over the course of the school year. These take account of later or revised assessments, further information received, emergencies, students moving between schools, etc. Additional allocations are made to schools that cannot meet the requirements of these students within their existing allocation.

Table 15: Applications and average number of days to decision for SNA access in the 2015/2016 academic year

	Applications	Average number of days to decision
Pre January 2015	39	154
January – June 2015	6,229	58
July – September 2015	1,474	27
October – December 2015	319	14
Applications with a decision end 2015	8,061	51
Pending at end of 2015	218	104

It's clear that the number of applications for students in primary and post-primary have increased since 2011/2012. The number of successful applications have increased significantly in 2015/2016. A similar trend is evident in the school data.

The number of students that had SNA support as a result of an application in 2014/2015 but are not accessing SNA support in 2015/2016 is estimated at 11% to 12%. Those not accessing SNA support increase with age, although in years when students are transitioning to post-primary or from post-primary peaks in the trend are evident.

The high number of days for a decision on application received from January to June is a function of the annualised process of allocating SNAs. The later the application is made in a round of allocations the shorter turnaround time from application to decision to allocation. It should also be noted that decisions on applications that do not meet criteria can be processed more quickly and the school advised promptly of the outcome, whereas a decision to provide SNA access, especially those which involve an allocation of additional resources to a school, will take longer and may require a visit to a school.

3.5 Outputs Impacts and Results

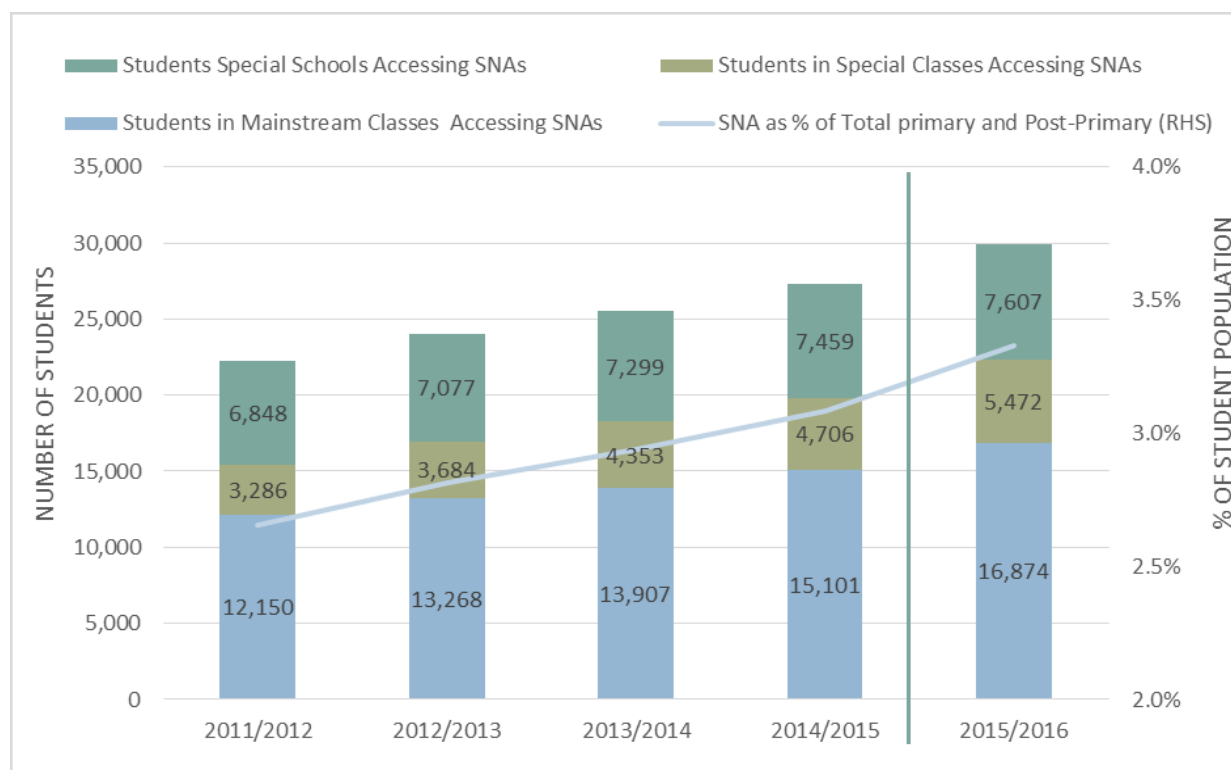
This section examines the number of students with SEN that have been allocated SNA support by sector. The first subsection provides an overview of the scheme, followed by an analysis of mainstream students, special classes and special schools.

3.5.1 Overview

The number of students accessing SNA (figure 10 below) increased by 34% from 22,284 to 29,953. Between 2011/2012 and 2015/2016 the number of students in special classes increased by 67%, the number of students with SNA access in mainstream classes increased by 39% and the number of students in special schools increased by 11%.

The number of students accessing SNAs compared to the total primary and post-primary population has increased from 2.7% in 2011/2012 to 3.3%¹⁹ in 2015/2016.

Figure 11: Number of students accessing SNAs by sector, 2011/2012 – 2014/2015



¹⁹ 2015/2016 total primary and post-primary population is based on the Department of Education Population Projections, July 2015

The total number of SNAs provided by the scheme has increased by 16% from 10,260 in 2011/2012 to 11,864²⁰ in 2015/2016. The average annual percentage change over the period was a 4% increase in SNAs. The largest increase was between 2014/2015 and 2015/2016 where the number of SNAs increased by 6.7% or 749 additional SNAs.

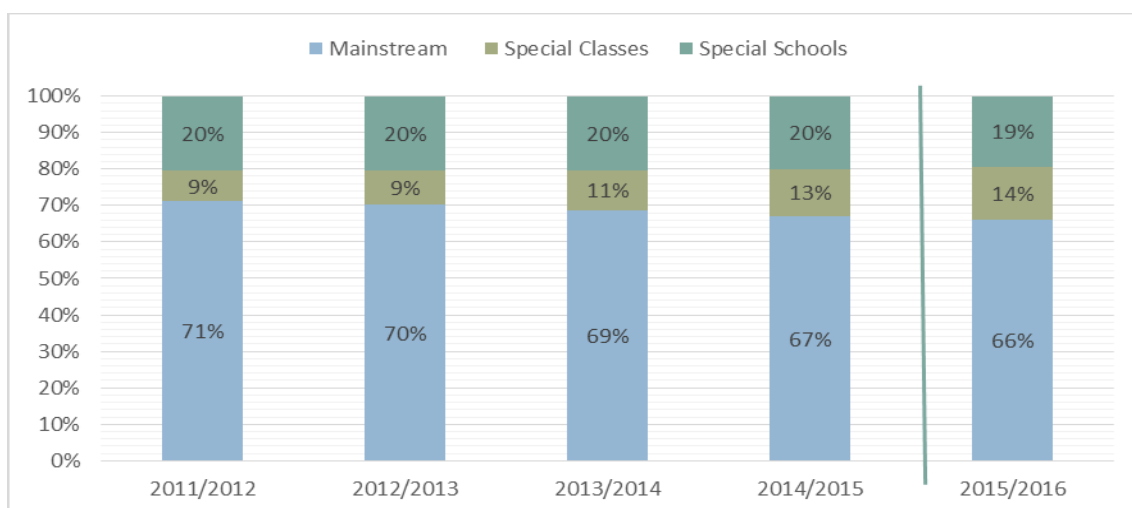
Between 2011/2012 and 2015/2016, SNAs in mainstream increased by 8% from 7,295 to 7,846. The numbers of SNAs in special classes increased by 97% from 873 to 1,718 and the number of SNAs in special schools increased by 10% from 2,092 to 2,300.

Figure 12: Number of SNAs by sector, 2011/2012 – 2014/2015



The percentage share of SNAs is presented in the figure below, the proportion of SNAs in special classes increased from 9% in 2011/2012 to 14% in 2015/2016. The proportion of SNAs in mainstream decreased by 5 percentage points from 71% to 66%. The percentage share of SNAs in special schools declined from 20% to 19%.

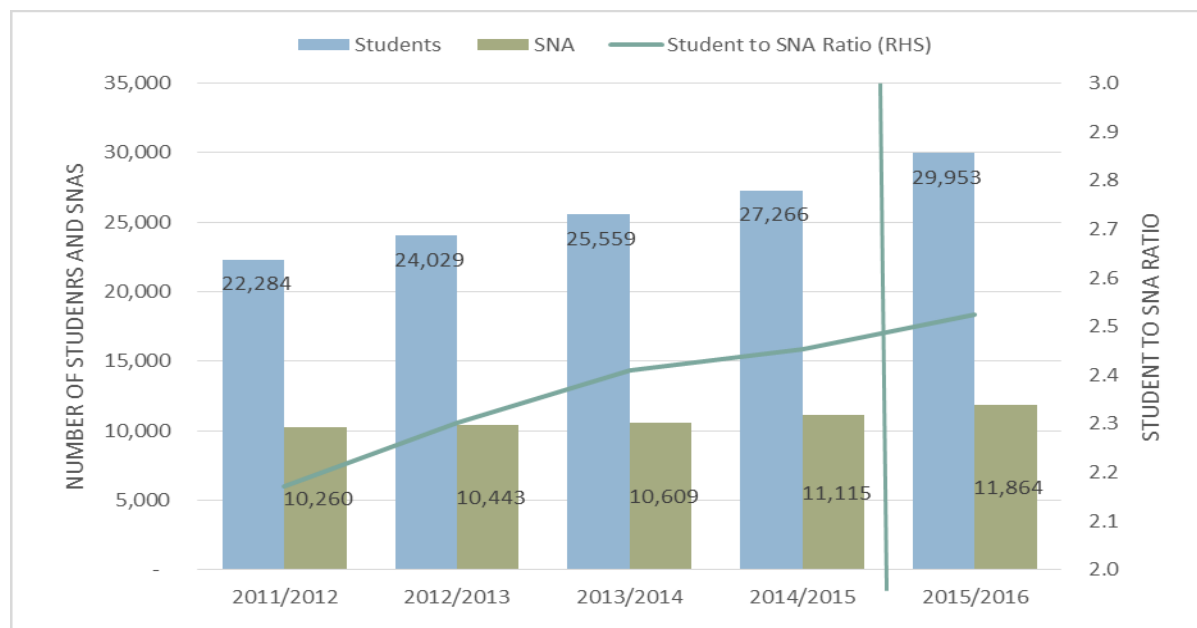
Figure 13: Percentage share of SNAs by sector, 2011/2012 – 2015/2016



²⁰ These figures exclude Child Care Workers, which account for 60 SNAs each year between 2011/2012 and 2015/2016.

Looking at the number of SNAs and students between 2011/2012 and 2015/2016, the higher annual growth rates in students accessing SNAs compared to the annual growth rates in SNAs has increased the student to SNA ratio from 2.2 students per SNA to 2.5 students per SNA.

Figure 14: Student and SNAs, 2011/2012 – 2015/2016



Overall the numbers of students accessing SNA resources are increasing particularly in special classes (67%) and more recently in mainstream classes. These increases have increased the percentage of students accessing SNAs compared to the overall student population from 2.7% to 3.3%. The growth in student numbers have increased the number of SNA posts by 16% (1,604). Across all sectors the number of students per SNA has increased from 2.2 in 2011/2012 to 2.5 in 2015/2016.

3.5.2 Mainstream Classes

As noted throughout the report SNAs are allocated to schools, both mainstream and special, in accordance with the DES Circular 0030/2014. Schools make an application to the SENO in order to provide support for students with identified care needs. These students will have diagnosed SEN, or medical needs or disability. Supporting evidence from the diagnosing clinician is submitted in support of the application. These reports set out that a student has significant care needs arising from a significant medical need or a significant impairment of physical or sensory function. School based information will also be taken into account in determining the outcome of the application and, generally, the SENO will have visited the relevant student in a pre-school or school setting and will have a first-hand experience of how the care needs of the student are impacting on their ability to access education.

The first part of this subsection provides an overview of students and SNA numbers in mainstream primary and post-primary. The second part of the subsection considers the change in the types of disabilities in mainstream primary and post-primary since 2011/2012.

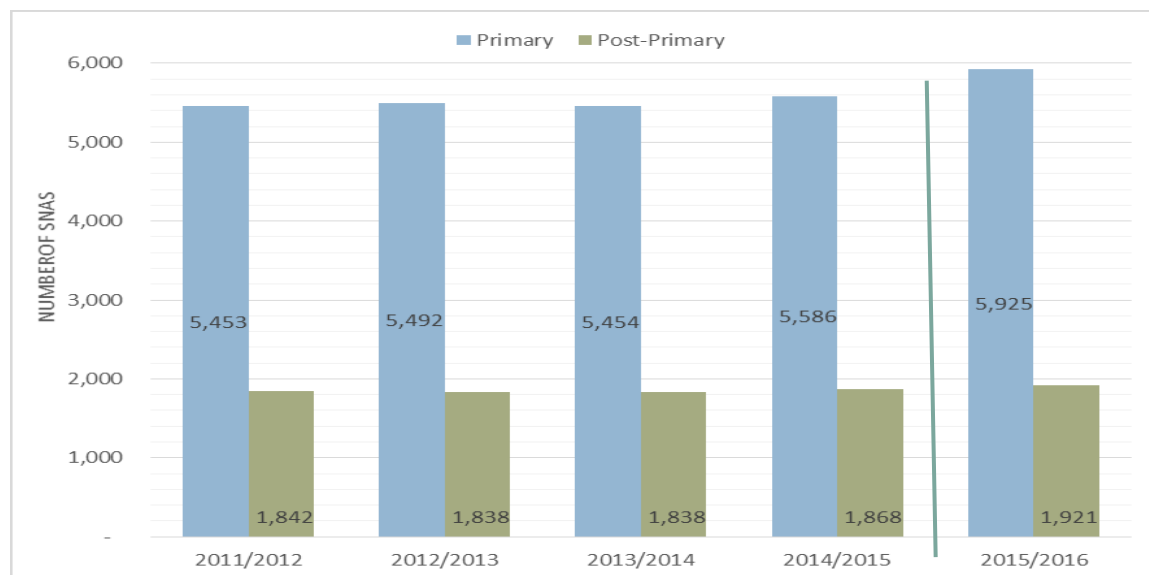
3.5.2.1 Mainstream Classes in Primary and Post-Primary

In terms of SNA allocations to mainstream classes only (figure 14 below), the number of SNAs in mainstream classes in primary and post-primary has increased by 8% from 7,295 to 7,846.

Allocations to primary school account for 75% of the SNA allocations. From 2011/2012 to 2015/2016, allocations to primary schools increased by 9% from 5,453 to 5,925.

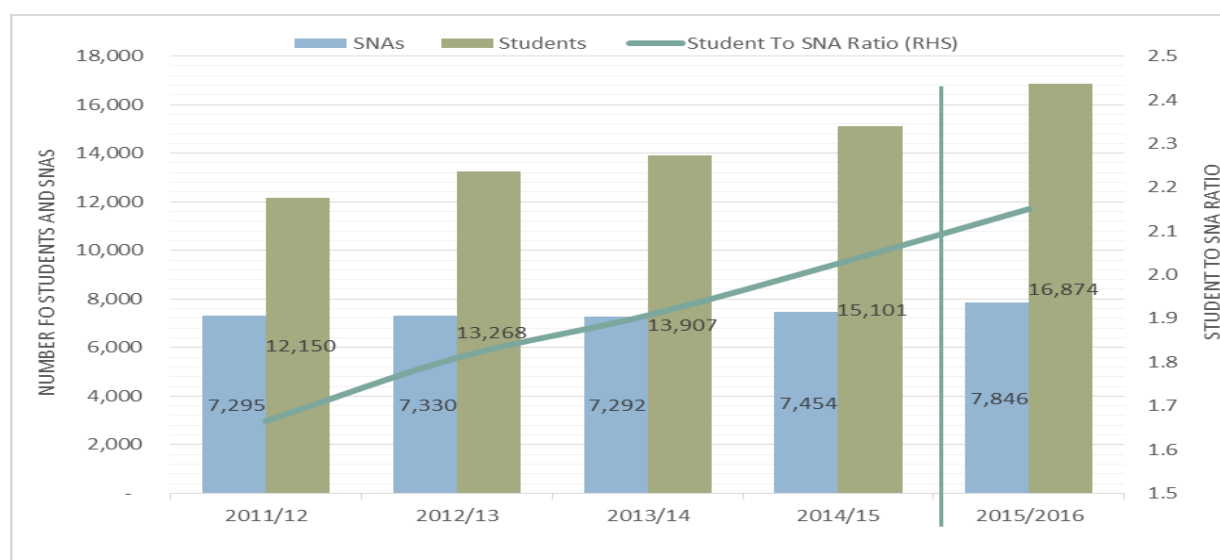
The number of SNAs allocated to mainstream post-primary schools increased by 4% from 1,842 in 2011/2012 to 1,921 in 2015/2016. From 2011/2012 to 2013/2014 the numbers of SNAs were relatively static between 1,842 and 1,838 although from 2013/2014 the numbers of SNAs have increased by 4.5% from 1,838 to 1,921.

Figure 15: Number of SNAs in mainstream classes by primary and post-primary, 2011/12 – 2015/2016



Turning to the number of students per SNA in mainstream (figure 16). Between 2011/2012 and 2015/2016 the number of students in mainstream classes accessing SNAs increased by 39% and the number of SNAs allocated to mainstream schools increased by 8%. The effect of these increases in student numbers and SNA posts, increased the student to SNA ratio from 1.7 to 2.2.

Figure 16: Number of SNAs and students in primary and post-primary mainstream classes, 2011/2012 – 2015/2016



3.5.2.2 Mainstream Classes - SEN category types in Mainstream Primary and Post-Primary

The table below shows the breakdown of students by SEN category for students in mainstream primary and post-primary. It is noted in this report that the care need of the students in mainstream classes dictates the level of access to SNAs. The SEN category can inform the trend of the different types of disability in mainstream.

Over the period the number of students with Autism Spectrum Disorder (ASD) overtook Emotional Behavioural Disturbance (EBD) as the most common diagnosis in those receiving SNA access in mainstream. The diagnosis of Physical Disability is the third most common diagnosis in mainstream.

In terms of growth over the 2011/2012 to 2015/2016 period, the No Disability category increased by an annual average of 20%, followed by and Multiple disabilities (20%) and ASD (17%). Other notable increases in SEN categories were in Physical Disability (9%), Assessed Syndrome (9%) and Severe Profound General Learning Disabilities (GLD) (10%).

The largest average annual decreases in SEN categories were evident in Specific Learning Disabilities (19%) and Borderline and Borderline/Mild GLD (19%).

Table 16: Number and % change of primary and post-primary students with access to SNAs by SEN category, 2011/2012 – 2015/2016

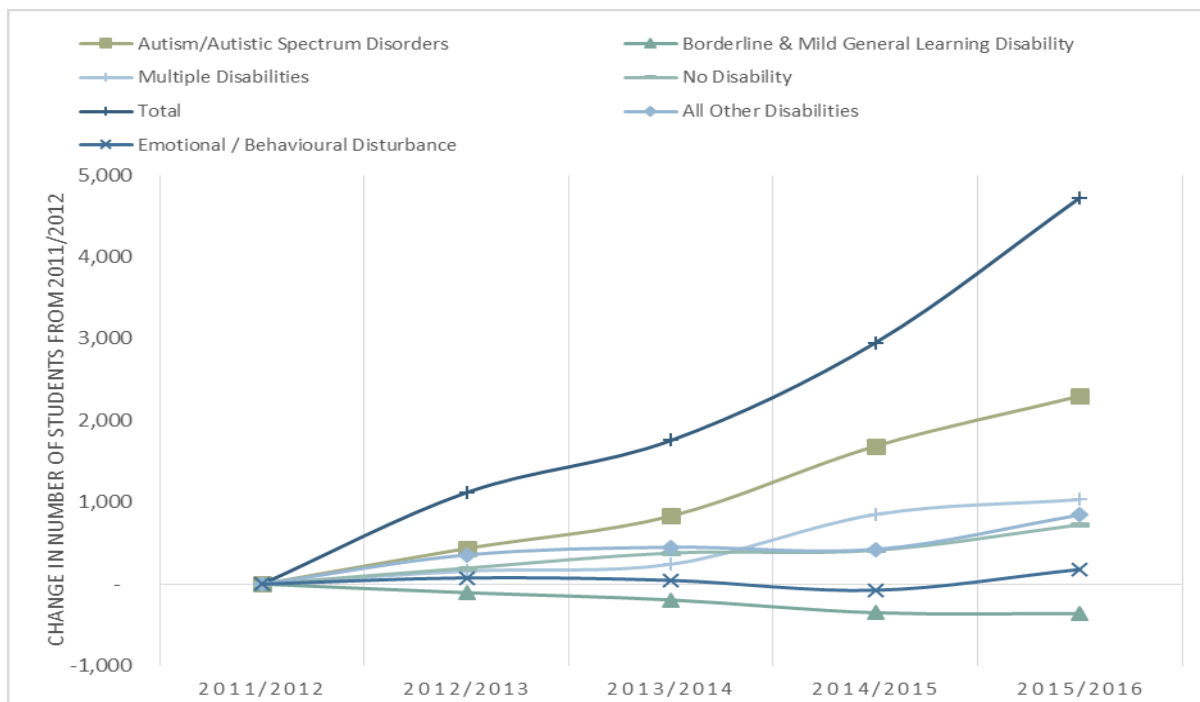
Disability type - Primary & Post-Primary (Mainstream Students)	11/12	12/13	13/14	14/15	15/16	11/12-15/16	Average Annual % Change: 2011/2012 - 2015/2016
Autism/Autistic Spectrum Disorders	2,742	3,178	3,574	4,429	5,041	2,299	17%
Multiple Disabilities	1,033	1,192	1,276	1,884	2,067	1,034	20%
No Disability	683	879	1,063	1,097	1,409	726	20%
Physical Disability	1,912	2,084	2,123	2,063	2,222	310	4%
Moderate GLD	430	458	466	547	613	183	9%
Emotional / Behavioural Disturbance	2,762	2,838	2,807	2,686	2,942	180	2%
Hearing Impairment	280	301	329	359	401	121	9%
Assessed Syndrome	377	431	468	396	452	75	5%
Visual Impairment	289	304	313	342	360	71	6%
Specific Speech and Language Disorder	320	347	347	296	374	54	5%
Severe Emotional / Behavioural Disturbance	666	713	699	712	708	42	2%
Severe/Profound GLD	21	25	22	26	31	10	11%
Specific Learning Disability	31	19	10	10	11	-20	-19%
Borderline and Mild GLD	604	499	410	254	243	-361	-19%
Total	12,150	13,268	13,907	15,101	16,874	4,724	9%

While the number of students accessing SNA resources across each disability have fluctuated over the period, there has been a net increase in the number of students accessing SNAs. Between 2011/2012 and 2015/2016 the number of students accessing SNAs has increased by 4,724.

A number of disabilities have fluctuated significantly since 2011/2012. ASD has increased by 2,299 (84%) students from 2011/2012 to 2015/2016. Those receiving SNA support under the No Disability category have increased by 726 (106%). The number of students with a diagnosis of Physical Disability increased by 1,034 (100%).

It is also the case that certain SEN categories being supported by the scheme decreased. The largest decreases were in those with Borderline and Mild GLD which decreased by 361 (60%) students. All other disabilities combined increased by 1,026 (24%) students.

Figure 17: Change in the number of disabilities, base year = 2011/2012



In summary the overall numbers of students accessing SNA in mainstream primary and post-primary classes has increased by 39% since 2011/2012. This has increased the number of SNAs in mainstream by 8% for the corresponding period. Both of these increases have resulted in the SNA to student ratio increasing from 1.7 to 2.2.

Looking to the disability categories the largest percentage increase has been in No Disability category and the multiple disability category. ASD and Multiple Disabilities had the greatest absolute increase over the period with ASD students becoming the largest cohort of students with access to SNAs in mainstream followed by EBD and Physical Disabilities. The number of students accessing SNA with a Borderline/Mild GLD and a Specific Learning Difficulty has declined.

3.5.3 Special Classes in Mainstream Schools

The following section considers the number of students in special classes, the number of special classes and the SEN category of special classes.

As noted, special classes receive a standard allocation of SNAs in accordance with student ratios defined in the Special Educational Review Committee (SERC) report (1993) and the DES Circular 0038/2010 which are outlined in table 17 below. For example a special class for children with ASD is entitled to an allocation of two SNAs for six students, whereas a special class for students with EBD is entitled to an SNA for every four classes. Where relevant, the SENO tops up the allocation in accordance with the care needs of individual students. However the class group would have an entitlement to a minimum ratio based on designation.

Table 17: Staffing ratios for each disability category, Circular 0038/2010

Type of special class/school	Student-Teacher ratio	Class-SNA ratio
Autism/Autistic Spectrum Disorders	6 : 1	1 : 2
Multiple Disabilities	6 : 1	1 : 1
Physical Disability	10 : 1	1 : 1
Severe Emotional Disturbance	6 : 1	1 : 1
Severe/Profound GLD	6 : 1	1 : 2
Moderate GLD	8 : 1	2 : 1
Borderline/Mild GLD	11 : 1	4 : 1
Emotional Disturbance	8 : 1	4 : 1
Hearing Impaired	7 : 1	4 : 1
Speech and Language Disorders	7 : 1	3 : 1
Visual Impairment	8 : 1	4 : 1
Profoundly Deaf	6 : 1	2 : 1
Specific Learning Disability	9 : 1	No automatic allocation
Assessed Syndrome	Not included in Circular	No automatic allocation
No Disability	Not included in Circular	No automatic allocation

Source: DES Circular 0038/2010, SERC 1993

The number of schools with special classes has increased by 65% from 338 in 2011/2012 to 558 in 2015/2016. The number of school allocated special classes increased by 17% between 2014/2015 and 2015/2016. The number of schools with special classes has increased from 9% in 2011/2012 to 14% in 2015/2016.

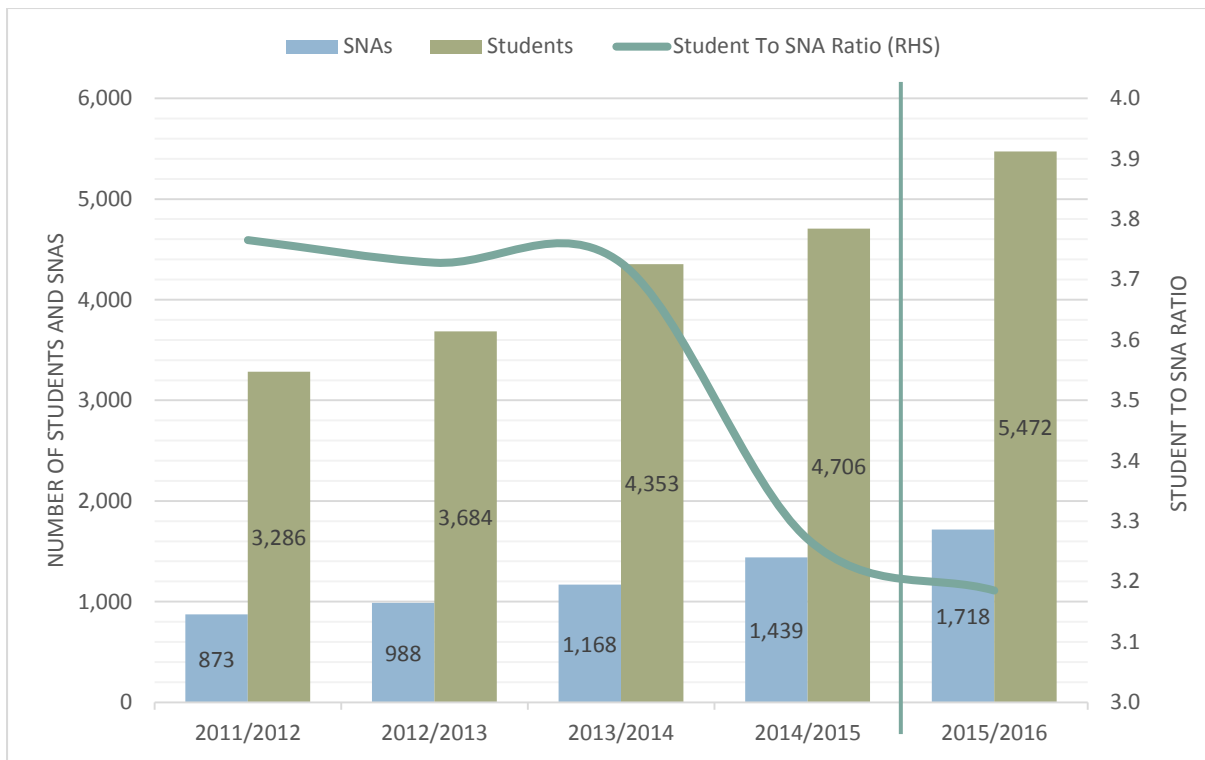
Table 18: Number of primary and post-primary schools with special classes, 2011/2012 – 2015/2016

	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016
Number of Schools	338	378	429	477	558
% of Total Schools	9%	10%	11%	12%	14%*

*Based on the provisional number of primary and post-primary schools for 2015/2016

The number of students per SNA in special classes in mainstream schools are presented below. The student numbers increased by 67% and the numbers of SNAs increased by 97%, the combined effect of these changes decreased the student to SNA ratio from 3.8 students per SNA in 2011/2012 to 3.2 in 2015/2016.

Figure 18: Number of SNAs and students in mainstream special classes, 2011/2012 – 2015/2016



3.5.3.1 Mainstream Special Classes – Types of Special Classes

This subsection considers the types of special classes in mainstream from 2011/2012 to 2015/2016.

Overall there has been an 84% increase in the number of special classes in mainstream since 2011/2012. The percentage of ASD classes has increased from 54% in 2011/2012 to 64% of all special classes in 2015/2016. When early intervention ASD classes are included, the percentage of ASD classes increases from 60% in 2011/2012 to 76% of classes in 2015/2016. The number of Moderate GLD classes increased by an annual average of 13% from 31 to 48.

There were small declines in the number of classes in some categories. In 2011/2012, there was 73 Mild General Learning Disability classes which decreased by an annual average of 3% to 64 in 2015/2016.

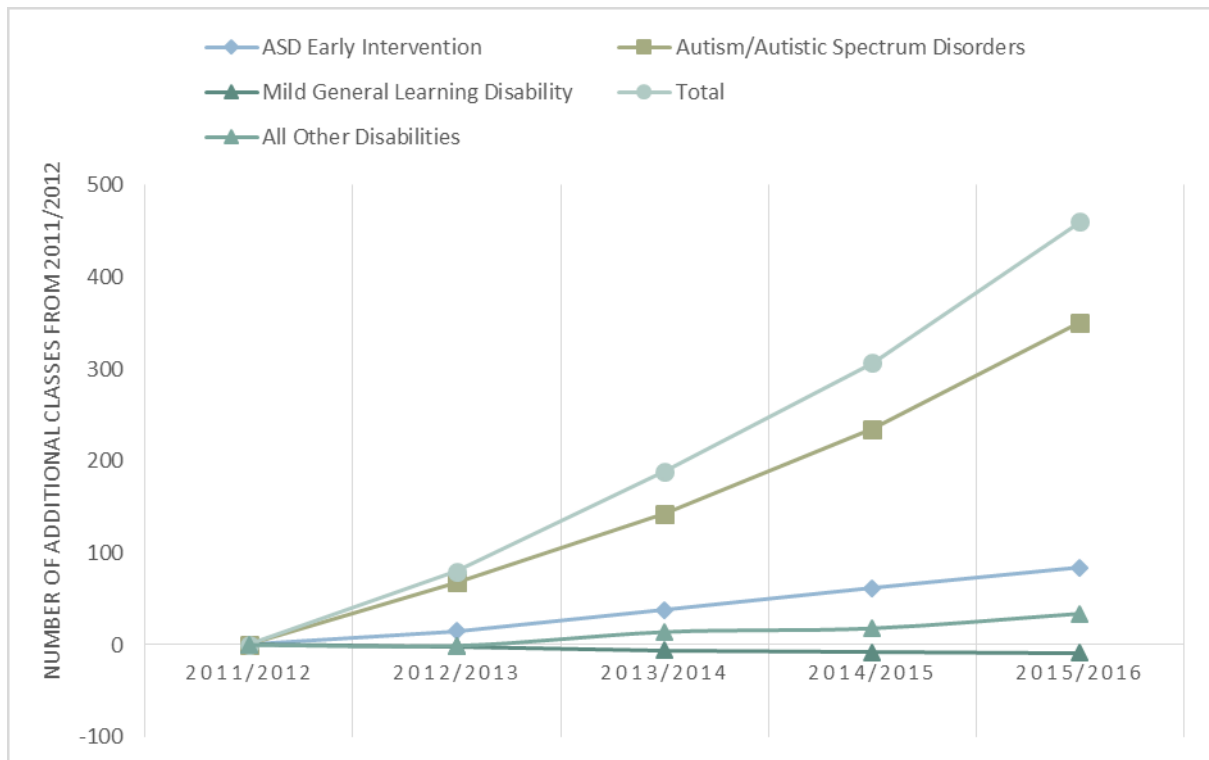
Table 19: Number of special classes in mainstream by type of special class, 2011/2012 – 2015/2016

Type of Special Class	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016	Change: 2011/2012 - 2015/2016	Average Annual % Change: 2011/2012 - 2015/2016
ASD	296	364	439	531	647	351	22%
ASD Early Intervention	34	49	72	96	118	84	37%
Moderate GLD	31	28	39	39	48	17	13%
Multiple Disabilities	3	5	5	8	15	12	54%
Multiple Disabilities	0	0	0	5	5	5	n/a
Severe EBD	1	1	1	2	2	1	25%
Hearing Impairment	15	16	16	15	16	1	2%
Hearing Impairment - Early Intervention	0	0	0	0	1	1	n/a
Severe/Profound GLD	9	10	10	10	9	-	0%
EBD	8	6	7	9	8	-	2%
Physical Disability	1	1	1	0	0	-1	n/a
Specific Speech and Language Disorder	64	64	64	63	63	-1	0%
Specific Learning Disability	13	13	16	12	12	-1	0%
Mild GLD	73	71	67	65	64	-9	-3%
Total	548	628	737	855	1,008	460	16%

n/a – not enough classes over the period for a meaningful value

Since 2011/2012 the increase in the number of ASD classes has been the main driver of the increase in special classes. Of the 460 additional classes created over the period, 435 (95%) were ASD. Early intervention ASD classes increased by 84 classes and ASD classes increased by 351. The number of classes provided for students with a Mild GLD decreased by 9 (12%). All Other Disability classes increased by 34 students (23%).

Figure 19: Change in the number of special classes, base year = 2011/2012



3.5.3.2 Mainstream Special Classes - Types of SEN in Special Classes

The profile of students in special classes by SEN category is provided below. It was only possible to establish the category of SEN for 2015/2016, as student specific data on special classes has is only reliable from 2015. Students with ASD make up 71% of the students in special schools. The next largest disability group is those with Specific Speech and Language Disorders who make up 8% of the total numbers in special classes, 6% of students in special classes have a Mild GLD, 5% of students have Multiple Disabilities.

Table 20: Special class students by SEN category, 2015/2016

Disability Type - Special Classes	2015/2016	Percentage of Total
Assessed Syndrome	50	0.9%
Autism/Autistic Spectrum Disorders	3,858	70.5%
Borderline Mild General Learning Disability	78	1.4%
Emotional/Behavioural Disturbance	71	1.3%
Hearing Impairment	94	1.7%
Mild General Learning Disability	316	5.8%
Moderate General Learning Disability	166	3.0%
Multiple Disabilities	259	4.7%
No Disability	16	0.3%
Physical Disability	21	0.4%
Severe Emotional / Behavioural Disturbance	14	0.3%
Severe/Profound General Learning Disability	28	0.5%
Specific Learning Disability	71	1.3%
Specific Speech and Language Disorder	426	7.8%
Visual Impairment	4	0.1%
Total	5,472	100%

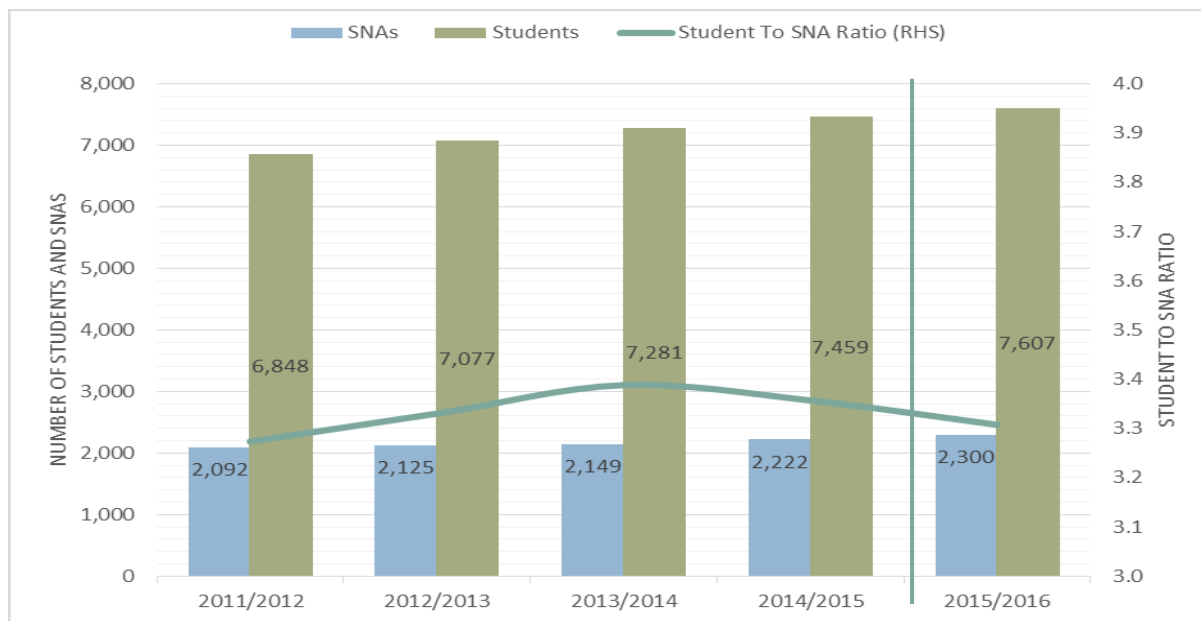
In summary a large number of special classes have been established since 2011/2012. The sector has experienced a very large increase in the student numbers (67%), as a result SNA numbers increased by 97% and the number of classes have increased by 84%. The student to SNA ratio has declined because of an increase in ASD classes which require a high level of SNA resource relative to other disabilities. According to figures from 2015/2016 students with ASD make up the majority of students in special classes (71%).

3.5.4 Special Schools

Students with the highest level of care need are provided for in special schools. This subsection first considers the number of SNAs from 2011/2012 to 2015/2016 and students in special schools and then considers the change in the type of SEN categories from 2011/2012 to 2015/2016.

The number of students and the number of SNAs in special schools are presented in the figure below. The number of students have increased by 11% from 6,848 to 7,607 and the number of SNAs has increased by 10% from 2,092 to 2,300. These similar growth rates have seen the student to SNA ratio increase from 3.27 to 3.31 in 2015/2016.

Figure 20: Number of SNAs and students in special schools resourced by the NCSE, 2011/2012 – 2015/2016



The number of students by SEN category between 2011/2012 and 2015/2016 are presented below. ASD students are the largest cohort of students in special schools, accounting for 22% of students in 2011/2012 and 30% of students in 2015/2016. Students accessing SNA support with Borderline/Mild GLD are the second largest cohort with 1,541 students in 2015/2016, this category accounted for 26% of students in 2011/2012 and 20% in 2015/2016. Students with Moderate GLD are the third largest cohort accounting for 16% of the total number of students in 2011/2012 and 13% in 2015/2016.

Students with EBD increased by an annual average of 33%, although EBD only accounts for 3% of the students in special schools.

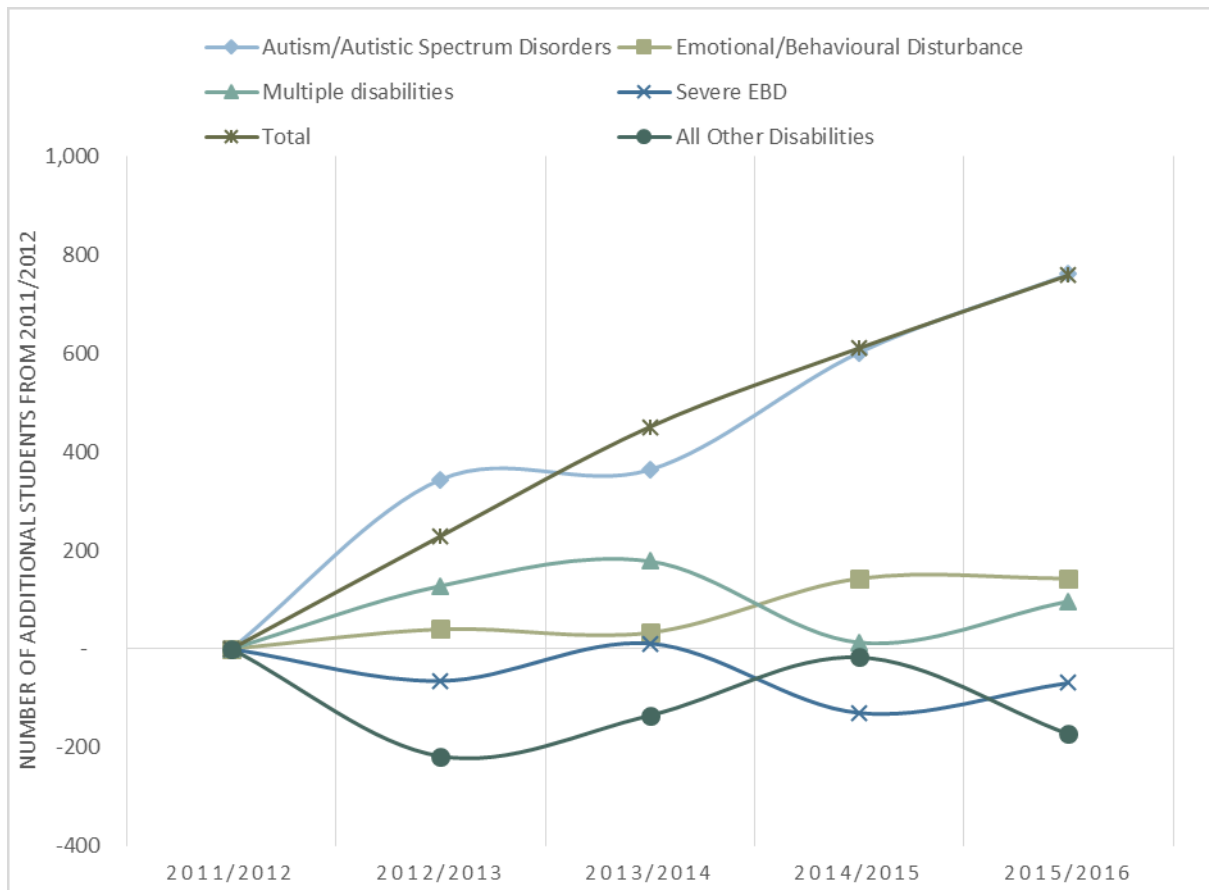
Figure 21: Special school students by category of SEN

Student Disability Type - Special School	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016	Change: 2011/2012 - 2015/2016	Average % Change: 2011/2012 - 2015/2016
Autism/Autistic Spectrum Disorders	1,522	1,866	1,886	2,124	2,283	761	11%
Emotional/Behavioural Disturbance	88	128	121	231	231	143	33%
Severe/profound GLD	744	719	788	810	852	108	4%
Multiple disabilities	644	772	822	657	741	97	5%
Hearing impaired	109	109	142	127	150	41	9%
Assessed Syndrome	-	7	6	35	33	33	154%
Visual impairment	20	17	22	27	31	11	13%
Specific Speech and Language Disorder	10	15	33	23	12	2	23%
Other Disabilities	15	20	51	7	14	-1	51%
Specific Learning Difficulty	243	241	242	262	237	-6	0%
Physical disability	267	237	217	281	242	-25	-1%
Severe EBD	292	227	303	162	223	-69	1%
Moderate GLD	1,100	1,028	1,064	1,027	1,017	-83	-2%
Borderline/Mild GLD	1,794	1,691	1,602	1,686	1,541	-253	-4%
Total	6,848	7,077	7,299	7,459	7,607	759	3%

The number of special school students with access to SNA supports increased by 759 (11%) between 2011/2012 and 2015/2016. The main drivers of the increase of students in special schools from 2011/2012 were ASD which increased by 761 students (50%), EBD which increased by 143 students (163%), Severe/Profound GLD which increased by 108 (15%) and Multiple Disabilities which increased by 97 students (15%).

A number SEN categories also saw a decline. The largest declines in number of students were evident in the Borderline/Mild GLD category which declined 253 (14%), Moderate GLD which declined by 83 students (8%) and those with a Severe Emotional Disturbance declined by 69 students (24%).

Figure 22: Change in the number of disabilities in special schools, 2013/2014 = base year



From 2011/2012 to 2015/2016, special school student numbers increased by 11% and SNAs increased by 10%, the net effect of this is that the student to SNA ratio slightly declined in 2015/2016 compared to 2014/2015. The main driver of the student increase since 2013/2014 has been primarily ASD. Students with an ASD diagnosis account for 30% of students in 2015/2016 compared to 22% in 2011/2012.

3.5.5 Results and Impacts - Conclusions

Across mainstream, special classes in mainstream schools and special schools there has been an increase in the number of students requiring SNA support. In mainstream, the numbers of SNAs have not increased at the same rate as the number of students which has increased the student to SNA ratio. In mainstream special classes the growth of SNAs was greater than growth in the number of students which decreased the SNA ratio, this was due to the establishment of ASD classes which have lower student to SNA ratio than other class types. It is also the case that an increasing share of the SNA resources in the scheme are being assigned to post-primary. Special school students and SNAs in special schools are increasing at a similar rate which has kept the student to SNA ratio relatively constant. Comparing the student to SNA ratios, special schools and classes have a higher number of students per SNA compared to mainstream classes. There has also been a significant increase in the number of students accessing SNAs in 2015/2016 compared to 2014/2015.

From the above analysis it is clear that students with an ASD diagnosis are the main disability provided for in the SNA scheme. Students with an ASD diagnosis also rank as one of the fastest growing disabilities categories in the SNA scheme over the period and is the primary driver of the increased number of special classes. There has also been a striking increase in the number of students in mainstream with No Disability.

Finally, the average duration of SNA support by type of disability and by type of school and the number of SNAs allocated per SEN category are metrics that were not possible to measure over the course of this analysis. These metrics were not measurable from the data available due to the nature of the SNA allocation process. The NCSE allocates a quantum of SNA support for each school annually, taking into account the care needs of all of the qualifying children enrolled in the school, and on the basis of the assessed care needs of all of the children concerned, rather than by reference to a student's disability categorisation. The process of allocating SNA support to schools rather than allocating resources to each student makes it very difficult to measure these metrics.

3.6 Summary

The direct costs of the scheme increased by 21% from 2011 to 2015 to €402m while the indirect costs decreased by 7% to €3.6m. The average annual total cost of the scheme over 4 years is €353m. The direct costs of the SNA scheme increased compared to the Special Education voted allocation. Special Education including the SNA scheme costs account for more of the total DES budget than in 2011.

Since 2011/2012, the number of students with SEN are increasing relative to the overall number of students in primary and post-primary. Students qualifying for GAM supports account for 63% of the SEN population at primary and post-primary in 2015/2016. All SEN supports have experienced increases in numbers of students, although the number of students accessing LITH and special classes are increasing at a faster rate than all other support categories. Students with SEN outside of the formal education sector (i.e. Home Tuition Scheme and those who are home schooled) are also increasing and make up a small proportion of the total student numbers.

Across mainstream classes, mainstream special classes and special schools student numbers increased by 34% and SNA numbers increased by 16%. Across all sectors the number of students have increased at a faster rate than SNAs which has increased the student to SNA ratio from 2.2 to 2.5.

In mainstream the numbers of SNAs have not increased at the same rate as the number of students which has increased the student to SNA ratio from 1.7 to 2.2. The growth in SNA numbers and students in special classes was greater than in special schools and mainstream classes. Moreover the growth in the percentage of SNAs was greater than that of the percentage growth in students requiring an SNA. This was a result of an increase in ASD classes, which receives the highest allocation of SNA per class. As a consequence this decreased the student to SNA ratio from 3.8 to 3.2. It is also the case that an increasing share of the SNA resources in this sector are being assigned to the post-primary sector. Special school students and SNAs are increasing at a similar rate which has kept the student to SNA ratio relatively constant (3.3 students per SNA). Comparing the student to SNA ratios, special schools and special classes have a higher number of students per SNA compared to mainstream classes. It is recognised that the best outcomes for the student determines the appropriate school setting provided in line with DES policy on inclusion.

The analysis shows that students with an ASD diagnosis are a very significant factor in the SNA scheme in terms of numbers of students and SNA allocations. ASD also ranks as one of the fastest growing disability categories in the SNA scheme over the period. There has been a notable increase in the number of students in mainstream with No Disability and in special schools with EBD.

The number of students that had SNA support as a result of an application in 2014/2015 but are not accessing SNA support in 2015/2016 is estimated at 11% to 12%. Those no longer accessing SNA support increase with age. In the age groups where students are expected to transition to post-primary or from post-primary, peaks in the trend are evident.

The number of applications for students have increased since 2011/2012 with the exception of 2014/2015. The number of successful applications have increased year on year. A similar trend is evident in the school data, the number of applications in 2013/2014 and 2014/2015 are very similar and the number of successful applications is increasing. The increase in the number of successful applications is a result of a more detailed application process, an information campaign for parents and schools rolled out by the NCSE and the DES circular 0030/2014 which set out qualifying criteria in clearer terms. Furthermore with the projected numbers of students starting primary and post-primary increasing in medium term it is likely that the number of applications will increase into the future.

There are a varied number of average days to decision which depends on when the SNA application is made. This is a function of the application process having a fixed date for applications in round 1 (November to May).

Over 3,200 schools with SNAs were reviewed in 2015, although there is no data to examine the outcomes at a school level of these review. The FPA technical group proposes that the NCSE should establish how to measure the outcomes of SENO review on schools. More discussion the outcomes of school reviews and the link to care needs of students is provided in appendix 4.

4 Estimate of SNA Demand 2016 - 2019

This chapter explains the methodology for estimating the potential number of SNAs in 2016, 2017, 2018 and 2019. Estimates of SNA demand are derived for mainstream primary, mainstream post-primary, and special schools, special classes in mainstream for ASD students and Non-ASD students and early intervention special classes for ASD.

4.1 Overview

The approach adopted for each sector is to estimate the level of student SNA access for all relevant age groups and apply a student to SNA ratio for each sector to estimate the number of SNAs required.

The assumptions used for forecasting the number of students started with the underlying growth in the population of school-going children, and then looked at different scenarios for changes in the proportion of students receiving SNA support. Four different scenarios were used.

The annual percentage change, relative to 2015, in the ratios of children in their birth year cohort having SNA support would be:

- **Zero.** In other words, these ratios would remain at their 2015 level. Any change forecast in SNA numbers would be due to underlying population growth only (**Population** scenario);
- The **lowest** yearly percentage change observed over the 2011 to 2015 period (**Minimum** scenario);
- The **average** yearly percentage change observed over the 2011 to 2015 period (**Average** scenario); and
- The **highest** yearly percentage change observed over the 2011 to 2015 period (**Maximum** scenario)

To these scenarios was added three assumptions about the evolution of the student to SNA ratio in each of mainstream schools, special classes in mainstream schools, and special schools. These assumptions are:

- The **Constant scenario** assumes the SNA ratio will remain at the 2015/2016 level;
- The **Minimum scenario** assumes the SNA ratio will change at the minimum annual change observed in the ratio between 2011 and 2015; and
- The **Average scenario** assumes the SNA ratio will change at the average annual change in the ratio observed between 2011 and 2015.

The FPA has developed four scenarios for student access and three scenarios for the student to SNA ratio (SNA concentration). This approach gives a range of estimates of the potential numbers of SNAs over the 2016 to 2019 period.

4.2 Student Demand

To estimate the potential student demand a number of steps are required.

First the Adjusted Relevant Birth Cohort (ARBC) for each year is established. The ARBC up to 2015 is the population by age which is estimated by the CSO. Post 2015 the ARBC is the estimated population for each age group adjusted by death rate and migration (M2)²¹. The ARBC is presented below, those born in 2008 (75,173) are assumed to be 4 years old in 2012 (70,789), 5 years old in 2013 and so on. The 4 year old age group exceeded 70,000 in 2012, this level of demand is only expected to decline below 70,000 in 2018. The number of 5 to 18 year olds is set to rise by 1.4% in 2017, a further 0.9% in 2018 and a further 0.8% in 2019. Overall the school age population is set to rise by 3% between 2016 and 2019. This increase in the population (highlighted in grey and black below) will in itself increase the demand for SNAs. The rationale for using the birth cohort is that the statistics for students accessing SNA support are available by age group and the number of births are

²¹ The deaths rate at each age group and estimated migration statistics provided by the CSO have been used to adjust the population. For forecasted years, death rates and the DES preferred migration scenario M2 is applied for 2016 – 2019.

known up to 2015 which means only one year of births (4 year olds in 2019/2020) are estimated based on the previous year's trend.

Table 21: Adjusted Relevant Birth Cohorts (4 -12 years) – 2011 - 2019

Age	2011	2012	2013	2014	2015	2016	2017	2018	2019
4 years	66,409	70,789	72,234	72,805	73,664	75,484	71,801	68,854	67,723
5 years	64,687	67,164	71,712	73,157	74,090	74,329	76,240	72,520	69,544
6 years	64,747	64,786	67,309	71,774	73,582	74,032	74,343	76,254	72,533
7 years	64,199	64,829	64,824	67,299	72,080	73,505	74,027	74,337	76,248
8 years	63,564	64,291	64,825	64,795	67,537	72,005	73,500	74,021	74,332
9 years	62,379	63,677	64,349	64,759	64,999	67,482	72,016	73,511	74,032
10 years	61,170	62,496	63,720	64,209	64,893	64,931	67,477	72,010	73,505
11 years	60,580	61,315	62,444	63,533	64,315	64,835	64,936	67,482	72,016
12 years	60,908	60,716	61,175	62,215	63,593	64,241	64,823	64,924	67,470

The next step in estimating demand is to estimate the level of student access to SNAs, in percentage terms, for 2011 – 2015. Using mainstream as an example, the NCSE data on student access is presented by age below.

Table 22: Number of students accessing SNAs in mainstream, 2011 - 2015

Age group	2011	2012	2013	2014	2015
6 years	982	1,122	1,169	1,414	1,670
7 years	1,201	1,266	1,345	1,423	1,768
8 years	1,197	1,395	1,365	1,508	1,649
9 years	1,206	1,346	1,482	1,484	1,703

To get the level of student access to SNAs, each age group in table 22 is divided by the corresponding ARBC in table 21, which gives the level of student access by age (table 23 below). The table below shows the level of student access for some of the age groups in mainstream primary. In 2011, 1.52% of the 6 year olds had access to SNAs and in 2015 the 6 year old age group had 2.27% access.

Table 23: Level of student access to SNAs in mainstream, 2011 – 2015

Age Group	2011	2012	2013	2014	2015
6 years	1.52%	1.73%	1.74%	1.97%	2.27%
7 years	1.87%	1.95%	2.07%	2.11%	2.45%
8 years	1.88%	2.17%	2.11%	2.33%	2.44%
9 years	1.93%	2.11%	2.30%	2.29%	2.62%

Once the ARBC, the number of students accessing SNAs and the level of student access is established, the next step is to estimate the average, minimum and maximum percentage change in the level of access between each student year group over the previous 5 years.

An important concept in this methodology is the student year group which is different from the age group and the ARBC. The student year group is the number or percentage of students by age with access to SNAs as they progress through the school system. Taking table 22 as an example the student year group is those who are 6 years old in 2011 (982), 7 in 2012 (1,266), 8 in 2013 (1,365) and so on for all student year groups. Taking table 23 as another example the student year group in this case is those who access SNAs at age 6 in 2011 (1.51%), age 7 in 2012 (1.95%), and age 8 in 2013 (2.11%) and so on for all student year groups.

Using table 23 as an example, the percentage change between the level of access for the student year group who were 6 years old in 2011 (1.52%) and 7 years old in 2012 (1.95%) is 29% (Table 24) and the percentage change in the level of access between those who were 7 in 2012 (2.07%) and 8 in 2013 (2.33%) is 8%. This process is carried out for all age groups.

Once the percentage change for all student groups is established, the annual average, minimum and maximum percentage change between 2011 and 2015 can be estimated. These values are then applied to each previous year to estimate the future level of access for each scenario.

Table 24: Example of % change in student year group and assumptions, 2011 – 2015

Student Year Group	% Change				Assumptions		
	2011-2012	2012-2013	2013-2014	2014-2015	Average	Minimum	Maximum
6 - 7 years	29%	20%	22%	25%	24%	20%	29%
7 - 8 years	16%	8%	12%	15%	13%	8%	16%
8 - 9 years	12%	6%	9%	13%	10%	6%	13%

The scenarios estimated for the level of student access to SNAs in the future are:

1. **Population:** This scenario assumes that the level of access stays at the 2015 level over the horizon of the estimate. Essentially this is what would be forecasted if population changes, measured by the number of births adjusted for deaths and migration, were the only driver of changes in the level of access.

Table 25: Example of population scenario, 2015 - 2019

Age Group	Observed	Estimated			
	2015	2016	2017	2018	2019
6 years	2.27%	2.27%	2.27%	2.27%	2.27%
7 years	2.45%	2.45%	2.45%	2.45%	2.45%
8 years	2.44%	2.44%	2.44%	2.44%	2.44%
9 years	2.62%	2.62%	2.62%	2.62%	2.62%

2. **The average yearly percentage change observed over the 2011 to 2015 period²² (Average):** This scenario applies the average annual change between 2011 and 2015 to each age group to estimate the level of access for the next age group in the next year. For example the average annual change in the 7 to 8 year old age group is 13% (table 24). To estimate the 2016 level of access the model applies the average annual change (13%) to level of access of 7 years old in 2015 (2.45%). This gives an estimated level of access of 2.77% for 8 year olds in 2016. The model then applies the average annual change (10%) to the level of access of those who are estimated to be 8 years old in 2016 (2.77%). This gives an estimated level of access of 3.04% for 9 year olds in 2017. This method is applied to all age groups to estimate the level of access for the forecast horizon under the average scenario.

²² For special schools the rate of change refers to a period of 4 years, 2011-2014 due to a lack of data.

Table 26: Example of average scenario, 2015 - 2019

	Observed	Estimated			
Age Group	2015	2016	2017	2018	2019
6 years	2.27%	2.48%	2.72%	2.99%	3.29%
7 years	2.45%	2.81%	3.06%	3.37%	3.70%
8 years	2.44%	2.77%	3.17%	3.46%	3.80%
9 years	2.62%	2.68%	3.04%	3.48%	3.80%

- The lowest yearly percentage change observed over the 2011 to 2015 period (Minimum):** This scenario applies the minimum annual change between 2011 and 2015 to each age group to estimate the level of access for the next age group in the next year. For example the minimum average annual change in the 7 to 8 year old age group is 8% (table 24). To estimate the 2016 level of access the model applies the minimum annual change (8%) to level of access of 7 year olds in 2015 (2.45%) which estimates a level of access of 2.64% for 8 year olds in 2016. The model then applies the minimum annual change (6%) to the level of access of those who are estimated to be 8 years old in 2016 (2.64%). This gives an estimated level of access of 2.81% for 9 year olds in 2017. This method is applied to all age groups to estimate the level of access for the forecast horizon under the minimum scenario.

Table 27: Example of minimum scenario, 2015 - 2019

	Observed	Estimated			
Age Group	2015	2016	2017	2018	2019
6 years	2.27%	2.40%	2.64%	2.91%	3.20%
7 years	2.45%	2.72%	2.88%	3.17%	3.48%
8 years	2.44%	2.64%	2.93%	3.11%	3.42%
9 years	2.62%	2.59%	2.81%	3.11%	3.30%

- The highest yearly percentage change observed over the 2011 to 2015 period (Maximum):** This scenario applies the maximum annual change between 2011 and 2015 to each age group to estimate the level of access for the next age group in the next year. For example the maximum average annual change in the 7 to 8 year old age group is 16% (table 24). To estimate the 2016 level of access the model applies the minimum annual change (16%) to level of access of 7 years old in 2015 (2.45%) which estimates a level of access of 2.84% for 8 year olds in 2016. The model then applies the maximum annual change (13%) to the level of access of those who are estimated to be 8 years old in 2016 (2.84%) which estimates a level of access of 3.2% for 9 year olds in 2017. This method is applied to all age groups to estimate the level of access for the forecast horizon under the maximum scenario.

Table 28: Example of maximum scenario, 2015 - 2019

	Observed	Estimated			
Age Group	2015	2016	2017	2018	2019
6 years	2.27%	2.52%	2.77%	3.05%	3.35%
7 years	2.45%	2.92%	3.25%	3.57%	3.93%
8 years	2.44%	2.84%	3.39%	3.77%	4.14%
9 years	2.62%	2.75%	3.20%	3.82%	4.24%

The next step is to apply these estimates to the ARBC, to derive the estimated number of students in each age group. Each age group is then summed to estimate the number of potential students in each year. For example the table below shows the estimated number of 7 year old students under each scenario. If the level of access remained at the 2015 level, the number of 7 year olds with access to SNAs would increase from 1,803 to 1,870, due to increases in population. If the level of access changed at the annual average, the number of 7 year olds with access to SNAs would increase from 2,064 to 2,825. If the level of access changed at the minimum annual

change, the number of 7 year olds with access to SNAs would increase from 1,999 to 2,656 and if the level of access changed at the maximum annual change, the number of 7 year olds with access to SNAs students would increase from 2,148 to 2,993.

Table 29: Estimated Number of 7 year old students in primary under each scenario, 2016 - 2019

7 year olds	RBC	Population		Average		Minimum		Maximum	
		% access	Students	% access	Students	% access	Students	% access	Students
2016	73,505	2.45%	1,803	2.81%	2,064	2.72%	1,999	2.92%	2,148
2017	74,027	2.45%	1,816	3.06%	2,268	2.88%	2,133	3.25%	2,403
2018	74,337	2.45%	1,823	3.37%	2,505	3.17%	2,355	3.57%	2,654
2019	76,248	2.45%	1,870	3.70%	2,825	3.48%	2,656	3.93%	2,993

4.2.1 Mainstream Primary and Post-Primary

Mainstream student demand is estimated for all age groups (4 -18 years) using the scenarios outlined above. The table below outlines the estimated number of student accessing SNAs in each age group under the average scenario.

To distribute primary and post-primary student demand, those between the ages of 4 and 11 can be directly attributed to primary and those between the ages of 14 and 18 can be directly attributed to post-primary. Due to the fact that there are students accessing SNAs in primary and post-primary at the ages of 12 and 13 the model separates the numbers by the average proportion of students in each sector between 2011 and 2015.

Table 30: Number of Student by age (average scenario), 2015 -2019

Age Group	2015	2016	2017	2018	2019	Sector
4 years	159	163	155	149	146	Primary
5 years	1,174	1,295	1,461	1,528	1,611	
6 years	1,670	1,834	2,025	2,284	2,389	
7 years	1,768	2,064	2,268	2,505	2,825	
8 years	1,649	1,993	2,329	2,560	2,827	
9 years	1,703	1,812	2,192	2,561	2,815	
10 years	1,610	1,810	1,927	2,332	2,724	
11 years	1,625	1,642	1,848	1,967	2,381	
12 years	1,314	1,480	1,497	1,685	1,794	Overlap
13 years	881	1,001	1,129	1,142	1,285	
14 years	825	846	963	1,086	1,098	Post-Primary
15 years	780	865	888	1,010	1,139	
16 years	739	740	820	843	959	
17 years	575	632	633	702	721	
18 years	402	436	480	480	533	

The proportion of 12 year olds in primary and post-primary are outlined below. From 2011 to 2015, between 84% and 88% of 12 year olds accessing SNA support were in primary and 12% to 15% of 12 year olds accessing

SNA support were in post-primary. The model assumes that of the estimated total number of 12 year olds accessing SNA support, 86% access support in primary and 14% access SNAs in post-primary.

Table 31: Proportion of 12 year olds with SNA access in primary and post-primary, 2011 - 2015

12 years	2011	2012	2013	2014	2015	Average
Primary	85%	87%	84%	84%	88%	86%
Post-Primary	15%	13%	16%	16%	12%	14%

The proportion of 13 year olds in primary and post-primary are outlined below. From 2011 to 2015, between 23% and 28% of 13 year olds accessing SNA support were in primary and between 72% and 77% of 13 year olds accessing SNA support were in post-primary. The model assumes that of the estimated total number of 13 year olds accessing SNA support, 26% access support in primary and 74% access SNAs in post-primary.

Table 32: Proportion of 13 year olds with SNA access in primary and post-primary, 2011 - 2015

13 years	2011	2012	2013	2014	2015	Average
Primary	26%	28%	26%	23%	27%	26%
Post-Primary	74%	72%	74%	77%	73%	74%

4.2.2 Mainstream Primary

The assumptions about the level of access by age don't apply to 4 year and 5 year olds because children start school between the ages of 4 and 5 so it is not accurate to apply the same methodology which is applied to other age groups. The level of access of 4 year olds is assumed to be constant in the model at the last observed year level (2015 - 0.22%). To estimate the percentage access for 2016 to 2019 for those in the 5 year old age, the average annual percentage change of 9.96% is applied each year. This increases the 5 year old percentage access from 1.58% in 2015 to 2.32% in 2019.

Table 33: Percentage change in access for 5 year olds, 2011 – 2015

Year	2011-2012	2012-2013	2013-2014	2014-2015	Annual Average
% change in 5 year old access	3%	16%	10%	11%	9.96%

Looking at the percentage access in each student year group, access increases until approximately the age of 11, after which students start to move to post-primary, when the percentage accessing by student year group declines.

Table 34: Observed level of access in primary by age group, 2011 - 2015

Mainstream Primary	2011	2012	2013	2014	2015
All Ages	1.55%	1.69%	1.72%	1.85%	2.06%
4 years	0.22%	0.22%	0.24%	0.24%	0.22%
5 years	1.09%	1.12%	1.30%	1.43%	1.58%
6 years	1.52%	1.73%	1.74%	1.97%	2.27%
7 years	1.87%	1.95%	2.07%	2.11%	2.45%
8 years	1.88%	2.17%	2.11%	2.33%	2.44%
9 years	1.93%	2.11%	2.30%	2.29%	2.62%
10 years	1.95%	2.13%	2.15%	2.42%	2.48%
11 years	1.90%	2.07%	2.03%	2.21%	2.53%
12 years	1.41%	1.56%	1.49%	1.55%	1.82%
13 years	0.30%	0.37%	0.34%	0.32%	0.38%

These trends are reflected in the change between each age group which are outlined below. The high level of increases in the 5 to 6 year student group is due to children starting school between the ages of 4 and 6 and the identification of students with care needs and disabilities in the first years of formal education. The high

level of decline in the 12 to 13 year old age group is due to number of students no longer requiring SNA support at the years when students move from primary to post-primary which is discussed in chapter 3.

The assumptions applied to each of the primary age groups are outlined in the table below. The numbers of estimated students under each scenario for the 12 and 13 year old age groups are then adjusted by the average proportion of those in primary.

Table 35: Percentage Change in primary student year group and assumptions, 2011 - 2015

Student Year Group	Actual Percentage Change				Assumptions		
	2011-2012	2012-2013	2013-2014	2014-2015	Average	Min	Max
5 - 6 years	59%	56%	52%	59%	56%	52%	59%
6 - 7 years	29%	20%	22%	25%	24%	20%	29%
7 - 8 years	16%	8%	12%	15%	13%	8%	16%
8 - 9 years	12%	6%	9%	13%	10%	6%	13%
9 - 10 years	10%	2%	5%	8%	6%	2%	10%
10 - 11 years	6%	-5%	3%	4%	2%	-5%	6%
11 - 12 years	-6%	-14%	-9%	-7%	-9%	-14%	-6%
12 - 13 years	-21%	-27%	-23%	-23%	-24%	-27%	-21%

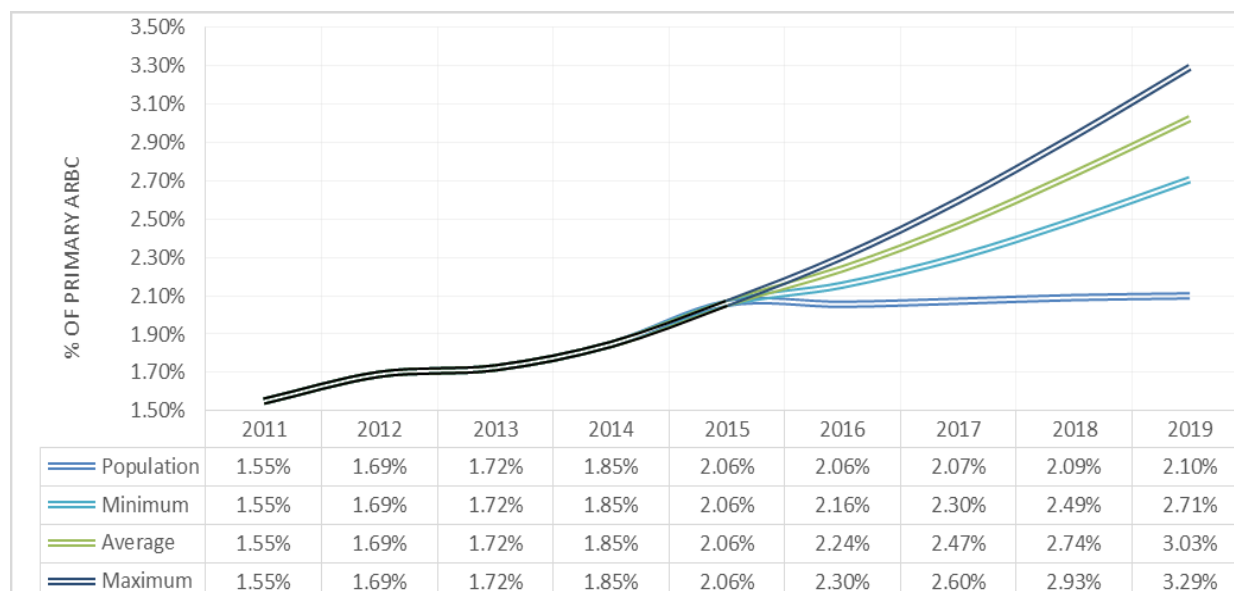
Applying the population scenario, the number of students would increase from 12,754 in 2015 to 13,595 in 2019, 841 additional students. When the minimum change in the level of access is applied, the number of students accessing SNAs increases from 12,754 to 17,526, 4,772 additional students or 3,931 additional students above the population change. When the average change in the level of access is applied, the number of students accessing the scheme increases from 12,754 to 19,587 in 2019. This is an additional 6,833 students or 5,992 above the population change. When the maximum change in the level of access is applied, the number of students increases from 12,754 to 21,323. This is an additional 8,569 students or 7,728 above the population change.

Table 36: Mainstream primary scenarios, 2015 - 2019

Scenarios	Actual	Estimated			
	2015	2016	2017	2018	2019
Population	12,754	12,969	13,245	13,464	13,595
Minimum	12,754	13,602	14,719	16,060	17,526
Average	12,754	14,140	15,780	17,624	19,587
Maximum	12,754	14,536	16,602	18,894	21,323

The estimates for the population scenario see the level of access in mainstream primary increase from 2.06% in 2015 to 2.10% in 2019. The minimum scenario implies that the level of access increases to 2.71% in 2019. The average scenario implies that the level of access will increase to 3.03% and the maximum scenario implies that the level of access will increase to 3.29%.

Figure 23: Mainstream primary scenarios as % of ARBC (all ages), 2015 – 2019



In light of the fact that levels of access have consistently increased year on year across all age levels from 2011 to 2015, and the lack of any evidence of likely change in this trend into the future, this report concludes that the numbers in the minimum and average scenario are the most likely on which to proceed.

4.2.3 Post-Primary

At mainstream post-primary, the percentage access increases until approximately the age of 15, when the percentage accessing by student year group declines.

Table 37: Observed level of access in post-primary by age group, 2011 - 2015

Mainstream Post-Primary	2011	2012	2013	2014	2015
All Ages	0.83%	0.86%	0.90%	0.95%	0.98%
12 years	0.25%	0.23%	0.29%	0.30%	0.25%
13 years	0.85%	0.94%	0.98%	1.05%	1.03%
14 years	1.07%	1.08%	1.23%	1.29%	1.35%
15 years	1.10%	1.13%	1.17%	1.28%	1.29%
16 years	1.11%	1.03%	1.09%	1.12%	1.22%
17 years	0.86%	0.92%	0.87%	0.95%	0.98%
18 years	0.59%	0.67%	0.69%	0.64%	0.73%

These trends are reflected in the change between each age group which are outlined below. The decline in the 12 to 13 year old age group is due to high number of students no longer requiring SNA support at the years when students move from primary to post-primary which is discussed in chapter 3.

The assumptions applied to the post-primary age groups for each scenario are outlined below. The numbers of estimated students under each scenario for the 12 and 13 year old age groups are then adjusted by the proportion of those in post-primary.

Table 38: Percentage Change in post-primary student year group and assumptions, 2011 - 2015

Student Year Group	Actual Percentage Change				Assumptions		
	2011-2012	2012-2013	2013-2014	2014-2015	Average	Minimum	Maximum
12 - 13 years	-21%	-27%	-23%	-23%	-24%	-27%	-21%
13 - 14 years	-6%	-6%	-2%	-1%	-4%	-6%	-1%
14 - 15 years	6%	8%	5%	1%	5%	1%	8%
15 - 16 years	-7%	-4%	-5%	-5%	-5%	-7%	-4%
16 - 17 years	-17%	-16%	-12%	-13%	-14%	-17%	-12%
17 - 18 years	-22%	-25%	-26%	-23%	-24%	-26%	-22%

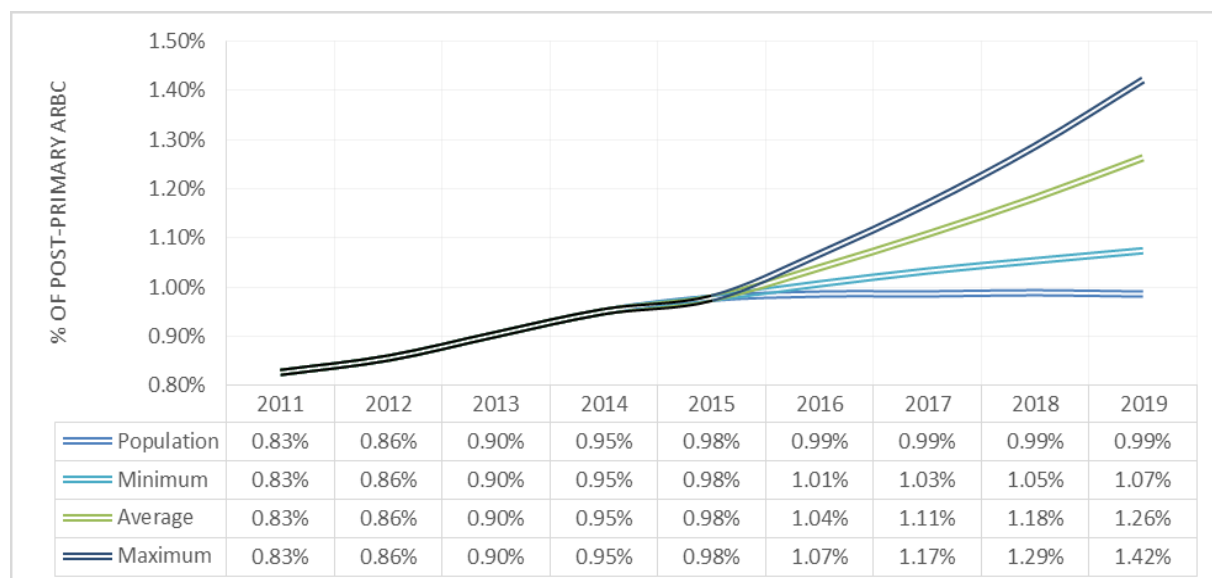
Applying population scenario, the number of students would increase from 4,120 in 2015 to 4,418 in 2019, 298 additional students. When the minimum change in the level of access is applied, the number of students accessing SNAs increases from 4,120 to 4,813, 693 additional students or 395 additional students than the population change scenario. When the average change in the level of access is applied, the number of students accessing the scheme increases from 4,120 to 5,660 in 2019. This is an additional 1,540 students or 1,242 above the population change. When the maximum change in the level of access is applied, the number of students increase from 4,120 to 6,370. This is an additional 2,250 students or 1,952 above the population change.

Table 39: Mainstream post-primary scenarios, 2015 - 2019

Scenarios	Actual	Estimated			
	2015	2016	2017	2018	2019
Population	4,120	4,242	4,305	4,358	4,418
Minimum	4,120	4,332	4,508	4,646	4,813
Average	4,120	4,473	4,835	5,209	5,660
Maximum	4,120	4,593	5,106	5,672	6,370

The estimates for the population scenario see the level of access in mainstream post-primary increase from 0.98% in 2015 to 0.99% in 2019. The minimum scenario implies that the level of access increases to 1.07% in 2019. The average scenario implies that the level of access will increase to 1.26% and the maximum scenario implies that the level of access will increase to 1.42%.

Figure 24: Mainstream post-primary scenarios as a % of ARBC (all ages), 2015 - 2019



The FPA proposes that number of students in the average and maximum scenarios are the most likely. This is because the average levels of access have increased year on year from 0.83% in 2011 to 0.98% 2015 and these trends don't show no evidence of declining and the increased numbers of students in primary accessing SNAs which is likely to impact on the post-primary SNA numbers.

4.2.4 Special Schools

In all of the above sectors the analysis was based on NCSE student data. The NCSE don't have complete age data for all the years required for special schools, so the model for special schools uses DES data which is only available up to 2014. From the table below it is evident that SNAs employed by the NCSE support between 93% and 94% of the students in special schools. The students accessing services in the other schools are not resourced by the SNA budget. To take account of this, the proportion of students in the forecasted years are adjusted by the proportion of students supported by the SNA scheme in 2014 (94%).

Table 40: Total number of students in special schools compared to NCSE staffed special schools

Data Source	2011	2012	2013	2014
DES	7,392	7,645	7,728	7,925
NCSE	6,848	7,077	7,299	7,459
NCSE Student Adjustment	93%	93%	94%	94%

In special schools the percentage access for those in each student year group (colour coded below) increases until the approximately the age of 15 when the percentage accessing by cohort declines.

Table 41: Special School percentage access to SNAs by ARBC, 2011– 2014

	2011	2012	2013	2014
All Ages	0.81%	0.83%	0.82%	0.83%
4 years	0.39%	0.39%	0.39%	0.48%
5 years	0.39%	0.46%	0.46%	0.43%
6 years	0.51%	0.53%	0.54%	0.54%
7 years	0.54%	0.55%	0.58%	0.58%
8 years	0.69%	0.61%	0.63%	0.67%
9 years	0.81%	0.79%	0.71%	0.75%
10 years	0.79%	0.92%	0.85%	0.77%
11 years	0.92%	0.83%	0.96%	0.88%
12 years	0.88%	0.97%	0.89%	1.02%
13 years	1.12%	1.03%	1.11%	1.09%
14 years	1.24%	1.27%	1.16%	1.29%
15 years	1.26%	1.35%	1.36%	1.23%
16 years	1.31%	1.21%	1.25%	1.29%
17 years	1.13%	1.20%	1.13%	1.18%
18 years	0.39%	0.51%	0.52%	0.46%

Due to the small number of children starting school at age 4 the model assumes the 4 year old level of access in the last observed year (2015 – 0.48%) is constant over the forecast horizon. To estimate the percentage access for 2016 to 2019 for those in the 5 year old age, the average annual percentage change of 3.15% is applied each year. This increases the 5 year old percentage access from 0.44% in 2015 to 0.50% in 2019.

Table 42: Special schools percentage change in access for 5 year olds, 2011 – 2015

	2011-2012	2012-2013	2013-2014	Annual Average
% change in 5 year old access	0.39%	0.46%	0.46%	3.15%

Deriving the average change between each cohort it's possible to establish an average, minimum and maximum level of change between each cohort which are then used to estimate the future level of access for each age group.

Table 43: Special schools percentage change in each year cohort (2011 - 2014) and scenario assumptions

	Actual Percentage Change			Assumptions		
	2011-2012	2012-2013	2013-2014	Average	Max	Min
5 – 6 years	36%	19%	18%	24.34%	35.62%	18.44%
6 – 7 years	10%	9%	7%	8.28%	9.65%	6.57%
7 – 8 years	13%	14%	16%	14.54%	16.32%	13.09%
8 – 9 years	15%	16%	19%	16.47%	18.66%	14.57%
9 – 10 years	14%	8%	8%	9.93%	14.24%	7.65%
10 – 11 years	4%	4%	3%	3.60%	4.07%	2.88%
11 – 12 years	5%	8%	6%	6.52%	8.35%	5.34%
12 – 13 years	17%	14%	22%	17.81%	22.22%	14.43%
13 – 14 years	14%	14%	16%	14.61%	16.33%	13.54%
14 – 15 years	9%	7%	5%	6.89%	8.88%	5.20%
15 – 16 years	-4%	-8%	-5%	-5.40%	-3.90%	-7.51%
16 – 17 years	-9%	-7%	-6%	-7.16%	-5.87%	-8.89%
17 – 18 years	-55%	-57%	-59%	-56.99%	-55.14%	-58.93%

Once the total number of students in special schools are estimated the numbers are adjusted by the proportion of students supported by the SNA scheme in 2014 (94%).

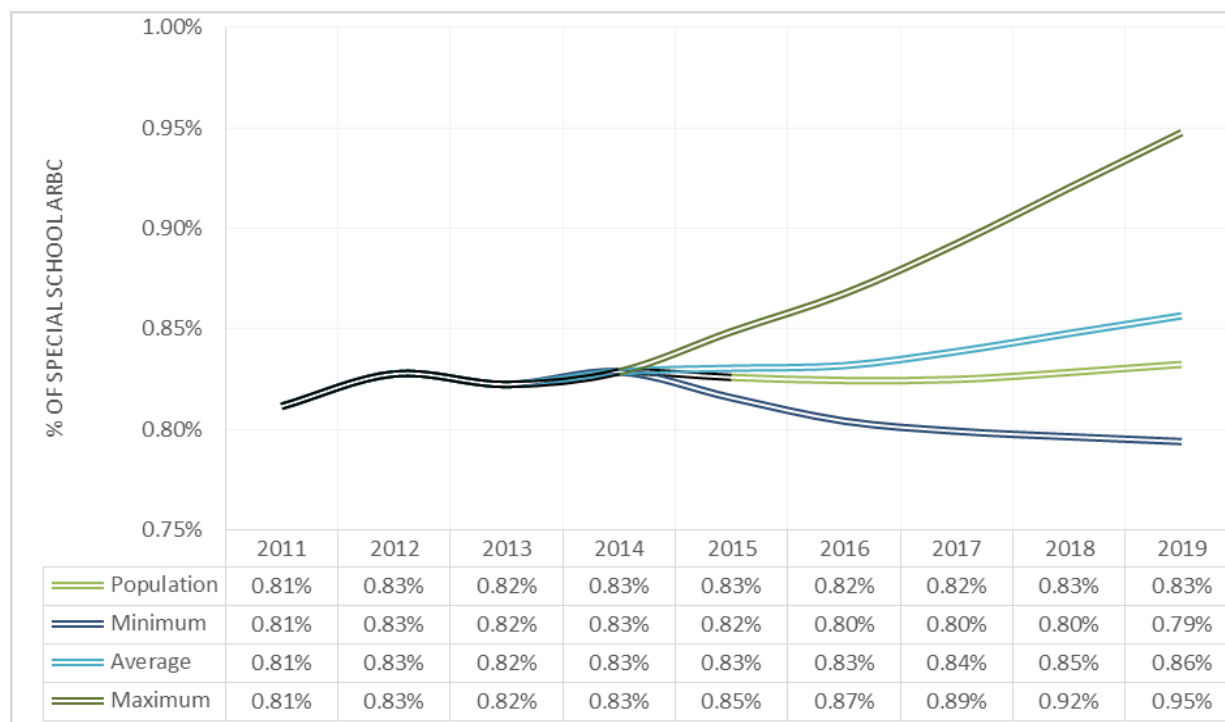
Applying the population scenario, the number of students would increase from 7,459 in 2015 to 8,053 in 2019, 594 additional students. When the minimum change in the level of access is applied, the number of students accessing SNAs increases from 7,459 to 7,682, 223 additional students or 372 students below the population change. When the average change in the level of access is applied, the number of students accessing the scheme increases from 7,459 to 8,287 in 2019. This is an additional 828 students or 234 above the population change. When the maximum change in the level of access is applied, the number of students increases from 7,459 to 9,170. This is an additional 1,711 students or 1,116 above the population change.

Table 44: Special school scenarios, 2014 to 2019

Scenarios	Actual	Estimated				
	2014	2015	2016	2017	2018	2019
Population	7,459	7,591	7,734	7,847	7,951	8,053
Minimum	7,459	7,498	7,544	7,602	7,644	7,682
Average	7,459	7,633	7,803	7,979	8,137	8,287
Maximum	7,459	7,801	8,139	8,490	8,833	9,170

The estimates for the population scenario see the level of access in special schools increase from 0.80% in 2014 to 0.83% in 2019. The minimum scenario sees the level of access decline to 0.79% in 2019. The average scenario implies that the level of access will increase to 0.86% and the maximum scenario implies that the level of access will increase to 0.95%.

Table 45: Special school scenarios as a % of ARBC (all ages), 2014 - 2019



The most likely scenarios for special schools is the population or the average scenario. This is because the total percentage accessing SNA support is relatively constant as a proportion of the birth cohort at 0.81% in 2011/2012 and 0.83% in 2014/2015 which suggests that population will be the main driver of student demand in this sector over the forecast horizon. Added to this, when the number of students forecasted in 2015 is compared to the actual NCSE student numbers for 2015, the population estimate adjusted for NCSE schools, estimates 7,591 students which is only 0.2% (16 students) of a difference from the actual number of students (7,607).

4.2.5 Special Classes in Mainstream Schools

The approach for estimating the number of students in special classes in mainstream is different from that of the other sectors due to a lack of robust age related data. The NCSE started collecting data on special classes by age in 2015 which makes it impossible to apply the same methodology as outlined above. Instead this sector applies high level assumptions to estimate the number of students over the forecast horizon.

The general approach in these sub-sectors is to estimate the number of students with ASD separate from students with other diagnoses. This is because ASD is the primary driver of the recent increases in students in special classes and the other disabilities have reached somewhat of a steady state in terms of level of access to SNAs.

4.2.5.1 Assumptions for both ASD and Non-ASD groups

The following assumptions apply to the average, lower and higher scenarios below; they don't apply to the population scenario.

To estimate the level of access of those 4 years of age, the level of access increases at the annual average rate observed in special schools over the 2011 to 2015 period. The average annual percentage change of 7.49% is applied each year. This increases the 4 year old percentage access from 0.10% in 2015 to 0.13% in 2019 in the ASD sub-sector and from 0.04% in 2015 to 0.06% in 2019 for the non-ASD sub-sector.

To estimate the level of access of those 5 years and 6 years of age, the difference between the levels of access of those in the preceding age groups in 2015 is assumed to be constant over the period of the forecast. For example in 2015, the access level for 4 year olds with ASD was 0.10%, the access level for 5 year olds was 0.44% and the access level for 6 year olds was 0.59%. For the estimate of ASD, the model assumes that the 5

years olds will be 4.49 times (0.44%/0.10%) the 4 year access level. For 6 year olds with ASD, the model assumes that the level of access will be 1.35 times (0.57%/0.44%) the 5 year old access level.

Table 46: ASD SNA access level, 4 – 6 year olds

	Actual	Estimated			
	2015	2016	2017	2018	2019
4 years	0.10%	0.10%	0.11%	0.12%	0.13%
5 years	0.44%	0.47%	0.51%	0.54%	0.59%
6 years	0.59%	0.64%	0.69%	0.74%	0.79%

The same approach is adopted for non-ASD students. For example in 2015, the access level for 4 year olds with non-ASD was 0.04%, the access level for 5 year olds was 0.18% and the access level for 6 year olds was 0.21%. For the analysis of non-ASD the model assumes that the 5 years olds will be 4.23 times (0.18%/0.04%) the 4 year access level. For 6 year olds the model assumes that the level of access will be 1.18 times (0.21%/0.18%) the 5 year old access level.

Table 47: Non-ASD SNA access level, 4 – 6 year olds

	Actual	Estimated			
	2015	2016	2017	2018	2019
4 years	0.04%	0.05%	0.05%	0.05%	0.06%
5 years	0.18%	0.19%	0.21%	0.22%	0.24%
6 years	0.21%	0.23%	0.24%	0.26%	0.28%

These assumptions apply to the average, lower and higher scenarios below.

4.2.5.2 Level of access for diagnosis of Non-ASD students

The percentage of those accessing special classes for diagnoses other than ASD has declined from 0.17% in 2011 to 0.15% in 2015. There is a lower limit below which special classes for the other diagnoses will not go beyond due to the prevalence of certain diagnosis in society in general, it is not clear if 0.15% is the lower limit.

Table 48: Level of access as a percentage of the ARBC in special classes, 2011- 2015

	2011	2012	2013	2014	2015
All Ages	0.17%	0.17%	0.18%	0.15%	0.15%

For students with other diagnoses, 4 scenarios of access to SNAs are derived. In the average, lower and higher scenarios the assumptions for 4, 5 and 6 year olds presented at the start of this section apply. To estimate the level of access to SNA by age group, four scenarios are presented:

1. **Population:** similar to the approach in the other sectors this scenario assumes that the level of access stays at the 2015 level over the horizon of the estimate. Essentially this is what would be forecasted if population changes were the only driver of changes in the level of access.
2. **Average:** This scenario applies the level of access in the previous year's student year group to the current student year group. For example the level of access for the 7 year old age group is 0.21% in 2015, applying this methodology, the level of access of the 8 year old age group in 2016 is 0.21%, and the level of access of the 9 year old age group is 0.21% in 2017. This method is applied to all age groups to estimate the level of access for the forecast horizon under the average scenario.

Table 49: Example of average scenario for non-ASD special classes, 2015 – 2019

	Observed	Estimate			
Age Group	2015	2016	2017	2018	2019
6 years	0.21%	0.23%	0.24%	0.26%	0.28%
7 years	0.21%	0.21%	0.23%	0.24%	0.26%
8 years	0.17%	0.21%	0.21%	0.23%	0.24%
9 years	0.17%	0.17%	0.21%	0.21%	0.23%

- Lower:** This scenario applies 90% of the level of access in the previous year’s student year group to the current student year group. For example the level of access for the 7 year old age group is 0.21%, applying this methodology the level of access of the 8 year old age group in 2016 is 0.19% (0.21%*90%). The level of access of the 9 year old age group is 0.17% in 2017. This method is applied to all age groups to estimate the level of access for the forecast horizon under the average scenario.

Table 50: Example of lower scenario for non-ASD special classes, 2015 – 2019

	Observed	Estimate			
Age Group	2015	2016	2017	2018	2019
6 years	0.21%	0.23%	0.24%	0.26%	0.28%
7 years	0.21%	0.19%	0.20%	0.22%	0.24%
8 years	0.17%	0.19%	0.17%	0.18%	0.20%
9 years	0.17%	0.16%	0.17%	0.15%	0.16%

- Higher:** This scenario applies 110% of the level of access in the previous year’s student year group to the current student year group. For example the level of access for the 7 year old age group is 0.21%, applying this methodology the level of access of the 8 year old age group in 2016 is 0.23% (0.21%*110%). The level of access of the 9 year old age group is 0.25% (0.32%*110%) in 2017. This method is applied to all age groups to estimate the level of access for the forecast horizon under the average scenario.

Table 51: Example of higher scenario for non-ASD special classes, 2015 – 2019

	Observed	Estimate			
Age Group	2015	2016	2017	2018	2019
6 years	0.21%	0.23%	0.24%	0.26%	0.28%
7 years	0.21%	0.23%	0.25%	0.27%	0.29%
8 years	0.17%	0.23%	0.25%	0.27%	0.29%
9 years	0.17%	0.19%	0.25%	0.28%	0.30%

The lower and higher scenarios in this case are sensitivities either side of the average assumption because there is not enough age related data to apply a similar approach to the other sectors.

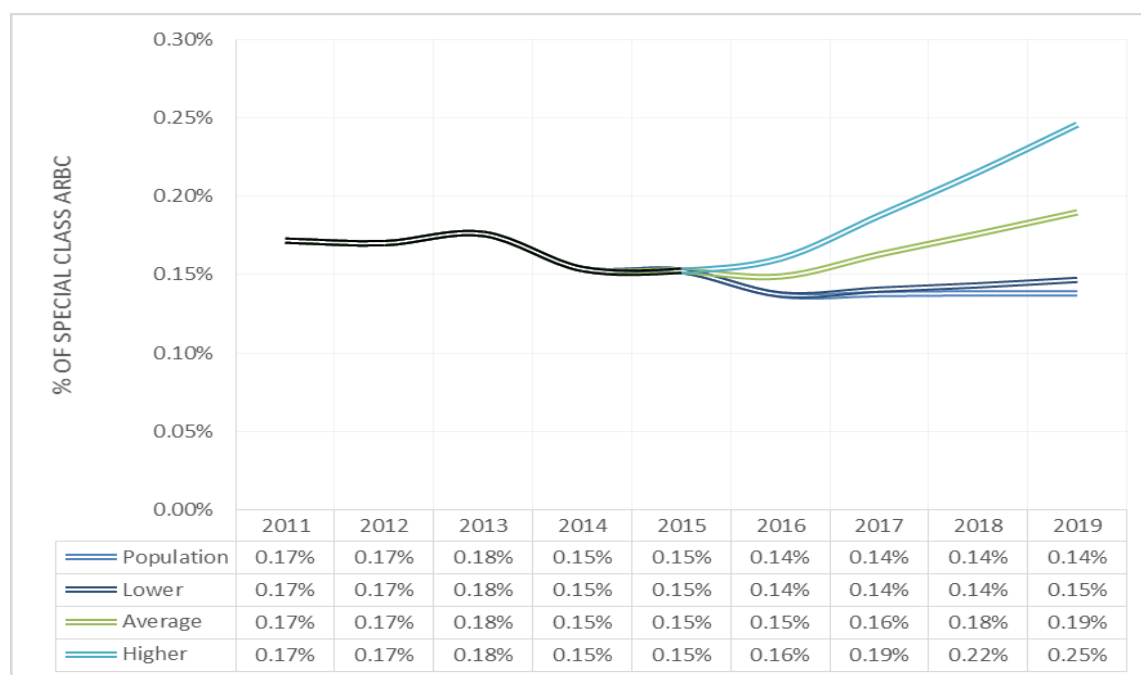
This result of these scenarios are presented below. Applying the population scenario, the number of students with a diagnosis other than ASD would decline from 1,489 to 1,419. Under the lower scenario the number of students increases to 1,508 which is an increase of 19 students or 89 above the population scenario. In the average scenario the number of students increases by 461 to 1,950 in 2019, which is 531 students above the population scenario. The higher scenario estimates that an additional 1,037 students will be in special classes in 2019 bringing the total number to 2,526, which is 1,016 more students than in the population scenario.

Table 52: Non-ASD students in special class scenarios, 2015 - 2019

Scenarios	Actual	Estimated			
	2015	2016	2017	2018	2019
Population	1,489	1,367	1,392	1,409	1,419
Lower	1,489	1,370	1,420	1,461	1,508
Average	1,489	1,484	1,647	1,796	1,950
Higher	1,489	1,598	1,896	2,197	2,526

The estimates for the population scenario see the level of access in non-ASD students decline from 0.15% in 2015 to 0.14% in 2019. The lower scenario implies that the level of access remains at 0.15% in 2019. The average scenario implies that the level of access will increase to 0.19% and the higher scenario implies that the level of access will increase to 0.25%.

Figure 25: Non-ASD Students in special class scenarios as a % of ARBC, 2015 - 2019



The most likely scenario in this case is the lower or the average scenario which estimates that by 2019 between 0.15% and 0.19% of ARBC will be in special classes. This level of access is comparable to the level of access observed between 2011 and 2015.

4.2.5.3 Level of access for students with an ASD diagnosis

The percentage of those accessing special classes in mainstream for ASD diagnoses has increased from 0.17% in 2011 to 0.34% in 2015.

Table 53: Level of access as a percentage of the ARBC in special classes, 2011- 2015

	2011	2012	2013	2014	2015
All Ages	0.17%	0.20%	0.25%	0.28%	0.34%

To estimate the level of access to SNA by age, four scenarios are presented. For 4, 5 and 6 year olds the assumptions that are detailed in section 4.2.5.1 are applied to the average, lower and higher scenario.

1. **Population:** similar to the approach in the other sectors this scenario assumes that the level of access stays at the 2015 level over the horizon of the estimate. Essentially this is what would be forecasted if population changes were the only driver of changes in the level of access.

- Average:** This scenario applies the level of access in the previous year's student year group to the current student year group. For example the level of access for the 7 year old age group is 0.54% in 2015, applying this methodology, the level of access of the 8 year old age group in 2016 is 0.54%, and the level of access of the 9 year old age group is 0.54% in 2017. This method is applied to all age groups to estimate the level of access for the forecast horizon under the average scenario.

Table 54: Example of average scenario for ASD special classes, 2015 – 2019

Age Group	Observed	Estimate			
	2015	2016	2017	2018	2019
6 years	0.59%	0.64%	0.69%	0.74%	0.79%
7 years	0.54%	0.59%	0.64%	0.69%	0.74%
8 years	0.47%	0.54%	0.59%	0.64%	0.69%
9 years	0.37%	0.47%	0.54%	0.59%	0.64%

- Lower:** This scenario applies 90% of the level of access in the previous year's student year group to the current student year group. For example the level of access for the 7 year old age group is 0.54%, applying this methodology the level of access of the 8 year old age group in 2016 is 0.48% (0.54%*90%). The level of access of the 9 year old age group is 0.43% in 2017. This method is applied to all age groups to estimate the level of access for the forecast horizon under the average scenario.

Table 55: Example of lower scenario for ASD special classes, 2015 – 2019

Age Group	Observed	Estimate			
	2015	2016	2017	2018	2019
6 years	0.59%	0.64%	0.69%	0.74%	0.79%
7 years	0.54%	0.53%	0.57%	0.62%	0.66%
8 years	0.47%	0.48%	0.48%	0.52%	0.56%
9 years	0.37%	0.42%	0.43%	0.43%	0.47%

- Higher:** This scenario applies 110% of the level of access in the previous year's student year group to the current student year group. For example the level of access for the 7 year old age group is 0.54%, applying this methodology the level of access of the 8 year old age group in 2016 is 0.59% (0.54%*110%). The level of access of the 9 year old age group is 0.65% (0.59%*110%) in 2017. This method is applied to all age groups to estimate the level of access for the forecast horizon under the average scenario.

Table 56: Example of higher scenario for ASD special classes, 2015 – 2019

Age Group	Observed	Estimate			
	2015	2016	2017	2018	2019
6 years	0.59%	0.64%	0.69%	0.74%	0.79%
7 years	0.54%	0.65%	0.70%	0.75%	0.81%
8 years	0.47%	0.59%	0.72%	0.77%	0.83%
9 years	0.37%	0.52%	0.65%	0.79%	0.85%

The lower and higher scenarios in this case are sensitivities either side of the average assumption because there is not enough age related data to apply a similar approach to the other sectors.

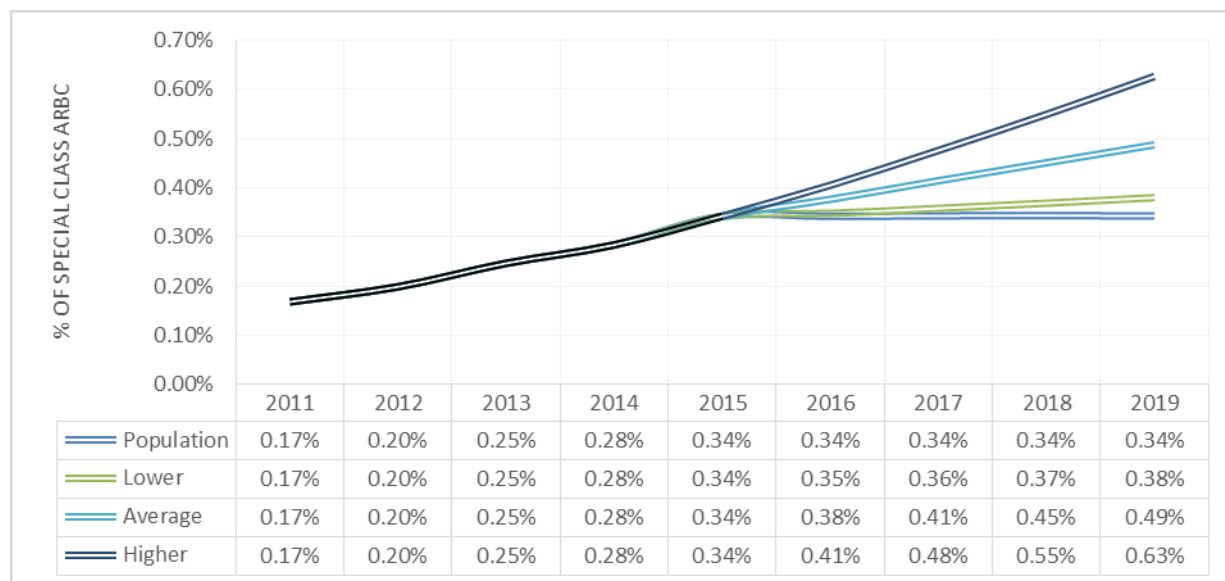
Applying these scenarios to the ARBC, under the population scenario there would be an additional 179 students. Applying the lower scenario, the number of students would increase from 3,342 to 3,906, which is an increase of 385 students compared to the population scenario. Applying the average scenario, the number of students increase by 1,669 from 3,342 to 5,011, which is 1,490 additional students above the population scenario. Applying the higher scenario, the number of students increase by 3,100 students to 6,442, which is 2,922 students above the population scenario.

Table 57: Estimated Number of ASD students in special classes, 2015 – 2019

Scenarios	2015	2016	2017	2018	2019
Population	3,342	3,408	3,467	3,505	3,521
Lower	3,342	3,468	3,621	3,760	3,906
Average	3,342	3,753	4,188	4,599	5,011
Higher	3,342	4,039	4,811	5,602	6,442

The estimates for the population scenarios see the level of access in ASD students remain constant at 0.34% over the forecast horizon. The lower scenario implies that the level of access decreases to 0.38% in 2019. The average scenario implies that the level of access will increase to 0.49% and the higher scenario implies that the level of access will increase to 0.63%.

Figure 26: ASD Students in special class scenarios as a % of ARBC, 2015 - 2019



The most likely scenarios for special classes are the average or the higher scenario. This is because the total percentage of the ARBC accessing SNA support has increased year on year from 0.17% in 2011 and 0.34% in 2015 which suggests that student demand is likely to keep increasing in this sector over the forecast horizon.

In terms of the overall special class sector the level of students accessing SNAs as a proportion of the ARBC is increasing year on year from 0.34% in 2011 to 0.49% in 2015.

Table 58: Observed percentage access for special classes of all ages, 2015 -2019

Special Classes	2011	2012	2013	2014	2015
All Ages	0.34%	0.37%	0.42%	0.44%	0.49%

Combining the estimates for ASD and other diagnoses the number of estimated students in the population scenario increases from 4,831 to 4,940 which is 109 additional students. Applying the lower scenario the estimated number of students increase by 583 to 5,414, which is 474 above the population. Applying the average scenario the number of students increase by 2,130 from 4,831 to 6,961 which is 2,130 above the population estimate. The higher scenario estimates that the number of students will increase by 4,137 to 8,968, which is 4,028 above the population estimate.

Table 59: Total estimated Students in Special Class Scenarios, 2015 - 2019

Scenarios	2015	2016	2017	2018	2019
Population	4,831	4,774	4,859	4,914	4,940
Lower	4,831	4,838	5,041	5,221	5,414
Average	4,831	5,237	5,835	6,395	6,961
Higher	4,831	5,636	6,707	7,799	8,968

The model applies the SNA concentration, which is explained below, to each of the sub sectors (ASD and non-ASD) so an overall range for mainstream special classes is not necessary.

4.2.6 Early Intervention ASD

The approach for estimating the number of students in special classes is different from that of other sectors due to a lack of robust age related data. The NCSE started collecting data on special classes by age in 2015 which makes it impossible to apply the same methodology as outlined for mainstream classes and special schools. Instead the model for this sector applies high level assumptions to estimate the number of students in 2019.

ASD early intervention classes primarily provide special classes for those between the ages of 3 and 5 year olds with a small proportion of 6 to 9 year olds.

Table 60: Number and percentage of students in ASD Early Intervention, 2015

2015	Students ²³	% Accessing
All Ages	641	
3 years	162	25%
4 years	301	47%
5 years	129	20%
6 years	29	5%
7 years	9	1%
8 years	7	1%
9 years	4	1%

To estimate the level of access to SNA by age, four scenarios are presented:

1. **Population:** similar to the approach in the other sectors this scenario assumes that the level of access stays at the 2015 level over the horizon of the estimate. Essentially this is what would be forecasted if population changes were the only driver of changes in the level of access.
2. **Average:** This scenario assumes the level of access for 3, 4 year olds grows in a linear manner to the level of access of 6 year olds in mainstream ASD special classes in 2015 (0.59%) by 2019. The 6 year old ASD mainstream special class access level in 2015 is chosen because numbers in special classes are proportionality weighted towards the younger years and the ASD mainstream special class sector is more mature than the early intervention sector. This scenario assumes that level of access for 5 years olds grows to the level of 3 year olds in 2015 (0.21%). It also assumes that the level of access of 6 year olds over the forecast horizon are directly proportional to the level of access between 5 and 6 year olds in 2015, which was 4.42 (0.17%/0.04%). For example the estimated access level for 5 year olds in 2016 is 0.23%, when divided by 4.42 the access level for 6 year olds in 2016 is 0.05%. The 7, 8 and 9 year old age cohort remain constant. The estimated change in level of access are in the table below.

²³ A very small proportion of students in the early intervention scheme are above the age of six this is due to lack of available classes for these types of disabilities in the geographic areas

Table 61: Early Intervention Special class level of access in average scenario, 2015 – 2019

	Observed	Estimate			
Age Group	2015	2016	2017	2018	2019
3 years	0.21%	0.31%	0.40%	0.50%	0.59%
4 years	0.41%	0.45%	0.50%	0.54%	0.59%
5 years	0.17%	0.23%	0.29%	0.35%	0.41%
6 years	0.04%	0.05%	0.07%	0.08%	0.09%

3. **Lower:** This scenario assumes the level of access for 3 and 5 year olds grows in a linear manner to the level of access of 4 year olds in early intervention special classes in 2015 (0.41%) by 2019. The level of access for 4 year olds remain constant. This level was chosen as it's the highest level of access in early intervention observed in 2015. It also assumes that the level of access of 6 year olds over the forecast horizon are directly proportional to the level of access between 5 and 6 year olds in 2015, which was 4.42 (0.17%/0.04%). For example the estimated access level for 5 year olds in 2016 is 0.18%, when divided by 4.42 the access level for 6 year olds in 2016 is 0.04%. The 7, 8 and 9 year old age cohort remain constant. The estimated change in level of access are in the table below.

Table 62: Early Intervention Special class level of access in lower scenario, 2015 – 2019

	Observed	Estimate			
Age Group	2015	2016	2017	2018	2019
3 years	0.21%	0.26%	0.31%	0.36%	0.41%
4 years	0.41%	0.41%	0.41%	0.41%	0.41%
5 years	0.17%	0.18%	0.19%	0.20%	0.21%
6 years	0.04%	0.04%	0.04%	0.05%	0.05%

4. **Higher:** This scenario assumes the level of access for 3 and 4 year olds grows to 0.80%, the level of 6 year olds in mainstream special classes in 2015. 5 year olds grows in a linear manner to the level of access of 6 year olds in mainstream ASD special classes in 2015 (0.6%) by 2019. This scenario assumes that the level of access of 6 year olds over the forecast horizon are directly proportional to the level of access between 5 and 6 year olds in 2015, which was 4.42 (0.17%/0.04%). For example the estimated access level for 5 year olds in 2016 is 0.33%, when divided by 4.42 the access level for 6 year olds in 2016 is 0.07%. The 7, 8 and 9 year old age cohort remain constant. The estimated change in level of access are in the table below.

Table 63: Early Intervention Special class level of access in higher scenario, 2015 – 2019

	Observed	Estimate			
Age Group	2015	2016	2017	2018	2019
3 years	0.21%	0.36%	0.51%	0.65%	0.80%
4 years	0.41%	0.51%	0.60%	0.70%	0.80%
5 years	0.17%	0.28%	0.39%	0.49%	0.60%
6 years	0.04%	0.06%	0.09%	0.11%	0.14%

In terms of the early intervention special class sector the level of students accessing SNAs as a proportion of the ARBC has been increasing year on year from 0.06% in 2011 to 0.18% in 2015.

Table 64: Observed early intervention special class level of access, 2011 – 2015

Total - Special Classes	2011	2012	2013	2014	2015
All Ages (3 – 8 years)	0.06%	0.08%	0.11%	0.15%	0.18%

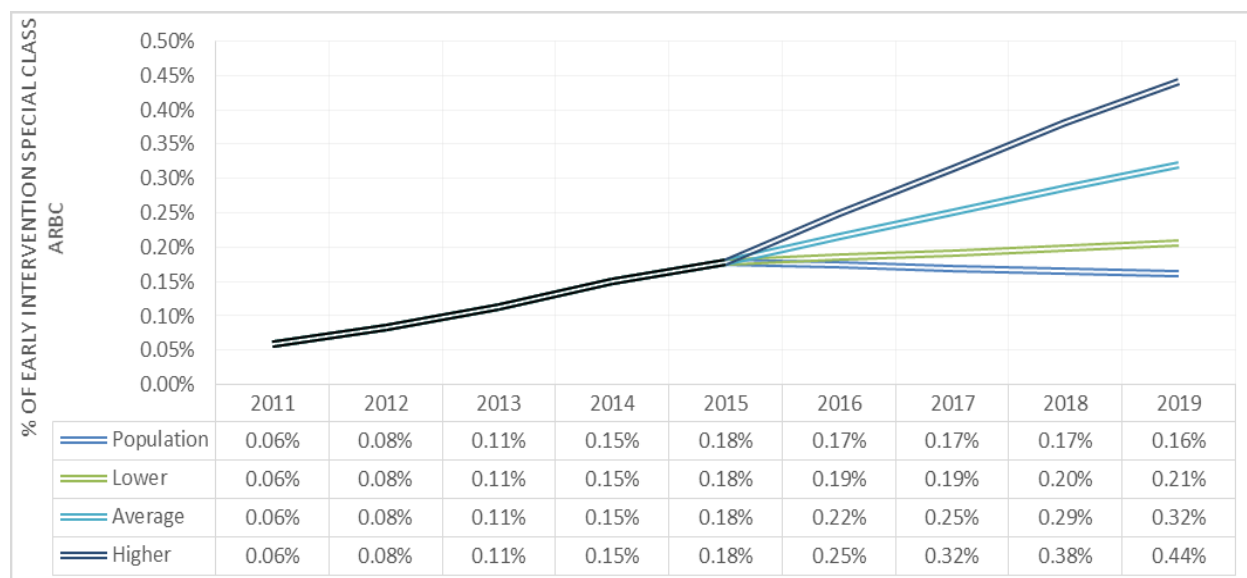
The number of estimated students in the population scenario decrease from 641 to 584, which is a decline of 57 students. Applying the minimum scenario the estimated number of students increase by 102 to 743. Applying the average scenario the number of students increase by 509 from 641 to 1,150 which is 408 above the population estimate. The maximum scenario estimates that the number of students will increase by 951 to 1,592, which is 441 above the population estimate.

Table 65: Estimated number of students in early intervention special classes, 2015 - 2019

Scenarios	Actual	Estimated			
	2015	2016	2017	2018	2019
Population Change	641	642	624	604	584
Lower	641	686	710	730	743
Average	641	798	929	1,049	1,150
Higher	641	919	1,166	1,393	1,592

The estimated level of students accessing SNAs as a proportion of the ARBC of all early intervention students is presented below. This is the estimated number of students by age summed and divided by the total ARBC for all ages (3 – 9 years). The level of access for the population increases from 0.15% in 2015 to 0.16% in 2019, the minimum scenario sees the level of access increase from 0.15% to 0.21%. The average scenario sees the level of access increase from 0.15% to 0.32% and applying the maximum scenario sees the level for access increase from 0.15% to 0.44%.

Figure 27: Estimated early intervention special class level of access all scenario, 2015 – 2019



The most likely scenarios for special classes are the average or the higher scenario. This is because the total percentage of the birth cohort accessing SNA support has increased year on year from 0.06% in 2011 to 0.18% in 2015. This suggests that student demand is likely to keep increasing in this sector over the forecast horizon. The fact that the service is relatively new compared to mainstream special classes, the percentage access could increase significantly in the next few years.

4.3 SNA Concentration

The SNA concentration refers to the number of students per WTE SNA. Different variations of this ratio are applied to the estimated number of students to estimate the total SNA demand for each sector. The model generates three SNA concentration scenarios for each sector:

1. **Constant** – Student to SNA ratio stays constant at 2015/2016 value for the forecast horizon. For example, the 2015/2016 student to SNA ratio in primary was 2.15; this is applied to the estimated number students in primary every year to 2019 to estimate the number of SNAs.

2. **Minimum** – The minimum percentage change in the student to SNA ratio between 2011/2012 to 2015/2016 applied each year over the forecast horizon. For example, the student to SNA ratio in primary increased from 1.62 students per SNA in 2011/2012 to 2.15 students per SNA in 2015/2016 (table below). The minimum increase over the period was 5%.

Table 66: Observed Student to SNA ratio, 2011 - 2015

	SNA	Students	Ratio	% Change
2011/2012	5,453	8,817	1.62	
2012/2013	5,492	9,807	1.79	10%
2013/2014	5,454	10,216	1.87	5%
2014/2015	5,586	11,166	2.00	7%
2015/2016	5,925	12,754	2.15	8%
Average				7%

Applying 5% to the ratio each year increases the ratio from 2.15 in 2015 to 2.61 in 2019.

Table 67: Estimated student to SNA ratio in primary minimum scenario, 2015 – 2019

	2015	2016	2017	2018	2019
Minimum	2.15	2.26	2.37	2.48	2.61

3. **Average** – The average annual percentage change in the ratio between 2011/2012 to 2015/2016 applied each year over the forecast horizon. From table 66 above the average annual change is 7%. Applying 7% to the ratio each year gives a 2019 ratio of students to SNA of 2.87.

Table 68: Student to SNA ratio in primary average scenario, 2015 – 2019

	2015	2016	2017	2018	2019
Average	2.15	2.31	2.48	2.67	2.87

4.3.1 Mainstream Primary

The SNA ratio has increased from 1.62 to 2.15 over the 2011-2015 period, which is an average annual change of 7%. The minimum change in the ratios between 2011/2012 and 2015/2016 was 5% in 2015/2016.

Table 69: Observed Student to SNA ratio in primary, 2015 – 2019

	SNA	Students	Ratio	% Change
2011/2012	5,453	8,817	1.62	
2012/2013	5,492	9,807	1.79	10%
2013/2014	5,454	10,216	1.87	5%
2014/2015	5,586	11,166	2.00	7%
2015/2016	5,925	12,754	2.15	8%
Average				7%

The assumption applied for the constant scenario is a student to SNA ratio of 2.15. For the minimum scenario the student to SNA ratio increases from 2.15 in 2015 to 2.61 in 2019 and for the average scenario the student to SNA ratio increases from 2.15 in 2015 to 2.87 in 2019.

Table 70: Student to SNA ratio in primary all scenarios, 2015 – 2019

Primary	2015	2016	2017	2018	2019
Constant	2.15	2.15	2.15	2.15	2.15
Minimum	2.15	2.26	2.37	2.48	2.61
Average	2.15	2.31	2.48	2.67	2.87

The SNA concentration estimated in the minimum or average scenarios are more likely for this sector because there have been year on year increases in the student to SNA ratio.

4.3.2 Mainstream Post-Primary

The SNA ratio has increased from 1.81 to 2.14 over the period of analysis, which is an average annual change of 4%. The minimum change was 2% in 2015/2016.

Table 71: Observed Student to SNA ratio in post-primary all scenarios, 2011 – 2015

	SNA	Students	Ratio	% Change
2011/2012	1,842	3,333	1.81	
2012/2013	1,838	3,461	1.88	4%
2013/2014	1,838	3,691	2.01	7%
2014/2015	1,868	3,935	2.11	5%
2015/2016	1,921	4,120	2.14	2%
Average				4%

The assumption applied for the constant scenario is a student to SNA ratio of 2.14. For the minimum scenario the student to SNA ratio increases from 2.14 in 2015 to 2.30 in 2019 and for the average scenario the student to SNA ratio increases from 2.14 in 2015 to 2.54 in 2019.

Table 72: Estimated Student to SNA ratio all scenarios, 2015 – 2019

Post-Primary	2015	2016	2017	2018	2019
Constant	2.14	2.14	2.14	2.14	2.14
Minimum	2.14	2.18	2.22	2.26	2.30
Average	2.14	2.24	2.34	2.44	2.54

The SNA concentration estimated in the minimum or the average scenario are more likely for this sector because there have been year on year increases in the student to SNA ratio.

4.3.3 Special Schools

The SNA ratio has increased slightly from 3.27 to 3.31 over the period of analysis, which is an average annual change of 0.32%. The minimum change was -1% in 2015/2016.

Table 73: Observed Student to SNA ratio in special schools all scenarios, 2011 – 2015

	SNA	Students	Ratio	% Change
2011/2012	2,092	6,848	3.27	
2012/2013	2,125	7,077	3.33	2%
2013/2014	2,149	7,299	3.40	2%
2014/2015	2,222	7,459	3.36	-1%
2015/2016	2,300	7,607	3.31	-1%
Average				0.27%

The assumption applied for the constant scenario is a student to SNA ratio of 3.31. For the minimum scenario the student to SNA ratio increases from 3.31 in 2015 to 3.12 in 2019 and for the average scenario the student to SNA ratio increases from 3.31 in 2015 to 3.34 in 2019.

Table 74: Estimated Student to SNA ratio all scenarios, 2015 – 2019

Special Schools	2015	2016	2017	2018	2019
Constant	3.31	3.31	3.31	3.31	3.31
Minimum	3.31	3.26	3.21	3.16	3.12
Average	3.31	3.32	3.33	3.33	3.34

The SNA concentration estimated in the constant and average are more likely for this sector because the year on year changes have been relatively small and over the period the changes have been negligible compared to other sectors.

4.3.4 Non-ASD Special Classes in Mainstream

The SNA ratio has increased from 10.09 to 7.30 over the period of analysis, which is an average annual decline of 7%. Although over the period the numbers of SNAs were artificially constrained by Employment Control Framework so some of these increased efficiencies were enforced. The minimum change was -7% in 2014/2015.

Table 75: Observed Student to SNA ratio in non-ASD special classes all scenarios, 2011 – 2015

	SNA	Students	Ratio	% Change
2011/2012	155	1,564	10.09	
2012/2013	153	1,571	10.27	2%
2013/2014	169	1,654	9.79	-5%
2014/2015	187	1,469	7.86	-20%
2015/2016	204	1,489	7.30	-7%
Average				-7%

The assumption applied for the constant scenario is a student to SNA ratio of 7.3. For the minimum scenario the student to SNA ratio decreases from 7.3 in 2015 to 3.03 in 2019 and for the average scenario the student to SNA ratio decreases from 7.3 in 2015 to 5.36 in 2019.

Table 76: Estimated Student to SNA ratio for non-ASD classes all scenarios, 2015 – 2019

Non-ASD Special classes	2015	2016	2017	2018	2019
Constant	7.30	7.30	7.30	7.30	7.30
Minimum	7.30	5.86	4.70	3.77	3.03
Average	7.30	6.76	6.25	5.79	5.36

The most likely scenarios in this case are the average or the minimum. The trend decreases between 2013 to 2015 period, added to this is the number of disabilities in this category which require very different levels of support.

4.3.5 ASD Special Classes in Mainstream

The SNA ratio has increased from 2.37 to 2.53 over the period of analysis, which is an average annual increase of 2%. The minimum change was -6% in 2014/2015.

Table 77: Observed Student to SNA ratio in special schools all scenarios, 2011 – 2015

	SNA	Students	Ratio	% Change
2011/2012	646	1,531	2.37	
2012/2013	738	1,835	2.49	5%
2013/2014	876	2,315	2.64	6%
2014/2015	1,091	2,713	2.49	-6%
2015/2016	1,323	3,342	2.53	2%
Average				2%

The assumption applied for the constant scenario is a student to SNA ratio of 2.53. For the minimum scenario the student to SNA ratio decreases from 2.53 in 2015 to 1.98 in 2019 and for the average scenario the student to SNA ratio increases from 2.53 in 2015 to 2.7 in 2019. In the case of ASD special classes the SERC ratio gives an automatic allocation of 2 SNAs per class of 6 students or 1 SNA per 3 students. In some cases the SENO will allocate additional SNA resources above the SERC ratio for students with additional need. To take account of this model imposes an upper limit of 2.9 students per SNA.

Table 78: Estimated Student to SNA ratio all scenarios, 2015 – 2019

ASD Special Classes	2015	2016	2017	2018	2019
Constant	2.53	2.53	2.53	2.53	2.53
Minimum	2.53	2.38	2.24	2.10	1.98
Average	2.53	2.57	2.61	2.66	2.70

The most likely scenarios in this case are the constant or the average. It is likely that the student to SNA ratio will increase slightly or decline slightly due to the SERC ratios and availability of special classes.

4.3.6 Early Intervention ASD Special Classes

The student to SNA ratio has increased from 2.70 to 3.36 over the period of analysis, which is an average annual change of 6%. The minimum change was 3% in 2015/2016.

Table 79: Observed Student to SNA ratio in EI ASD classes all scenarios, 2011 – 2015

	SNA	Students	Ratio	% Change
2011/2012	71	191	2.70	
2012/2013	97	278	2.86	6%
2013/2014	125	384	3.07	7%
2014/2015	161	524	3.25	6%
2015/2016	191	641	3.36	3%
Average				6%

The assumption applied for the constant scenario is a student to SNA ratio of 3.36. For the minimum scenario the student to SNA ratio increases from 3.36 in 2015 to 3.51 in 2019 and for the average scenario the student to SNA ratio increases from 3.36 in 2015 to 3.51 in 2019. In the case of early intervention ASD special classes the SERC ratio gives an automatic allocation of 1.66 WTE SNAs per class of 6 students or 0.83 WTE SNA per 3 students. In terms of WTE SNAs this is the equivalent of 3.61 students per WTE SNA. In some cases the SENO will allocate additional SNA resources above the SERC ratio for students with additional need. To take account of this, the model imposes an upper limit of on the concentration of SNAs of 3.51 students per WTE SNA.

Table 80: Estimated Student to SNA ratio in EI ASD classes all scenarios, 2015 – 2019

EI ASD special classes	2015	2016	2017	2018	2019
Constant	3.36	3.36	3.36	3.36	3.36
Minimum	3.36	3.46	3.51	3.51	3.51
Average	3.36	3.51	3.51	3.51	3.51

The most likely scenarios in this case are the constant or the minimum scenarios. It is likely that the student to SNA ratio will only change slightly to the SERC ratios and availability of special classes.

4.4 Limitations

The model applies assumptions and uses past trends to estimate what the likely SNA numbers will be over the forecast horizon. It was not possible to take account of all factors impacting on the demand and cost of SNAs in developing the forecasting model. This approach has a number of limitations which are not limited to but include:

1. **Employee Control Framework:** The ECF has previously capped the number of SNAs allocated to schools, the model has no method to account for the effects of ECF limit below the level of actual student demand.
2. **Circular 0041/2015:** DES Circular 0041/2015 specifies that that existing part time SNAs are to be offered full time positions prior to the employment of additional SNAs following an increase in allocations. Payroll data from 2011-2014 shows that there was a decline in full-time SNAs and an increase in the number of part-time SNAs employed in schools. It is unclear how this Circular will affect the number of additional SNAs employed over the forecast horizon.
3. **Circular 0030/2014:** DES Circular 0030/2014 specifies that allocations will be time bound, made initially for a period of three years, subject to annual review, and subject to a full re-assessment at the end of the three year period.
4. **Geographic Spread:** The spread of SNAs particularly in special classes will have a material effect on the number of SNA deployed. In a geographic area with no special classes where a significant demand arises for a special class will increase the allocations of SNAs. The age specific nature of the model doesn't capture this geographic effect.
5. **Policy Changes and New Programmes:** The Department of Children and Youth Affairs is leading on the extension of early childhood education schemes for all students including students with SEN. This may reduce the numbers of students in early intervention ASD classes. The introduction of more early-years schemes may also increase the identification of students with needs at an earlier stage which may have an impact on ASD early intervention classes and mainstream special classes. Once these schemes have been fully rolled out the Early Intervention special class data should be assessed to take account of these schemes.
6. **Special School Places:** The model doesn't take into account any of the limiting factors on places in special schools such as physical capacity or any other limiting factors.

4.5 Summary

This chapter has identified a number of different scenarios for student demand for SNAs and the concentration of SNAs in each sector. There are up to 72 different numbers that could be combined across all the sectors to estimate the number SNAs over the forecast horizon. Appendix 5 presents all of the scenarios for each sector.

The table below provides the estimated number of WTE SNAs in 2019 and the number of additional SNAs required between 2015 and 2019 under each of the scenarios. The examples given are not exhaustive and provide an illustration of possible outcomes given certain conditions. An actual forecast of demand is likely to be based on a hybrid scenario with conditions varying between sectors.

The maximum student demand combined with the constant assumption of the SNA concentration estimates that 7,155 additional SNAs will be required by 2019, which would bring the total number of SNAs in the scheme to 19,079. The student demand scenario of population growth and the average assumption of the SNA concentration estimates that there will be a decline of 1,245 by 2019 due to the student to SNA ratio increasing, this scenario estimates the total number of SNAs at 10,679 in 2019.

Table 81: Summary number of additional SNAs by 2019 using combined scenarios

2019	Constant		Minimum		Average	
	Total	Additional	Total	Additional	Total	Additional
Population	12,633	709	12,190	266	10,679	-1,245
Minimum	14,743	2,819	14,020	2,096	12,299	375
Average	16,897	4,973	16,192	4,268	14,139	2,215
Maximum	19,079	7,155	18,488	6,564	16,049	4,125

The FPA proposes two different more likely scenarios for each of the sectors in the student demand scenarios and the SNA concentration scenarios above, which are listed in the table below. Scenario A estimates a likely lower level of SNA demand and Scenario B estimated a likely higher level of student SNA demand.

Table 82: Summary of proposed scenarios by sector

Sector	Student Demand		SNA Concentration	
	Scenario A	Scenario B	Scenario A	Scenario B
Primary	Minimum	Average	Average	Minimum
Post-Primary	Average	Maximum	Average	Minimum
Special Schools	Population	Average	Constant	Minimum
Special Classes - ASD	Average	Higher	Average	Minimum
Special Classes - Non-ASD	Lower	Average	Average	Minimum
Special Classes - Early Intervention	Average	Higher	Average	Minimum

Combining the relevant figures for Scenario A the total number of SNAs by 2019 is estimated to be 13,309, which is an increase of 1,385 SNAs. Under this scenario the number of SNA in primary are estimated to increase to 6,112, which is an increase of 187 SNAs. In post-primary the number of SNAs are estimated to increase to 2,225, which is an additional 304 SNAs. In special schools the number of SNAs are estimated to increase to 2,434, which is an additional 135 SNAs. In mainstream special classes for ASD students the number of SNAs are estimated to increase to 1,853 which is an additional 530 SNAs. In mainstream special classes for non-ASD students the number of SNAs are estimated to increase to 281, which is an increase of 77 SNAs. In early intervention special classes the numbers are estimated to increase by 216 SNAs, to 343 SNAs by 2019.

Table 83: Scenario A – Breakdown of estimated SNA, 2015 - 2019

Scenario A	2015	2016	2017	2018	2019	Student Scenario	SNA Scenario
Primary	5,925	5,882	5,924	6,017	6,112	Average	Average
Post-Primary	1,921	1,998	2,070	2,137	2,225	Average	Average
Special Schools*	2,300	2,338	2,373	2,404	2,435	Population	Constant
Special Classes - ASD	1,323	1,461	1,602	1,730	1,853	Average	Average
Special Classes - Non-ASD	204	203	227	252	281	Lower	Average
Special Classes - Early Intervention	191	238	277	312	343	Average	Constant
CCW	60	60	60	60	60		
Total	11,924	12,180	12,533	12,913	13,309		
Additional		256	354	379	396		

* The number of students in special schools refers to those in NCSE supported special schools only.

Combining the relevant figures for Scenario B the total number of SNAs by 2019 is estimated to be 17,349, which is an increase of 5,425 SNAs. Under this scenario the number of SNA in primary are estimated to increase to 7,516, which is 1,591 additional SNAs. In post-primary the number of SNAs are estimated to increase to 2,764, which is an additional 843 SNAs. In special schools the number of SNAs are estimated to increase to 2,659, which is an additional 359 SNAs. In mainstream special classes for ASD students the number of SNAs are estimated to increase to 3,253 which is an additional 1,930 SNAs. In mainstream special classes for non-ASD students the number of SNAs are estimated to increase to 644 SNAs, which is an increase of 440 SNAs. In early intervention special classes the numbers are estimated to increase by 262 SNAs, to 453 SNAs by 2019.

Table 84: Scenario B – Breakdown of estimated SNA, 2015 - 2019

Scenario B	2015	2016	2017	2018	2019	Student Scenario	SNA Scenario
Primary	5,925	6,262	6,662	7,094	7,516	Maximum	Minimum
Post-Primary	1,921	2,103	2,297	2,506	2,764	Maximum	Minimum
Special Schools*	2,300	2,395	2,485	2,572	2,659	Minimum	Minimum
Special Classes - ASD	1,323	1,699	2,151	2,661	3,253	Higher	Minimum
Special Classes - Non-ASD	204	253	350	476	644	Average	Minimum
Special Classes - Early Intervention	191	266	332	397	453	Higher	Minimum
CCW	60	60	60	60	60		
Total	11,924	13,038	14,338	15,766	17,349		
Additional		1,114	1,300	1,429	1,582		

* The number of students in special schools refers to those in NCSE supported special schools only.

To illustrate how the model can work in practice²⁴, the table below shows an example of the estimated number of SNAs based on a “modified” average change in the scheme over the forecast horizon. This is an example of what might happen if student numbers continue to increase in line with the average of the last five years and the SNA ratios:

- Change at the “Minimum” observed over the 2011-2015 period for mainstream primary and post-primary, to avoid the impact of the data from the years following ECF; and
- Remain at the 2015 level (Constant), for the special settings to reflect the automatic allocation provided in Circular 0038/2010.

Using this combination of scenarios the total number of SNAs by 2019 is estimated to be 15,131, which is an increase of 3,027 SNAs.

Table 85: Example (modified average) – Breakdown of estimated SNA, 2015 - 2019

Example	2015	2016	2017	2018	2019	Student Scenario	SNA Scenario
Primary	5,925	6,262	6,662	7,094	7,516	Average	Minimum
Post-Primary	1,921	2,048	2,175	2,301	2,456	Average	Minimum
Special Schools*	2,300	2,359	2,413	2,460	2,506	Average	Constant
Special Classes - ASD	1,323	1,486	1,658	1,821	1,984	Average	Constant
Special Classes - Non-ASD	204	203	226	246	267	Average	Constant
Special Classes - Early Intervention	191	238	277	312	343	Average	Constant
CCW	60	60	60	60	60		
Total	11,924	12,657	13,470	14,429	15,131		
Additional		733	814	824	836		

In conclusion the number of SNAs by 2019 is likely to be in the range of 13,309 to 17,349. These estimates can be improved and made more realistic in July of each year when the applications are processed. **Applications measure observed or real demand so they are more accurate than this forecasting mode.** The outcomes of application should be built into this process in July to give a more accurate estimate of SNA demand.

²⁴ Please note that this is an illustration of how the model can work in practice rather than a recommended level of demand for SNAs.

4.5.1 Annualised Process

The SNA allocation process is an annualised process with, an average of 80% resources being allocated from the beginning of the school year in September to December. Additional SNA are allocated over the course of the academic year. For budgetary purposes the allocation of resources is being reflected at two key points in the Academic Year – Start/ End of Calendar Year (January) and Start of Academic Year (September). The additional allocations from January to August has averaged out at approximately 20% of the total allocation in order to meet demand.

Table 86: Number of SNAs allocated and annualised breakdown, 2012 – 2015

	Year	SNAs Position at start of Year (January)*	SNAs allocated from Jan - August	SNAs Allocated from Sept to December	SNA Position at End Calendar year (December)*	Jan – Aug % of total allocation	Sept – Dec % of total allocation
Actual	2012	10,300	20	100	10,420	17%	83%
	2013	10,420	83	168	10,671	33%	67%
	2014	10,671	83	324	11,078	20%	80%
	2015	11,078	96	750	11,924	11%	89%

*Figures are inclusive of 60 Child Care Workers

Under Scenario A, 1,060 SNAs will be allocated in January to August and 265 in September to December over the 2016 – 2019 period.

Table 87: Estimated number of SNAs and annualised breakdown in Scenario A, 2016 – 2019

	Year	SNAs Position at start of Year (January)	SNAs allocated from Jan - August	SNAs Allocated from Sept to December	SNA Position at End Calendar year (December)*
Estimated	2016	11,984	39	157	12,180
	2017	12,180	71	283	12,533
	2018	12,533	76	303	12,913
	2019	12,913	79	317	13,309

*Figures are inclusive of 60 Child Care Workers

Under Scenario B the 1,073 SNAs will be allocated in January to August and 4,292 in September to December over the 2016 – 2019 period

Table 88: Estimated number of SNAs and annualised breakdown in Scenario B, 2016 – 2019

	Year	SNAs Position at start of Year (January)	SNAs allocated from Jan - August	SNAs Allocated from Sept to December	SNA Position at End Calendar year (December)*
Actual	2016	11,984	211	843	13,038
	2017	13,038	260	1,040	14,338
	2018	14,338	286	1,143	15,766
	2019	15,766	316	1,266	17,349

*Figures are inclusive of 60 Child Care Workers

4.5.2 Costing Scenarios

To cost the scenarios, the average cost of a SNA in primary and post-primary was applied. The average of cost of a SNA in primary was €34,000 and the average cost of a SNA in post-primary was €33,000.

The costs of the additional SNAs related to each of these scenarios are presented in the table below. The estimated cost of the additional SNAs when the assumption of a constant SNA concentration and maximum student demand is applied is €242m. The cost of the additional SNAs under the assumption of average change in SNA concentration and student demand of population growth is a decline of €42m.

Table 89: Estimated costs of additional SNAs by 2019

2019	Constant	Minimum	Average
Population	€ 24,098,856	€ 8,866,409	€ -42,140,613
Minimum	€ 95,557,108	€ 70,978,315	€ 12,814,791
Average	€ 168,238,252	€ 144,209,875	€ 74,854,482
Maximum	€ 241,822,448	€ 221,599,759	€ 139,295,874

If population was the only driver of the increase in the number of students accessing SNAs, the cost of the additional SNAs over the 2016 to 2019 is €24m. The annual costs would decline from €7m in 2016 to €4m in 2019.

Table 90: Estimated costs of additional SNAs, Population only

Population Only	2016	2017	2018	2019	Total
Total	€7,059,928	€7,227,422	€5,724,494	€4,087,012	€24,098,856

Applying the average cost of SNAs to estimated number of SNAs under Scenario A, the additional cost of to the scheme is approximately €47m. The annual costs of additional SNAs are estimated to increase from €8.6m in 2016 to €13.3m in 2019.

Table 91: Estimated costs of additional SNAs, Scenario A

Scenario A	2016	2017	2018	2019	Total
Total	€8,590,764	€11,917,716	€12,807,863	€13,362,221	€46,678,564

Applying the average cost of a SNA to estimated number of SNAs under Scenario A, the additional cost of to the scheme is approximately €183m. The annual costs of additional SNAs are estimated to increase from €37.6m in 2016 to €53.3m in 2019.

Table 92: Estimated costs of additional SNAs, Scenario B

Scenario A	2016	2017	2018	2019	Total
Total	€37,584,881	€43,838,824	€48,192,595	€53,331,984	€182,948,283

In summary the cost of the additional SNAs to the scheme range could range from €-42m to €242m by 2019. Using a more likely set of assumptions the costs are estimated to range from €47m to €183m by 2019, depending on the combination of scenarios. In both scenario A and B the cost of the scheme at primary is greater than the cost in post-primary due to the increased numbers of students with SNA support in primary compared to post-primary and the classification of special schools as primary schools.

5 Conclusions, Other Considerations and Recommendations

5.1 Other Considerations

5.1.1 Full-Time and Part-Time Posts

Circular 0041/2015 was issued on twelfth of June 2015 and directs school management authorities to, in general, use any additional SNA allocation to increase current part-time SNAs to full-time before considering creating any additional SNA posts in the school. In essence this means that before the employer can consider the recruitment of a further person as an SNA, they must ensure that all existing part-time SNAs in their employment, in order of seniority, have been offered a full-time position in the school or, in the case of ETBs, a full-time position in a school within the ETB scheme.

The table below shows the percentage breakdown of part-time and full-time additional SNAs employed in recognised schools (excluding ETBs) from 2012 to 2015. The number of additional SNAs employed in a full time capacity has declined from 51% of those hired between 2012 and 2013 to 38% of those hired between 2014 and 2015. Between 2012 and 2015 37% of additional SNA posts were full time and 63% were part-time.

Table 93: Percentage of Additional Full-Time and Part-Time SNAs (excluding ETBs)

	Additional SNA Posts	
	Full-Time	Part-Time
2012 - 2013	51%	49%
2013 - 2014	23%	77%
2014 - 2015	38%	62%
2012 - 2015	37%	63%

It is the role of the SENO to determine a quantum of support (total number of WTE SNAs) in a school required to the care needs of the students eligible for the SNA scheme. It is the role of School management to recruit and deploy the SNAs and the data shows a mix of part-time and full-times posts are used by schools. As Circular 0041/2015 sets restrictions on schools capacity to proceed directly with recruitment of part time SNA posts it may have an impact on the number of SNAs required in the system. The impact of the circular will take a few years to fully realise and should be factored into considerations budgetary considerations.

5.1.2 IT systems

The NCSE has developed its SEAS system to collect student and school data in support of its role in administering resource allocations to schools including the SNA scheme. The student and school data collected is anonymised for analysis purposes and used to inform research, performance management and forecasting demand. Recognising that evaluation is becoming increasing important particularly in light of the fiscal rules and more constrained budgets due to demographics. Going forward the DES and the NCSE should recognise the importance of this system and the staff that maintain and operate it. The FPA group proposes that some additional data be collected such as the outcomes from school reviews and the number of students who had SNA access in previous year that no longer require SNA support in current year.

5.1.3 ECF effects on SNA numbers

In the context of the National Recovery Programme the DES Circular 0006/2011 introduced a cap through the ECF on SNAs posts of 10,575 in December 2010 which remained unchanged until 2013. Since then, the ECF in relation to SNAs has increased annually.

The ECF depressed the level of resources available for the scheme when the number of students eligible for the scheme was increasing. The numbers of SNA only increased beyond the ECF limit in 2013 when the limit was increased. The increase in the ECF is negotiated based on expected demand each year.

5.2 Conclusions

The first aim of this FPA was to identify, collate and analyse the available data underpinning the scheme in relation to the performance metrics as set out in Appendix 1. Analysis of this data has provided a clear picture of how the scheme has developed since 2011/2012. However, it was not possible to establish a small number of indicators.

The SNA scheme has experienced an increase in demand of 34% over the 2011/2012 to 2015/2016 period. The increasing demand has led to a 16% increase in SNAs and as a result the cost of the scheme has increased by 21%. In real terms there are now an additional 7,669 students accessing SNA support, 4,724 (62%) of those are in mainstream classes, 2,186 (29%) are in special classes in mainstream and 759 (10%) are in special schools.

The main driver of the increases in student numbers is students with a diagnosis of ASD. In mainstream of the 4,752 additional students requiring SNA support, 49% had an ASD diagnosis. In special classes in mainstream schools there were an additional 460 classes opened between 2011/2012 and 2015/2016, of which 76% were mainstream ASD classes and 18% were Early Intervention ASD classes. In special schools the number of students increased by 760, 100% of this increase was driven by students with ASD.

The NCSE responded to the increase in demand with an allocation of an additional 1,604 SNAs across the various sectors. Schools with special classes in mainstream were allocated an additional 845 SNAs (53% of additional SNAs), schools with SNAs in mainstream classes were allocated an additional 551 SNAs (34% of additional SNAs) and special schools were allocated an additional 208 SNAs (13% of additional SNAs). The relatively high proportion of SNAs allocated to special classes is a function of the significant number of new ASD classes for school age and pre-school children. DES policy is to allocate two SNAs for every class, which is the lowest SNA to class ratio.

The second aim of the FPA was to identify what was required to develop the forecasting capacity of the Department and NCSE in order to anticipate the level of demand and cost of the future SNA requirements.

Through analysing the growth in metrics such as the age profile of students accessing SNA supports, the growth in students accessing SNAs as a proportion of the primary and post-primary education and levels of enrolment in special classes it has been possible to establish an estimate of demand. This model of demand is only indicative and it is unrealistic to assume that this will predict exactly the quantum of student demand for SNAs. Thus the estimated number of SNA are presented in range. The estimated number of additional SNAs between by 2019 will be in the order of 1,300 and 5,400 which is estimated to cost between €47m and €183m. This demand estimate is an improvement on the previous methods and can be built upon as time progresses.

The third aim of the FPA was to align the submission of this data (i.e. performance indicators and forecast) with the planning needs of the Department, DPER and the NCSE with specific reference to the budgetary process.

It is proposed that the NCSE submit two forecasts of SNA demand and one End of Year Data Statement. The first submission would be submitted by the end of second week in April and would include the first forecast of demand and End of Year Data Statement. The second submission would be submitted by the end of the second week in June and will provide an updated forecast to ensure that emerging trends from that year are accounted for in the forecast.

This FPA has achieved all three of the objectives set out in the Terms of Reference (Appendix 2), by measuring the recent trends which have highlighted the main drivers of the scheme, establishing a methodology for forecasting the numbers of SNAs and providing a timeline for the provision of data and the forecast.

5.3 Recommendations

The FPA technical group makes a number of recommendations based on observations of the scheme data.

The FPA technical group proposes that the NCSE should produce an Annual Statement of SNA Demand and forecast of future demand in April of each year with an updated forecast in July to take account of the current year applications. The proposed Annual Statement of SNA Demand will provide a more comprehensive suite of data, setting out the factors identified as impacting on the allocation of SNAs using metrics agreed with the DES. It will incorporate NCSE data, DES data and other relevant data in the statement. The statement will report on the SNA allocations in mainstream, special classes and special schools to end December of the previous calendar year (mid-year position for the current school year) and provide the final position on the previous academic year. The report should consider a five year trend.

In terms of the forecast the projected demand should be broken down by the number of SNAs needed in January to August and September to December for each year. The forecast should detail the level of demand across sectors (i.e. mainstream, special classes and special school) over a three year period to inform multi-annual budget negotiations (i.e. in April 2016 the NCSE will forecast the level of demand for 2017, 2018 and 2019).

The FPA technical group proposes that the Minister for Education and Skills, under section 20 of the EPSEN ACT 2004, ask the NCSE, in partnership with other relevant Departments and State Agencies, including the NDA and HSE, to carry out a comprehensive review of the SNA scheme. The review should seek to identify the most appropriate form of support options to provide better outcomes for students with SEN or disability, having regard to the significant amount of State investment in this area. With a potential additional price tag of between €47 and €183m in the next four years, it is timely to conduct a review of the scheme. The FPA group suggests considering if:

- Additional funds would be more effective in other disability areas, such as for occupational therapy, speech and language therapy, and other supports which could help children, particularly those with autism, better cope with sensory issues or communication difficulties. Added to this the review should consider if investment in other areas (e.g. NEPS scheme which employs approximately 170 psychologists or in the HSE multidisciplinary therapy teams for 0-18s where approximately 1,700 people employed in all therapy grades) can lead to better outcomes for those disabilities that can benefit from intervention rather than assistance;
- The current pilot project being evaluated by the NCSE which looks at the effect of provision of additional resource teaching support rather than SNA support benefits certain disability types; and
- Ratios set down in SERC (1993) which provide for a fixed ratio of SNAs per child in a special class or special school where a child has a certain type diagnosis are appropriate and/or suitable to each disability category. In view of the moves towards a new model of allocation of resource teachers, which is based on need and is independent of diagnosis, it is worth considering whether automatic ratios for a particular diagnoses should continue.

The data collected on SEAS, anonymised for the purposes of this analysis, was essential for the measuring of the metrics. However, there were gaps in the availability of certain types of data in this regard. The FPA technical group proposes that NCSE develop its data capturing capacity in the following areas:

- Differentiating the intensity of care needs for students;
- Additional information on No Disability category; and
- Additional information on the outcome of Care Needs Reviews.

Appendix 1 – Agreed Performance Metrics

Individual Components of the Programme Logic Model	Performance Indicators	Potential Performance Measures
<p>DES Strategic Objective <i>Providing a range of resources and support for students with special educational needs.</i></p>	Number of students with SEN in different school sectors.	Ratio of students with SEN who are/ are not attending school.
<p>Programme Objective <i>The provision of a system of additional care support within educational contexts for students with special educational needs.</i></p>	Number of students with SEN who require and have been allocated SNA support per school sector.	Establishing the extent to which the additional care support has been allocated through ongoing monitoring and review processes. <i>(not possible to measure with available data)</i>
<p>Inputs (Budget) <i>Human and financial inputs to SNA Scheme</i></p>	Overall cost of programme including no. and grade of staff involved in admin of SNA scheme	1. % change in the costs of SNA Scheme annually
		2. Ratio of SNA scheme costs to Special Education/DES budgets
<p>Activities <i>Application, Allocation and Review Processes</i></p>	1. No of applications processed	1. Timeliness of the process at each stage
	2. No of successful applications	
	3. No and % of schools applying and allocated SNA support in each sector	
<p>Outputs <i>Number of SNAs in different school sectors</i></p>	1. Total number of SNAs	1. % change in total SNAs
	2. Number of SNAs allocated per school sector	2. Number of SNAs per school sector
	3. Total number of schools allocated SNA support	3. SNA to student ratios by school type and by type of disability <i>(SNA to student ratio by type of disability not possible to measure with available data)</i>
	4. Number and % of Schools allocated SNA support per sector	4. Number of SNAs allocated per SEN category annually <i>(not possible to measure with available data)</i>
		5. Number of successful/unsuccessful appeals over time
		6. Average duration of SNA support by type of disability and by type of school <i>(not possible to measure with available data)</i>
<p>Results <i>Number of students with special educational needs requiring additional care support who are being provided for</i></p>	Number of students with SEN allocated SNA support in each category of special education needs in each sector	1. % change in number of students with SEN per school sector
		2. % change in number of students allocated SNA support per School sector annually
<p>Impacts <i>Number of students with special educational needs who have been allocated SNA support and the number no longer requiring support</i></p>	Number of students with SEN who have been allocated SNA support and the number that no longer require SNA support per school sector annually.	No of students with SEN who have been allocated SNA support and the number that no longer require SNA support per school sector annually.

Appendix 2 – Terms of Reference

Title

Assessment of historic data in relation to allocation trends to inform provisions to meet future demands of the SNA scheme.

Context

The Government decision on the 07/07/2015 agreed that a review of the SNA scheme would be carried out to ensure that the scheme continues to meet its objectives and that resources are being utilised effectively and efficiently, in line with the guidelines. The terms of reference for this review are to be agreed between the Department of Education and Skills (DES), the Department of Public Expenditure and Reform (DPER) and the National Council for Special Education (NCSE). The Government also noted that the DES and the NCSE would endeavour to ensure that resources would only be allocated in cases of assessed need, including by making efforts to minimise the number of posts allocated.

In addition to the terms of the Government decision, discussions at the Cabinet Committee on Social Policy and Public Service Reform suggested that the review should seek to establish a better understanding of the factors driving increased demand for SNA support and the means by which these factors may be recorded and reported in the future. The availability of robust and reliable data in a timely manner is key to understanding of the drivers of demand and improving the capacity to make future projections.

The timelines around the availability of data and the submission of SNA funding requirements are not currently aligned with the Government's budget calendar. In addition, the level of detail in the data is not sufficient to analyse the various drivers of demand or to make future needs projections.

In 2011 the DES published a Value for Money (VFM) Review of expenditure on the SNA scheme. The main findings of the review in terms of efficiency and effectiveness, were that the scheme:

- Could achieve its objectives and the associated level of output with fewer inputs;
- Is effective in assisting schools to meet the care needs of students with disabilities but is compromised by the inappropriate expansion of the role and the identified over-allocation of SNA posts; and
- Continues to be relevant to enable schools to meet the additional care needs of some students with disabilities but the role of the SNA is not well understood. Schools, parents and professionals seem to consider that SNAs may be used for administrative, pedagogical, behavioural management and therapeutic duties.

The 2011 VFM review also set out a range of performance indicators and performance measures that should be used to monitor the operation of the SNA scheme in to the future (see Appendix 1).

This Focused Policy Assessment (FPA) comprises a data review involving the identification, analysis and evaluation of relevant data. The review will be led by the IGEES Unit in the Department of Education and Skills. This FPA is a pre-cursor to an NCSE-led review which will, if considered necessary, consider the model of allocating SNAs and make recommendations on whether an alternative model might provide for better outcomes for children. More detail on this will follow the conclusion of the FPA.

The aims of the Focused Policy Assessment are therefore to identify the data needed to report on the performance indicators set out in the 2011 VFM and to review any emerging trends. These additional data can then be used to inform the development of a model to estimate likely future demand and costing that demand for SNAs.

Objective

1. Identify, collate and evaluate all available data underpinning the scheme in relation to performance indicators for the SNA scheme as set out in Appendix 1.
2. Identify what is required to develop the forecasting capacity of the Department and the NCSE in order to anticipate the level of demand and cost²⁵ of future SNA requirements.

²⁵ Costings will be based on assumptions about the cost of an average Special Needs Assistant currently.

3. Provision of this data to be aligned with the planning needs of the Department, the Department of Public Expenditure and Reform and the NCSE with specific reference to the annual budgetary process.

Terms of Reference

1. Identify, collate and review all baseline data relevant to SNA provision during the period 2007 to date in order to establish drivers (e.g. disability types and disability prevalence) and levels of growth in demand under the scheme. This will include the availability of a time series on pupils and SNAs in both primary and second level, inflows and outflows within the scheme, the average duration of SNA provision for pupils, provision of SNA support from transition from primary to second level and other relevant datasets that are informative with respect to the historic drivers of the scheme. The level of detail of the data significantly improves in the 2011/2012 period and beyond. This limitation will mean certain pieces of analysis will be limited to the 2011/2012 and beyond.
2. Develop a trend analysis of inputs and outputs from the scheme over the last 8 years “using available data for the performance metrics” set out in Appendix 1 of this report²⁶.
3. Development of a spreadsheet model with relevant stakeholders to estimate demand and costing that demand having regard to Budgetary timeframes.

The first draft of the report is to be submitted no later than end-February 2016.

Potential Outputs

Having regard to the terms of reference, the potential outputs are:

1. A Data inventory that will collate the relevant data on special needs and highlight growth trends;
2. Agreement on an arrangement of timelines for provision of data that addresses the information needs of the relevant funding organisations;
3. Analysis of metrics associated with Activities, Outputs, Results²⁷ and Impacts as suggested in the 2011 VFM report (Appendix 1), as updated; and
4. A spreadsheet model will be developed that uses past trends and other satisfactory models in the Education sector (e.g. GAM model) to estimate allocations.
5. A more detailed understanding of the aggregate pupil (e.g. disability type) and school characteristics (i.e. special or mainstream) which materially influence demand, the intensity of resource allocation needs and costs.

Data Sources

1. NCSE data on Special Needs
2. Health Research Board data on disability prevalence
3. Dept. of Education data on Special Needs
4. CSO Census (2006 and 2011), National Disability Survey (2006) and Growing Up in Ireland Survey

Project Governance

The FPA will be overseen by a technical group which includes 2 members from NCSE, 4 members from DES (2 policy, 1 evaluator and 1 data specialist), 3 members from DPER (2 Vote, 1 Central Expenditure Evaluation Unit (CEEU)) 1 independent member from the National Disability Authority to advise on interpretations of the data. The independent member should be working in the area of disability and will add an informed but neutral view on the report’s conclusions and recommendations.

²⁶ The limitation in the data which is referenced above may prevent all metrics being analysed over an 8 year period

²⁷ The metrics for four potential performance measures: “the success of schools in meeting students additional care needs” , “Improvements in systems and procedures including ICT, NCSE and DES processes” , “Extent of compliance with SNA circulars regarding deployment of resources” and “Improvements in classroom management” will be excluded from this analysis. The qualitative performance measure of *Success of schools in meeting student’s additional care needs* is a specific metric that can only be robustly and fairly measured by a Special Education expert rather than a general educational analyst. The qualitative performance measure of *improvements in systems and procedures Extent of compliance with SNA circulars regarding deployment of resources and improvements in classroom management* would require additional qualitative data collection and assessments based on the change in efficiency and effectiveness of systems and procedures. It is envisaged that the analysis section will not go into such detail in order for the report to be produced in the 4 to 5 month period suggested above.

The proposed members are:

- NCSE – Niall Feeney, Gerard Hogan
- DPER – John Burke, Sighle de Barra and Laura Watts
- DES – Jim Mulkerrins, Catriona Hanevy, Evan Coady and Nicola Tickner
- NDA – Eithne Fitzgerald

Timelines and Meetings

The first draft of the Report will be available by end-February 2016. It is envisaged that the Technical group meet at least 4 times over the course of the project. The first of these meetings will be administrative in nature, in that it will be introductory and the other meetings will involve technical and consultative discussions about the direction/methods used for modelling, the need for new data and other issues linked to the development and completion of the report. One of the initial meetings of the technical group should focus on approving a more detailed document setting out the methodology for the FPA. This would address issues such as the indicative model of demand. This model of demand will be informed from past trends, demographics, prevalence of disability in the relevant age groups, etc. The CEEU will provide a technical assessment regarding the quality of the FPA at the first and final draft stages.

Appendix 3 – List of Abbreviations

ASD – Autism Spectrum Disorder

ARBC – Adjusted Relevant Birth Cohort

CEEU - Central Expenditure Evaluation Unit

CRE – Comprehensive Review of Expenditure

CCW – Child Care Worker

CSO – Central Statistics Office

DES – Department of Education and Skills

DPER – Department of Public Expenditure and Reform

EBD – Emotional Behavioural Disturbance

ECF – Employment Control Framework

EPESN - Education for Persons with Special Educational Needs

ETBS - Education Training Board Schools

FEMPI – Financial Emergency Measures in the Public Interest

FPA – Focused Policy Assessment

GAM – General Allocation Model

GLD – General Learning Disability

HITH – High Incidence Teaching Hours

LITH – Low Incidence Teaching Hours

NCSE – National Council for Special Education

NDA – National Disability Authority

PRSI – Pay Related Social Insurance

PSC – Public Spending Code

RHS – Right Hand Side

SEAS – Special Education Administrative System

SEN – Special Educational Needs

SENO – Special Education Needs Organiser

SERC – Special Education Review Committee

SNA – Special Needs Assistant

VFM – Value for Money

WTE – Whole Time Equivalent

Appendix 4 – NCSE Process for Allocation for SNAs

Policy

The NCSE's processes for allocating SNAs have been developed in line with DES Policy and in particular DES Circular 0030/2014. Circular 0030/ 2014 clarifies the role of the classroom teacher and resource/learning support teachers to provide support for the education of a child and the role of the SNA to support the work of those teachers in assisting with care needs support. The circular clarifies that students should access the support of an SNA based on their level of needs arising during the school day. It is the responsibility of school management to deploy SNA support allocated to qualifying students while at the same time ensuring the acquisition of independent living skills, as appropriate.

The Application Process

When the SENO receives a new application for SNA support, he/she confirms if all the following requirements have been met.

- Completed NCSE **Application Form For Access to Care Needs Support** signed by school principal and parent/guardian.
- Supporting **professional report/documentation** of an assessed disability and recommending adult or SNA support which provides details on the significant level of care needs relevant to SNA scheme
- A comprehensive School Summary of Care Needs Currently Supported submitted by the **school citing intensity, duration and frequency** of the significant care needs, SNA role in supporting these and plans for independence.
- For children presenting with care needs related to **behaviour** the school should provide clear evidence that sustained interventions have been put in place by the school and have not been successful. If after this period SNA support is deemed to be necessary a comprehensive BCN1 form is required. Receipt of a BCN1 form does not always trigger access to SNA support.
- For children with significant **care needs arising from a medical condition**, such as Epilepsy, Narcolepsy, Diabetes, Cancer, Cystic Fibrosis and Arthritis and who cannot independently manage the care required, an application for additional care support can be considered.

The care needs outlined must be of such significance that they are beyond that which would normally be expected to be provided to a child by the child's class teacher, support teacher, or other school teachers, or beyond the level of assistance which could be offered to the student by his/ or her fellow students in school. The care needs must also be those beyond which could normally be provided for by alternative supportive approaches or modifications of the classroom environment, teaching approaches and/or assistive technology or specialist equipment.

If the application does not meet criteria the SENO processes it as a DNMC and issues a Decision Statement to the school including the rationale for decision. If the application meets the criteria then the SENO will engage in a review of current student care needs and existing SNA support in the school from information provided by the school, e.g. School Summary Care Needs Record.

Care Needs Review in the School

There are four categories and associated factors that SENOs apply when planning a care needs review.

Full Review in the School

In general, a full school review is carried out every 2 to 3 years. This will involve reviewing the care needs of all students accessing SNA support, consultation with all relevant staff and parents, where appropriate.

Focused Review in the School

For students in 4th, 5th, 6th class or year who have had access to SNA support for over 2 years and who now may have developed independence

For students with non enduring care needs, which can be remediated through programmes put in place in the school

Time bound allocations, which are scheduled for review, (DES Circular 0030/2014, Section 14).

Students with **care needs, which can diminish** over time through the development of independence

Review Meeting in the School

This involves a face to face meeting with the Principal or SEN team to discuss the current level of need where SENO determines level of SNA support required for the coming year.

Office Based Review

The significant level of care needs is clearly identified in professional reports indicating frequency and duration. Example: Toileting schedules have been provided by the school for a student with toileting needs.

This will involve a phone call with the Principal prior to commencement of school year whereby the SENO will determine the level of SNA support to be allocated to the school.

Determining the SNA Allocation

In order to determine the level of support, the following is taken into account during the review process:

- **Frequency**
- **Duration**
- **Intensity**
- **Whole School Responsibility**

The assessment of the level of support required also considers:

- DES Circular 0030/2014 outlines primary care needs which would be considered significant which may require SNA support. The circular also outlines secondary care associated with tasks which will not in themselves constitute a reason for the allocation of SNA support.
- In any instance, where SNA support is provided, a care dimension should be included in planning – a **Personal Pupil Plan**. School documentation may include: incident records; care plans; behaviour plans; plan to maximize the development of independence skills etc.
- Conversations with parent/guardians. Please note that it may not be possible or necessary to meet all parents. Meetings with parents should focus on parents of new entrants or parents of children where the support may be altered.
- Views of the student, if appropriate.
- Professional reports for each student who is in receipt of SNA support.
- Relevant Teacher/School reports for each student which help verify care needs e.g. incident book, care plans
- SNA duties in relation to each student
- SNA timetables

Following the process outlined above the SENO will decide the level of appropriate SNA support to the school. The SENO communicates to the school the care needs for each student, which have led to the school's SNA allocation so that the school has a shared understanding on how to support the students within the school's SNA support. The SENO may advise the principal on examples of good practice of how care needs can be met using SNA support but they must also emphasize that the management and deployment of SNA support is ultimately a matter for the principal. SENOs should therefore strike a balance between providing the advice, (which in many schools will be welcomed), and actually managing and deploying the SNA support allocated.

Diminishing Care Needs

The scheme recognizes that care needs change and can diminish over time for some students through the development of independent living skills. While students may continue to present with care needs if the nature/level of care needs is not consistent with the terms of Circular 0030/2014 then these students should be removed from the SNA caseload. SENOs will inform schools of students with diminishing care support requirements observed during the review process in advance of withdrawing the SNA support in order to prepare the student for the transition.

Recording Outcome of Reviews

SENOs retain the documentation relating to the application process on a manual student file and record key data on the NCSE Special Education Administration System (SEAS) including the outcome of the review process:

- Students accessing SNA in the school
- Students no longer accessing SNA in the school
- Students in mainstream/ special classes
- Number of SNAs in the school

There is no direct relationship between the numbers of SNAs to the number of students in a school. The level of care needs vary between students and consequently the level of access to SNA support will vary. The number of students with SNA access can go up and down in a school without having a dramatic effect on the school SNA allocation if certain key students, with high intensity needs, are present in the school.

While the student's disability and care need is recorded on SEAS the level of access to SNA support is not differentiated. For example if a student with quadriplegia requires full and intensive support throughout the day, with an additional second adult assisting with transfers and toileting – they are recorded as accessing SNA support. Similarly, a student with diabetes only requiring assistance three times a day for five minutes to record blood sugar levels and alter settings on an insulin pump – is recorded as having access to SNA support.

Consequently, the full impact of an SNA review is not being picked up in a measurable way from, SEAS. In order to capture data on the impact of SNA reviews on SEAS it would be necessary to introduce procedural changes that allow some level of differentiation of SNA support requirements, for example between low level and high level needs. This type of data would be useful in understanding variations in the rate of students accessing SNA support compared with the allocation of SNAs.

Examples of reviews and their outcomes

Example School A – A full review in a medium sized school

A national school of 120 pupils are making an application for a new junior infant with diabetes. The school currently has one SNA shared between two students.

A new student is starting in the school and will require their blood sugar levels to be monitored and adjustments to be made to the output from an insulin pump. One of the existing students, a child in 1st class with spina bifida, uses a wheelchair and requires support around intermittent clean catheterization. A second student is a child in 4th class with ADHD who has access to SNA support around the management of behaviour. The school principal explains that, since the current SNA is fully engaged with the current two students, additional SNA support will be required for the new student.

The SENO arranges to visit the school for a review. The SENO spends time in both 1st class and 4th class, talks to the teachers about the current needs of students and talks to the SNA about her role with students. A discussion would also generally take place with the school principal and resource teacher. The SENO may also meet with the parents and hear any concerns they may have in relation to the needs of their child. The SENO will take the opportunity to clarify the role of the SNA and the continuous review process of their child's needs. The parents are keen to promote independence and expect their children to become largely "self-managing" in due course. It becomes clear during the course of the day that, whilst the student in 4th class still requires a level of support, many of the behaviours that gave rise to the initial application for support have significantly ameliorated. The student in 1st class has very clear needs at times in the day, but does not generally require the SNA to be available while attending to lessons in class. The student commencing in junior

infants requires that his blood sugar levels be checked three times a day with occasional adjustments to the insulin pump. A diary is kept of blood sugar levels, dietary intake and pump adjustments and this information is communicated with the home. The SENO concludes that the current level of support will be adequate to cover the totality of needs in the school. The principal agrees to work on this basis, particularly as it is possible that the child in 4th class may ultimately leave the SNA caseload. This information is recorded and the SEAS system will show that an additional student has been added to the caseload without adjustment to the allocation of SNAs.

Example school B – A focused review in a large school

A school with an enrolment of 300 students provides support for six students with care needs in the mainstream with three SNAs. In addition there are two special classes for students with ASD supporting 9 students with 3 SNAs.

A new intake of 5 new students with care needs are expected to commence in the coming year, two of these will be attending mainstream and of the remaining three, two are commencing in junior infants and the third student, who is transferring from another area, will be joining 3rd class. Also, two students who have access to SNA support will be leaving sixth class to transfer to a second level placement.

Having completed a full review in the previous year which required two full days, the SENO determines that a focused review will be sufficient and so will concentrate on the changes that will be occurring in the allocation in the current year.

Two students are due to commence in the special class, which will bring the numbers up to eleven. On the basis of policy, the student to teacher ratio in such a class is 6 to 1 and the student to SNA ratio is 3 to 1. With two additional students an additional SNA is allocated on the basis of policy.

The HSE early intervention team has provided information about one of the children starting in Junior Infants. She is a child with Down syndrome with some self-care and toileting issues. There are some concerns around behaviours in the context of a formal classroom environment. The SENO has already met with the parents and child in a pre-school setting and is familiar with the needs. The student has clearly documented care needs that are relevant to the SNA scheme. A full-time infant day post will be required in the infant classroom. The second student has epilepsy and has a recommendation for SNA support and an outline of care needs. Even though reports say this can now be managed medically access will be given to the child for the junior infant year to monitor the situation. This SNA already assigned to the class on the basis on care needs for the student with Down syndrome will support this child also as required.

The student transferring into 3rd class has a diagnosed emotional/behavioural difficulty and a history of SNA access around behaviour. This student will not immediately form part of the SNA caseload unless the behaviours were extreme in nature. The school would be expected to allow him to commence school and follow behavioural management strategies for a time before any conclusions are reached about the need for a continued level of SNA support. The school may ultimately submit a behavioural care needs form outlining the approaches that have been taken, prior to any allocation being made.

There are two students leaving sixth class, one of whom, a student with a moderate general learning disability, is to transfer to a special school. A second student with a diagnosis of ADHD is transferring to secondary school. A full-time SNA post was deployed between these two students.

There were 6 SNAs in the school prior to the review, 3 in the special class and three in the mainstream. After the review an additional SNA is identified as required for the special class. In the mainstream one full-time post is effectively gone, but an infant-day post is required. On balance there is a small reduction in mainstream, but an overall increase because of the special class. The school allocation changes from 6 full-time SNA posts to 6 full-time plus 1 infant-day SNA posts.

Example school C – An office based review

A small school with 30 students has an allocation of a junior SNA post (0.83) due to the care needs of a Junior Infant with a diagnosis of Autism Spectrum Disorder.

The pupil has behaviours associated with his diagnosis including displays of high anxiety at different points in the day, resulting in the need to remove him from the classrooms for breaks. After completion of the BCN process, the school was allocated the SNA post in November. The child is moving to Senior Infants in September.

The SENO contacted the Principal by phone and it was reported that his needs were still significant and it was agreed that the current allocation would continue for the new school year.

Appendix 5 – SNA Demand Scenarios

The scenarios are presented in 3 sections. Each section shows the number of SNAs for each demand scenario (population, average, minimum and maximum) under the SNA concentration scenario. The first section shows the estimated number of SNAs if SNA concentration was constant at 2015/2016 levels. The second section shows the estimated number of SNAs if the SNA concentration changed at the minimum level observed over the 2011/2012 – 2015/2016 period. The third section shows the estimated number of SNAs if the SNA concentration changed at the average annual level observed over the 2011/2012 – 2015/2016 period.

The potential for demand for additional SNAs, dependent as it is on a number of factors, is represented here with respect to a number of possible scenarios.

The two main components of the scenarios are (i) the concentration of SNAs responding to the care needs of a given population of students and (ii) the changes in the population requiring SNA support.

The school going population is broken down with respect to primary mainstream, post-primary mainstream, mainstream special classes, special schools and early intervention classes. This reflects the differing relationships within these groups between numbers of students and numbers of SNAs.

The examples given are not exhaustive and provide an illustration of possible outcomes given certain conditions. An actual forecast of demand is likely to be based on a hybrid scenario with conditions varying between sectors.

The data is given in three sections which relate to possible changes to SNA concentrations. The first section is based on SNA concentration levels being held as a constant. For instance, if population doubles the number of SNAs double. The second is based on a changing concentration, but the change is kept to the minimum change level over the previous five years. Minimum change scenarios avoid the difficulties that arise from atypical results in the years following the introduction of the ECF. The third section is based on concentration levels continuing to change in line with the average change over the preceding five year period.

Each section is given with respect to the demand population changing (i) in line with school going population; (ii) in line the average over the preceding years; (iii) minimum increase and (iv) maximum increase, based on preceding five years.

Constant SNA Concentration

Table 94: SNA demand with student population scenario and SNA constant scenario

Population	2015	2016	2017	2018	2019	Additional SNAs	Additional Above Population
Primary	5,925	6,025	6,153	6,255	6,316	391	-
Post-Primary	1,921	1,978	2,007	2,032	2,060	139	-
Mainstream Special Classes	1,527	1,536	1,563	1,581	1,588	61	-
- ASD Special Classes	1,323	1,349	1,372	1,388	1,394	71	-
- Other Special Classes	204	187	191	193	194	-10	-
Special Schools	2,295	2,338	2,372	2,403	2,434	140	-
Early Intervention	191	191	186	180	174	-17	-

Table 95: SNA demand with student average scenario and SNA constant scenario

Average	2015	2016	2017	2018	2019	Additional SNAs	Additional Above Population
Primary	5,925	6,569	7,331	8,187	9,099	3,174	2,784
Post-Primary	1,921	2,085	2,254	2,429	2,639	718	579
Mainstream Special Classes	1,527	1,689	1,884	2,067	2,251	724	663
- ASD Special Classes	1,323	1,486	1,658	1,821	1,984	661	590
- Other Special Classes	204	203	226	246	267	63	73
Special Schools	2,308	2,359	2,413	2,460	2,506	198	58
Early Intervention	191	238	277	312	343	152	169

Table 96: SNA demand with student minimum scenario and SNA constant scenario

Minimum	2015	2016	2017	2018	2019	Additional SNAs	Additional Above Population
Primary	5,925	6,319	6,838	7,461	8,142	2,217	1,826
Post-Primary	1,921	2,020	2,102	2,166	2,244	323	184
Mainstream Special Classes	1,527	1,561	1,628	1,689	1,753	226	165
- ASD Special Classes	1,323	1,373	1,433	1,489	1,546	223	153
- Other Special Classes	204	188	195	200	207	3	12
Special Schools	2,267	2,281	2,299	2,311	2,323	56	-84
Early Intervention	191	204	211	218	221	30	47

Table 97: SNA demand with student maximum scenario and SNA constant scenario

Maximum	2015	2016	2017	2018	2019	Additional SNAs	Additional Above Population
Primary	5,925	6,753	7,713	8,778	9,906	3,981	3,590
Post-Primary	1,921	2,141	2,381	2,645	2,970	1,049	910
Mainstream Special Classes	1,527	1,818	2,164	2,519	2,896	1,369	1,308
- ASD Special Classes	1,323	1,599	1,904	2,217	2,550	1,227	1,157
- Other Special Classes	204	219	260	301	346	142	152
Special Schools	2,359	2,461	2,567	2,671	2,773	414	274
Early Intervention	191	274	348	415	474	283	300

Minimum Change in SNA Concentration

Table 98: SNA demand with student population scenario and SNA minimum scenario

Population	2015	2016	2017	2018	2019	Additional SNAs	Additional Above Population
Primary	5,925	5,744	5,592	5,419	5,216	-709	-
Post-Primary	1,921	1,942	1,936	1,925	1,917	-4	-
Mainstream Special Classes	1,527	1,667	1,846	2,039	2,246	719	-
- ASD Special Classes	1,323	1,434	1,550	1,666	1,778	455	-
- Other Special Classes	204	233	296	373	468	264	-
Special Schools	2,295	2,373	2,444	2,514	2,584	289	-
Early Intervention	191	185	178	172	166	-25	-

Table 99: SNA demand with student average scenario and SNA minimum scenario

Average	2015	2016	2017	2018	2019	Additional SNAs	Additional Above Population
Primary	5,925	6,262	6,662	7,094	7,516	1,591	2,299
Post-Primary	1,921	2,048	2,175	2,301	2,456	535	539
Mainstream Special Classes	1,527	1,832	2,223	2,661	3,174	1,647	928
- ASD Special Classes	1,323	1,579	1,873	2,185	2,530	1,207	753
- Other Special Classes	204	253	350	476	644	440	175
Special Schools	2,308	2,395	2,485	2,572	2,659	351	62
Early Intervention	191	231	265	299	328	137	161

Table 100: SNA demand with student minimum scenario and SNA minimum scenario

Minimum	2015	2016	2017	2018	2019	Additional SNAs	Additional Above Population
Primary	5,925	6,024	6,214	6,464	6,725	800	1,508
Post-Primary	1,921	1,984	2,028	2,053	2,088	167	171
Mainstream Special Classes	1,527	1,693	1,921	2,174	2,470	943	224
- ASD Special Classes	1,323	1,459	1,619	1,787	1,972	649	195
- Other Special Classes	204	234	302	387	498	294	29
Special Schools	2,267	2,315	2,368	2,416	2,465	198	-91
Early Intervention	191	198	202	208	212	21	45

Table 101: SNA demand with student maximum scenario and SNA minimum scenario

Maximum	2015	2016	2017	2018	2019	Additional SNAs	Additional Above Population
Primary	5,925	6,438	7,009	7,605	8,182	2,257	2,965
Post-Primary	1,921	2,103	2,297	2,506	2,764	843	847
Mainstream Special Classes	1,527	1,972	2,554	3,244	4,087	2,560	1,840
- ASD Special Classes	1,323	1,699	2,151	2,661	3,253	1,930	1,475
- Other Special Classes	204	273	403	582	834	630	365
Special Schools	2,359	2,498	2,644	2,792	2,942	584	295
Early Intervention	191	266	332	397	453	262	287

Average Change in SNA concentration

Table 102: SNA demand with student population scenario and SNA average scenario

Population	2015	2016	2017	2018	2019	Additional SNAs	Additional Above Population
Primary	5,925	5,608	5,331	5,044	4,741	-1,184	-
Post-Primary	1,921	1,895	1,843	1,788	1,737	-184	-
Mainstream Special Classes	1,527	1,528	1,549	1,562	1,567	40	-
- ASD Special Classes	1,323	1,326	1,326	1,318	1,302	-21	-
- Other Special Classes	204	202	223	243	265	61	-
Special Schools	2,295	2,332	2,360	2,385	2,409	114	-
Early Intervention	191	183	178	172	166	-25	-

Table 103: SNA demand with student average scenario and SNA average scenario

Average	2015	2016	2017	2018	2019	Additional SNAs	Additional Above Population
Primary	5,925	6,114	6,351	6,603	6,830	905	2,089
Post-Primary	1,921	1,998	2,070	2,137	2,225	304	488
Mainstream Special Classes	1,527	1,680	1,866	2,040	2,217	690	650
- ASD Special Classes	1,323	1,461	1,602	1,730	1,853	530	551
- Other Special Classes	204	220	263	310	364	160	99
Special Schools	2,308	2,353	2,400	2,440	2,479	171	57
Early Intervention	191	227	265	299	328	137	161

Table 104: SNA demand with student minimum scenario and SNA average scenario

Minimum	2015	2016	2017	2018	2019	Additional SNAs	Additional Above Population
Primary	5,925	5,882	5,924	6,017	6,112	187	1,371
Post-Primary	1,921	1,935	1,930	1,906	1,892	-29	155
Mainstream Special Classes	1,527	1,553	1,612	1,667	1,726	199	159
- ASD Special Classes	1,323	1,350	1,385	1,414	1,444	121	142
- Other Special Classes	204	203	227	252	281	77	17
Special Schools	2,267	2,275	2,286	2,292	2,298	30	-83
Early Intervention	191	195	202	208	212	21	45

Table 105: SNA demand with student maximum scenario and SNA average scenario

Maximum	2015	2016	2017	2018	2019	Additional SNAs	Additional Above Population
Primary	5,925	6,286	6,682	7,079	7,436	1,511	2,695
Post-Primary	1,921	2,052	2,186	2,327	2,504	583	767
Mainstream Special Classes	1,527	1,808	2,144	2,486	2,854	1,327	1,287
- ASD Special Classes	1,323	1,572	1,840	2,107	2,382	1,059	1,080
- Other Special Classes	204	236	303	380	471	267	206
Special Schools	2,359	2,454	2,553	2,649	2,743	384	271
Early Intervention	191	262	332	397	453	262	287

Appendix 6 – SNA Data

Table 106: Total Students with SEN (indicative), 2011/2012 – 2015/2016

	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016
LITH	29,426	32,480	35,763	38,414	42,931
GAM*	91,777	101,675	101,085	110,813	113,888
HITH*	10,010	10,210	10,414	10,623	10,835
Special Classes	3,286	3,684	4,226	4,707	5,472
Special Schools	7,420	7,665	7,755	7,949	8,092
Total SEN	141,919	155,714	159,243	172,506	181,218
Total Students	838,977	853,745	869,492	883,903	899,106

*Estimated

Table 107: Students Accessing SNAs by Sector, 2011/2012 – 2015/2016

School Year	Students in Mainstream (Primary & Post-Primary) Accessing SNAs	Students in Special Classes Accessing SNAs	Students Special Schools Accessing SNAs	Students accessing SNAs Total
2011/2012	12,150	3,286	6,848	22,284
2012/2013	13,268	3,684	7,077	24,029
2013/2014	13,907	4,353	7,299	25,559
2014/2015	15,101	4,706	7,459	27,266
2015/2016	16,874	5,472	7,607	29,953

Table 108: SNAs by Sector 2011/2012 – 2015/2016

School Year	Mainstream	Special Classes	Special Schools	Child Care Workers	Total SNAs
2011/2012	7,295	873	2,092	60	10,320
2012/2013	7,330	988	2,125	60	10,503
2013/2014	7,292	1,168	2,149	60	10,669
2014/2015	7,454	1,439	2,222	60	11,175
2015/2016	7,846	1,718	2,300	60	11,924

Table 109: Number of Special Classes, 2011/2012 – 2015/2016

School Year	Early Intervention	Mainstream	Total Classes
2011/2012	34	514	548
2012/2013	49	579	628
2013/2014	71	298	737
2014/2015	97	759	855
2015/2016	118	890	1,008

Table 110: Direct cost of the SNA scheme, 2011 - 2015

	2011	2012	2013	2014	2015
Direct Costs (€m)	332	342	354	372	402

*excluding CCW SNAs

Table 111: Number of Applications and Successful Applications in Mainstream, 2011/2012 – 2015/2016

School Year	Applications			Successful Applications		
	Primary	Post Primary	Total	Primary	Post Primary	Total
2011/2012	3,610	1,707	5,317	2,030	749	2,779
2012/2013	4,335	1,996	6,331	2,535	979	3,514
2013/2014	5,394	2,249	7,643	2,986	1,133	4,119
2014/2015	5,287	2,213	7,500	3,128	1,063	4,191
2015/2016	5,915	1,990	7,905	3,877	1,135	5,012

Table 112: Disability type - Primary & Post Primary Mainstream Students, 2011/2012 – 2015/2016

Disability Type	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016
Autism/Autistic Spectrum Disorders	2,742	3,178	3,574	4,429	5,041
Emotional/Behavioural Disturbance	3,428	3,551	3,506	3,398	3,650
General/Specific Learning Disability	1,086	1,001	908	837	898
Multiple Disabilities	1,033	1,192	1,276	1,884	2,067
Physical Disability	1,912	2,084	2,123	2,063	2,222
Other	1,949	2,262	2,520	2,490	2,996
Total	12,150	13,268	13,907	15,101	16,874

Table 113: Disability type – Students in NCSE Staffed Special School, 2011/12-2015/16

Disability Type	11/12	12/13	13/14	14/15	15/16
Autism/Autistic Spectrum Disorders	1,522	1,866	1,886	2,124	2,283
Emotional/Behavioural Disturbance	380	355	424	393	454
General/Specific Learning Disability	3,881	3,679	3,696	3,785	3,647
Multiple Disabilities	644	772	822	657	741
Physical disability	267	237	217	281	242
Other	154	168	254	219	240
Total	6,848	7,077	7,299	7,459	7,607

Table 114: Disability Type – Special Classes, 2011/2012 – 2015/2016

Disability Type	2011/2012	2012/2013	2013/2014	2014/2015	2015/2016
ASD	330	413	511	627	765
EBD	9	7	8	11	10
General/Specific Learning Disability	126	122	132	126	133
Multiple Disabilities	3	5	5	13	20
Physical Disability	1	1	1	0	0
Specific Speech and Language Disorder	64	64	64	63	63
Other	79	80	80	78	80
Total	548	628	737	855	1008