Chapter 21 Department of Education and Science

Primary School Planning

Primary School Planning

21.1   The provision of accommodation for the education of primary school students has to be planned in the light of three main factors

- demographic changes and the emergence of developing areas can give rise to instances where there is inadequate or no educational infrastructure

- the existing infrastructure may need upgrading

- policy underpinned in the Education Act, 1998 provides for parental choice in the type of school children attend, thereby increasing the range and number of schools for which building projects are required.

21.2   Unless the Department has readily accessible information on emerging demands, the capacity of the school building stock and the state of infrastructure, including its composition in terms of permanent and temporary structures, it will lack the ability to proactively manage accommodation provision. There have been some instances of significant surges in demand for primary school places, resulting in deficiencies in provision, most recently in 2007 in the Lucan and Balbriggan areas of Dublin, that required school accommodation to be put in place rapidly.

Audit Focus

The audit reviewed

- the extent to which the Department has information and procedures that allows it to proactively plan for primary school provision

- the quality of its information on the condition of school accommodation

- how development projects are prioritised.

Planning Information

21.3   In order to plan accommodation provision, the Department would need information on the number of pupils likely to require places, the location of those pupils, and the extent and quality of the existing accommodation.

Demand for School Places

21.4   There has been a fundamental shift in requirements for accommodation in recent years.

- In 1998 it was projected (based on the prevailing demographics, migration and birth rate patterns at the time) that the number of pupils at primary level would fall to between 418,900 and 442,300 by the year 2016.

- Currently, primary enrolment is in the region of 499,000 and is expected to reach 597,000 by 2016 (based on the most recent predictions from Central Statistics Office (CSO) and the Department's Statistics Section using current demographic, migration and birth rate patterns).

Implication for Classroom Facilities

21.5   The Department estimates that meeting the demand for education services at primary level would entail the provision of up to 3,500 additional classrooms if all the pupils could not be accommodated in existing schools. However, it is more likely that whatever additional school capacity is required will be met through a combination of the use of any existing spare classroom capacity, by extensions and expansions of existing schools and by the provision of new schools where necessary. This will be due to the dispersed nature of the increased number of pupils across the country. In general terms, population growth leading to pressure on primary and post-primary school accommodation is likely to be strongest in the areas along the east coast commuter belt, the greater Dublin area and in the areas surrounding other major cities. However, many other areas will also experience pressure in terms of increased demand for pupil places, albeit at a lower level.

Identification of Emerging Requirements

21.6   During 2008 the Department introduced a Geographical Information System (GIS) to facilitate greater accuracy in the identification of school place needs. This system allows the Department to layer various pieces of information over a digital map of Ireland. The information is sourced from the CSO (age cohort by district electoral division), ordnance survey mapping, a geodirectory from An Post which maps each dwelling in the country (updated quarterly), child benefit data (updated quarterly) and the General Register Office data on live births (also updated quarterly). Historical and current information on school enrolments and staffing is also used.

21.7   The combination of this information allows indicative feeder areas to be established around existing schools and in greenfield locations. The system facilitates the modelling of a range of forecast scenarios for each area for the coming years and the likely changes to the school-going population in those areas in order to predict the level of school provision that will be required.

21.8   Utilising the GIS, the Department has carried out a study of the country to identify the areas where, due to demographic changes, there may be a requirement for significant additional school provision at both primary and post-primary levels over the coming years. The study indicates that the requirement for additional primary provision over the next four to five years is likely to be greatest in 42 locations across the country based on significant changes to the demographics of those areas. The process of carrying out detailed analysis and reports for each of these locations is underway in order to identify the school accommodation requirements for each area up to and including the school year 2014/2015. These detailed reports indicate the locations where new schools and/or extensions to existing schools may be required and thus informs the prioritisation and progression of capital projects for these areas.

21.9   This process while helping to identify need for additional provision in particular areas, which is its main function as a planning tool, does not address upgrade or refurbishment needs because the system does not have information on current school accommodation beyond basic enrolment figures for each school.

Existing School Accommodation

21.10 While historic investment in schools can be tracked using information from an overview system, the Department needs to have relevant and reliable information on the state of the existing schools in the system. Up to this point, there has been limited centrally maintained information on the condition of schools.

21.11 In 2001 the Department ran a pilot project to create an inventory of school accommodation in one county. The objective was to develop a system to aid the prioritisation of school building projects. The project assessed 90 primary schools and 25 post-primary schools in Kildare.

21.12 There were two main elements in the project

- The gathering of information through project surveys which included site surveys, building elevations, floor plans, and detailed data on the condition of up to 37 elements of each school together with digital photos and other general data.

- The customising of an existing software package in order to store the data collected and link this information to an appropriate GIS database.

The project cost just over €1 million, with 20% of the cost being incurred on computer systems and 80% on school surveys.

Pilot Project Outcome

21.13 In May 2003 an Evaluation Report on the operation of the pilot project was prepared for senior management of the Planning and Building Unit (PBU). Among the findings and options outlined in the report were that

- a targeted approach should be taken in determining the areas/schools that should be included in the next phase(s) of the inventory project

- the range of data collected should be reduced to a useful and manageable minimum in order to reduce costs

- the focus of the expansion of the inventory should also reflect the fact that lack of space rather than condition was the greatest need identified in schools in the pilot phase

- the data should be collected over time, as schools are assessed for building project prioritisation

- licences should be purchased from Ordnance Survey Ireland to enable the use of geographical mapping nationwide, immediately allowing the expansion of the GIS element of the system.

21.14 In 2009 when data from this inventory was sought for audit review, it was found that the database had not been accessed for some time and that there were software and licensing issues with accessing the information. However, some information previously extracted was made available by the Department.

21.15 The inventory project database contains drawings and condition report data on surveyed schools. The drawings, which were maintained outside the database, have been used over the years by the Department. Other information collected during the pilot survey project, including condition ratings, has not been accessed in recent years. While some condition information contained in tables downloaded from the database has been available throughout the intervening period, it has not been integrated into the new GIS currently used for forward planning of school places.

Improving Inventory Information

21.16 Work is currently underway on the development of a new inventory of school accommodation which will be available for completion online by schools as part of a school portal[72]. This should provide a detailed inventory of the entire school building stock with a facility for annual update by schools at minimum development costs. The new quantitative inventory of school accommodation, which is expected to go live towards the end of 2009, will be integrated into the GIS. The new inventory will capture quantitative data in respect of all accommodation at a school, both temporary and permanent.

21.17 In the interim, the Department has a standalone database of rented school accommodation, which records the date of installation, annual rent and supplier name and details. This database is updated on a continuous basis as new and relevant information is received by the Department.

21.18 Separately, the Department has a standalone database of prefabricated accommodation where grant-aid has been sanctioned for purchase of a unit or units. This database includes any prefabricated units sanctioned for purchase since January 2008 and is updated on a continuous basis as further prefabricated purchases are sanctioned and as new and relevant information is received.

21.19 It is envisaged that the full inventory of school building stock, when developed in late 2009, will form an important layer of data to be used within the GIS system for forward planning purposes. The GIS will then have the capacity to indicate the level of temporary accommodation in schools.

21.20 Audit work noted that while the Department's overview system contains information on temporary accommodation, including numbers of classrooms sanctioned, the new GIS system does not do so at this time. The cost of temporary accommodation is separately monitored and no data is collected on the condition of temporary accommodation.

21.21 Provision of temporary accommodation is usually a response to the approval of an extra teaching post in a school. Approval of teaching posts, on the basis of numbers at the beginning of each school year may be made in late Spring for the following September. This leaves a short period of time for provision of the requisite classroom. Since early 2008, PBU policy is that temporary accommodation is purchased where it is required for more than three years and rented if the need is more temporary. The Department sanctions an amount for either purchase or rental of temporary accommodation, along with installation costs, and the school proceeds on foot of that sanction. Where a prefab purchase is sanctioned, the sanction is open-ended and the school may retain the prefab for as long as it has use for it. For new rental agreements, the sanction is for the length of time the need is expected to last (which will be up to three years) and is then reviewed. For rental agreements that existed prior to the change in policy from 2008 (indicating purchase as the most value-for-money option for prefabs required for three years or more) the sanction is reviewed on a three-yearly basis then terminated or extended as appropriate.

Responding to Emergency Need

21.22 In instances where need emerges without previous identification, it is necessary for the Department to respond promptly. It instituted a Rapid Delivery Programme in 2008.

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[72]   Esinet is an on-line portal which allows primary, voluntary, secondary and community and comprehensive schools to access systems such as the Online Claims System.

Rapid Development Response

The Developing Area Unit (DAU) commenced in September 2007 to

■   liase with local authorities

■   identify where new schools are needed

■   ensure that they are delivered in the fastest possible timeframe.

It delivered 7,000 additional pupil places in September 2008 in 26 new schools using off-site construction. Permanent schools were built where permanent sites were acquired and temporary solutions where only temporary sites were available. The Department itself acted as client for these projects. For September 2009 the DAU aims to deliver eight new primary schools (2,800 school places) and one new post-primary school (350 places in the first phase).

21.23 The Accounting Officer informed me that as a result of the 2008 programme, the Department did not receive indications from schools, as in previous years, that there were any major difficulties in securing accommodation and there was no area of the country where school places were not available for eligible primary school pupils for September 2008.

21.24 She added that, since the introduction of the GIS system, the Department is now in a position to forecast increases in demand for school places further in advance than was the case previously. The facility for earlier prediction of likely demands should increase the range of options for delivery of school accommodation.

Improving Information Processing

21.25 The Accounting Officer informed me that the Department was progressing work to improve its systems in order to facilitate access to accurate and up-to-date information on individual schools, both to ensure more efficient use of official time and to reduce the administrative burden on schools.

21.26 The Department is committed to improving its IT infrastructure and is upgrading IT systems in order to enhance the capacity for ready retrieval of information. A unified data model designed to rationalise, standardise and unify the Department's main data holdings, so as to provide a solid foundation on which to build new systems, is being implemented. The Department has indicated that the pace of progress will be dependent on available financial, human and IT resources.

Project Assessment and Approval

21.27 The progression of a school building project from application through to construction phase is a function of the priority attaching to it and the availability of the necessary financial and other resources.

21.28 There are three key decision points in the process. These are

■   assessment and approval in principle of the project and assignment of a band rating

■   the decision to allow the project to enter architectural planning

■   the decision to approve the project to proceed to tender and construction.

Key Steps in Assessment and Planning Stages

■   Assessment of applications by PBU including

-     enrolment policy, staffing, existing accommodation, housing developments in the area

-     school inspectors recommendations

-     consideration of accommodation condition and demand factors

-     consideration of long-term sustainability

■   Approval and band rating against prioritisation criteria (see Figure 81)

■   Site visit, plans, drawings

■   Land acquisition (if necessary)

■   Project brief

■   Recommendation to Minister designed to match urgency and financial provision

■   Ministerial decision

■   Ministerial approval to proceed to tender and construction

■   Architectural planning

Thereafter, it follows a normal public procurement cycle for public construction work.

Project Prioritisation

21.29 Each school project is assigned a band rating that takes account of

■   individual school requirements

■   an assessment of school condition (triggered by a capital grant application)

■   the overall requirement for accommodation in the area

■   the provision of special needs accommodation.

21.30 In response to my enquiries as to how the banding system determines or informs decisions, the Accounting Officer explained that the priority rating assigned to projects under the banding system broadly determines when a project is advanced to architectural planning and through the stages of architectural planning, tender and construction. While decisions relating to the inclusion of projects in the capital programme are made on the basis of a large range of factors, the priority band rating of the projects is a major consideration.

21.31 In general, a proposed project's band rating is not reviewed unless circumstances change or new demographic information becomes available, changing the requirements of the project. While these criteria are used to classify potential projects, the timing of their delivery is dependent on the availability of funding at specific decision points, local project readiness to proceed and the stage the project has reached in architectural design.

21.32 In the case of an existing school, the process normally begins with an application for a major capital grant, setting out the case for investment, including the forecast enrolment growth. The case for a development is assessed by the PBU which takes into account any shortfall in accommodation, demographic growth in the area, the size of the school site and the willingness or suitability of the school to enlarge, extend or refurbish, as well as curricular improvements. In

addition, existing schools may be approached directly by the Department with regard to possible expansion where the Department is aware of the need for additional school places in an area.

Planning up to 2008

An independent New Schools Advisory Committee (NSAC) provided advice to the Minister on recognition of new primary schools from 2002 until September 2008 when its term of office expired and the Minister announced a review of the criteria and procedures for the recognition of new schools. The NSAC was established following a report of the Commission on School Accommodation which is an independent body comprised of representatives of all the education partners and the Department. The Commission also has responsibility for agreeing Area Development Plans with education stakeholders. These Area Development Plans were the main forward planning approach used by the Department before they were largely replaced by new consultation procedures.

21.33 Greenfield sites, where no patron has yet emerged, necessitate proactive planning by the Department. Where the Department has identified need in an area, it notifies patrons of its intention to establish a new school, invites applications to become patrons and commences site acquisition in concert with the local authority.

Figure 81 Summary of Prioritisation Criteria for School Building Programme[a]

Band	Details
1.1	New school or extension in developing area
1.2	Accommodation for special needs students
1.3	School that is structurally unsound
1.4	Rationalisation project
2.1	Major extension of existing school and extensive refurbishment
2.2	Major extension of existing school
2.3	Extensive refurbishment
2.4	Extension of existing school and moderate refurbishment
2.5	Extension of existing school
2.6	Moderate refurbishment
3.1	Ancillary accommodation for special education and some improvements only
3.2	Ancillary for special education only
3.3	Deficit or ancillary (other than special education) and some improvements
3.4	Deficit or ancillary (other than special education)
3.5	Improvement works
4	All other requests

Note:

a   These have been used since 2003, and were revised in 2004.

21.34 The Accounting Officer stated that the prioritisation system attached particular priority to the need for new or additional accommodation in those areas of the country which were experiencing rapid population growth. This was on the basis that classroom accommodation has to be provided for school-going children in these areas.

21.35 Schools that were structurally unsound also receive a high band rating. Within Band 2, schools requiring extensions to provide additional accommodation for mainstream classrooms and extensive refurbishment received a higher priority than those which required a major extension only or a refurbishment only.

21.36 The system also differentiates between extensions which were required to meet a deficit of mainstream classroom accommodation and those which were required to meet a deficit of ancillary accommodation.

21.37 There is a balance required between the ongoing needs to ensure sufficient accommodation for all children and accommodation of a requisite standard within the existing building stock.

Factors Impacting on Programme Cost

21.38 The Accounting Officer informed me that the economic environment now pertaining in the construction industry presented both an opportunity and a challenge for the delivery of the Department's primary school building programme.

21.39 In 2009, tenders for school building projects were significantly lower than in the last number of years. However, due to the new circumstances being experienced throughout the construction industry, challenges were arising for the PBU and external design consultants in terms of the operation and management of large public tender competitions and the management of projects on-site.

21.40 The introduction of the new form of contract[73] for major capital projects in the public sector was a welcome development and should lead to improved certainty for the Department and schools on school building projects, including the risk factors arising from the changed operating environment within the construction industry.

21.41 However, the Department's experience had been that the industry was taking longer than anticipated to adjust to the requirements of the new form of contract. This had led to delays in the preparation of tender documents by design teams and had also resulted in submissions of poor quality being received by the Department. The quality of these submissions was such that they required extensive revisions. These revisions added to delays in bringing projects to site.

21.42 In response to this, the Department had organised a series of briefing workshops for design teams. Feedback from the industry has indicated that the cost overhead of the necessary training and development of expertise to prepare the new form of tenders was significant.

21.43 The Department had been required to provide a high level of interaction and support to external design teams in order to ensure that tender documents were completed correctly and in accordance with public procurement and other requirements arising from the revised procedures. This also had resource implications for the Department itself.

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[73] Introduced in October 2006 as part of a wider process of construction procurement reform – the contract aims to address concerns about the extent of cost overruns in public works projects, in part by using fixed price lump sum tenders.

Conclusions

The Department has begun to address the need to consolidate its information on schools, including the demand for places. However, it needs to press ahead with its initiatives in order to ensure that a reasonably predictive planning model emerges, capable of ensuring that primary school accommodation demand is identified promptly and met.

Likewise, it has begun to address the need for an inventory of accommodation capable of being linked to its planning information. Again, it needs to bring this to a conclusion and integrate information on both permanent and temporary accommodation into its central planning system.

A detailed banding system informs decisions on the prioritisation of projects. Ultimately progression while informed by that system is a factor of available finance and perceived urgency. Decisions on project progression are taken by the Minister following recommendations by the Department.