

DOCUMENT 2

Enabling Infrastructure & Sports Pitches

**GUIDELINES FOR THE APPRAISAL AND MANAGEMENT OF CAPITAL
EXPENDITURE PROPOSALS IN THE PUBLIC SECTOR**

Multi Criteria Analysis

Projects costing €5m - €30m

Institute of Technology Tallaght

Proposed Project: Enabling Infrastructure & Sports Pitches

1 - Background on the Institute to include details of:

a) Current student numbers F.T.E.

3183

b) Historic trends on student numbers + or -.

Note Analysis based on Full Time Equivalents

Table 1.

2004/2005	2003/2004	2002/2003	2001/2002	2000/2001
+1%	-5%	-7%	0	+4%

c) If minus, reasons for decline and indicate measure to arrest decline in numbers

2002/2003.

The decline in student numbers reflects the decline in student enrolment on engineering, computing and science courses nationally and internationally.

Electronics programmes nationally have been under severe pressure and there has been a fall-off in computing as well particularly amongst young women taken up computing as a career. Against this national decline the rate of decline at ITT Dublin has been less than the national average. This is due to increases in participation rates from disadvantage areas in our region and innovative course redesign to produce programmes like the FLASHE programme for mature students. Furthermore in the academic year 2004/2005 there was a reduction in the number taking our part-time courses, 859 compared to a figure of 1213, in the academic year 2003/2004. The dot.com crisis is thought to have contributed to the decline in part-time numbers in as multinational companies reduced their training budgets.

The School of Engineering has undertaken a root and branch redesign of its programmes to address issues of access and attainment. An electrical apprenticeship programme has commenced which will grow over the next number of years. These initiatives are detailed further in the submission regarding the Engineering Building. The numbers in the part-time programme increased to 1181 in the academic year

2005/2006 as a result of a new marketing initiative within the Institute and a more directed advertising campaign.

The Institute has increased the number of Higher Certificate (Level 6) and Degrees (Level 7) we offer through the CAO from 10 in 2005/2006 to 21 in 2006/2007. As a result of these changes and a more focused marketing campaign with schools within the region, the total mentions on the CAO has increased by 24% with an increase of 9% for first preferences and 29% for second preferences. Furthermore, due to market demand within the our region we have increased the number of Honour Degree (Level 8) programmes from 3 to 8 on offer through the CAO for the academic year 2007/2008.

d) Forecast of student numbers for next 5 years with basis for projection.

We forecast a modest growth of 1% to 2% given that we are already operating at capacity in numbers as due to space requirements we are limited in the number of new programmes that we can offer. However, we do forecast an increase in numbers in engineering as detailed separately in the Engineering section submission. With the introduction of more space as a result of new buildings, we will introduce new programmes in civil and environmental engineering, sports science, social science, apprenticeships and increased numbers in Audio Visual media. Currently there are no civil, environmental, sports science and social science programmes on offer in the Institute.

These student numbers are based on the existing accommodation and no additional numbers have been allowed for any new buildings as these are not expected to be completed within the next five years.

2 - Faculties/Schools in Institute

a) Current main faculties/schools within the Institute.

School of Business & Humanities
School of Computing & Science
School of Engineering

b) Historic (5 years) student numbers within the schools/faculties.

Table 2a shows the full time registration figures for the School of Business & Humanities.

2005-2006	2004-2005	2003-2004	2002-2003	2001-2002
1303	1507	1396	1395	1274

Table 2b shows the full time registration figures for the School of Computing and Science

2005-2006	2004-2005	2003-2004	2002-2003	2001-2002
458	435	533	609	576

Table 2c shows the full time registration figures for the School of Engineering

2005-2006	2004-2005	2003-2004	2002-2003	2001-2002
486	476	476	506	516

c) If schools/faculties are in decline, reasons for decline and identify measures to arrest decline.

(i) School of Business & Humanities. No decline. In the academic year 2004/2005 too many students were taken into the School.

(ii) School of Computing & Science. Decline in numbers due to fall off in numbers taking the Leaving Certificate and numbers taken a Science subject. There has also been a decline in the number opting for Computing programmes particularly amongst females. The school has increased the number of offering through the CAO and will increase the number of Honour Degree offerings through the CAO in 2007/2008. It is undertaking a Programmatic review and will be developing new programmes e.g., in sports science. A number of initiatives have been introduced to encourage second level students to consider science as a career option. The number taking part-time courses in Pharmaceutical science continues to grow.

(iii) School of Engineering. See Document 3 – Engineering Building.

d) Planned growth in new courses and basis for this expansion.

(i) School of Business and Humanities. The School is developing ab-initio Honours Degree programme in Business Accountancy, Higher Diploma in Business Marketing, Master of Business Management (ACCS mode) and Master of Business in Technology Management (ACCS mode). The basis for the expansion is that the majority of students entering business wish to obtain an Honours Degree. These new programmes will be offered in parallel to the existing Higher Certificate and Ordinary degree programmes. The Master programmes are being developed for part-time delivery in response to National targets for increasing the numbers with Masters and PhD's working in business and industry. It is planned to develop programmes in social science in response to a demand for such programmes in the region.

(ii) School of Science & Computing. The School is developing honours degree programmes and Master degree programmes and will also be increasing the number of those taking PhD's. The School has one of the largest part-time programmes in the sector. The School has identified a significant skill shortage in the region for scientists trained to operate and manage pharmaceutical production facilities. In 2000, the Department of Applied Science established the National Pharmaceutical Education Centre (NPEC) within the Institute to meet the needs of industry in the area. Since the opening of the NPEC, the Institute has been providing a wide variety of training courses, academic qualification and topical conferences which are specifically designed for the pharmaceutical industry. The NPEC has delivered training and educational programmes to a wide range of companies including: GENZYME, Ivax, Guidant, Wyeth, Biopharma, Wyeth Medica, Helsinn Birex Pharma, Takeda, Organon, BMS, Scherling Plough, Baush & Lomb, GSK, Pfizer, Merck, Sharpe & Dohme.

Currently there are 48 postgraduates students in the School of Science with 9 of those registered for PhD's. (In total across the three Schools in the Institute there are 65 students studying on full time research degree program. It represents 8% of

the total number of research degree students currently registered with the Higher Education and Training Awards Council)

An Honours Bachelor of Science in IT Management (Level 8) is under development as a follow on programme to the existing BSc in Information Technology. It is intended to run this programme for the first time in 2008 in the full time mode. A new Higher Diploma in Computing (Level 8) will be offered for the first time in 2008 in the part-time mode. It is intended to offer an ab-initio BSc (Hons) in Bioanalytical Science and one in Applied Chemistry in the academic year 2007-2008. An MSc (Qualified Person) will be offered in the part-time mode of study in the academic year 2007-2008.

It is intended that the School of Science and Computing will expand into areas within the existing building which will become vacant with the completion of the Engineering building.

(iii) School of Engineering.

See Document 3 – Engineering Building.

3 - Overview of existing accommodation

A brief outline of existing accommodation to include the following:

a) Total area:

Main Building 15,047 square metres

b) Ratio of accommodation to student:

1 : 4.73 (FTE)

c) Describe age and condition of each building:

The Institute opened in September 1992 with a floor area of 9,136 square metres. The Phase 1a extension, which was completed in 2001, brought the total floor area of the building up to 15,047 square metres.

The building is in good condition.

4 - Proposed new project

a) State exactly what is required.

The Enabling Infrastructure Project is one of four projects that was recommended under Phase 1 of the Kelly Report.

This project will provide all necessary enabling infrastructure to permit the orderly completion of the campus master development plan.

The project comprises the following:

External Sports Facilities

2 no. full size all-weather artificial sports pitches
Tennis Courts – 3 no

External Infrastructural Works

Site Entrances
Site Roads and Footpaths
Main Drains – surface water
Main sewers – foul
Surface water attenuation
Land drains
Watermains
Gas Distribution
High Tension Electrical Distribution
Transformers
Road Lighting
Trenching and Ducting
Diversion of ESB cables at east side of campus
Boundary treatment
Fibre optic loop
Structural Landscaping
Relocation of travellers halting site

b) State the area required. Attach a schedule of accommodation.

Not applicable

c) How many students will the proposed new facility accommodate?

The enabling infrastructure will provide facilities for a campus of over 5,000 students.

d) Provide a detailed justification for the project.

This project will enable the development of the three other projects as recommended in the Kelly report and will facilitate the further implementation of the campus master development plan.

e) How does the project support the mission statement of the Institute?

ITT Dublin is the regional higher education institution of South Dublin County. We aspire to be a major contributor to the social, cultural and economic life of the County, and the surrounding region. The enabling infrastructure project will enable us to fulfil this element of our mission.

f) How does it integrate with the Institute's master-plan? When was master-plan prepared?

This project is an integral part of the institute's agreed 2003-2009 master plan which was prepared in 2001. The master plan has been agreed with the Department of Education and Science and the local authority planners.

- Yes. The Enabling Infrastructure project is one of four projects on the campus of ITT Dublin which together supports a strong and internationally competitive Greater Dublin Area (GDA) driving both its own economy and national development.

"The National Spatial Strategy supports Dublin's pivotal role in national economic success. It is essential for balanced regional development that the performance of the Greater Dublin Area be built upon and physically consolidated"

Main Points – page 38

National Spatial Strategy for Ireland 2002-2020

h) Does it contribute to social and cultural development? Explain how.

Yes. Please refer to the Multi Criteria Analyses for the Engineering, Multi-Purpose / Student Centre and Catering and Tourism Buildings.

i) Are there any other benefits attaching to this project?

It will be beneficial to the operation of the Institute to have all the necessary infrastructure put in place as a result of one project. This will avoid the disruption of having to provide individual infrastructural facilities for each building as and when they come to be built.

6 – Impacts

a) If the project is geared for a course or school in your Institute and there are broadly similar courses or schools available in surrounding institutes, comment on the impact of this competition for students and close geographic overlapping.

Not applicable.

b) Are there any other impacts attaching to this project?

The provision of enabling infrastructure facilitates the cost-effective development of the campus in line with the master development plan and will permit future development without significant disruption to the operation of the campus. An all-encompassing infrastructure project would provide best value for money compared to piecemeal provision of infrastructure as and when required for individual developments.

7- Options

In assessing the need for this project, state the following:

g) Was the project recommended in the Kelly Report?

Yes

h) Is this the Institute's main priority project?

Yes, the Kelly Report approved four projects - Multi-Purpose Centre, Catering & Tourism Building, Engineering Building and Enabling Infrastructure (including sports pitches).

5 - Benefits

How will the project contribute to the following:

a) Will it allow the Institute to grow its enrolments and if so by how many, and timeframe for growth?

As previously stated the Enabling Infrastructure project will allow the orderly development of the campus master development plan. Growth will be in line with the students numbers contained the Multi Criteria Analyses for the Engineering and Catering and Tourism Buildings.

b) Will it allow the Institute to arrest decline in enrolments and if so explain how?

Please refer to the Multi Criteria Analyses for the Engineering and Catering and Tourism Buildings.

c) Will the project contribute to expansion of course options at the Institute? If so detail same and explain basis.

Please refer to the Multi Criteria Analyses for the Engineering and Catering and Tourism Buildings.

d) Will the project contribute to increased research capacity (4th level)? If so, explain how, show potential numbers and state basis for projections.

Please refer to the Multi Criteria Analyses for the Engineering and Catering and Tourism Buildings.

e) Will it contribute to economic development at a national, regional or local level? Explain how.

Please refer to the Multi Criteria Analyses for the Engineering and Catering and Tourism Buildings.

f) Will it contribute to upskilling, addressing identified skills needs or retraining? Explain how.

Please refer to the Multi Criteria Analyses for the Engineering and Catering and Tourism Buildings.

g) Does it support the National Spatial Strategy? Explain how.

a) What other options were considered?

There are no other options. Enabling infrastructure must be provided to allow the development of the other three projects recommended in the Kelly report and the further implementation of the campus development plan.

b) Detail why each individual option was not favoured?

See 7a.

c) Was the option of doing nothing considered and what are the consequences of doing nothing?

See 7a.

d) Explain the rationale for selecting this preferred option?

See 7a

8 - Programme

a) Show the indicative programme for the design and construction of this project.

We understand that it is likely that the 4 projects on the ITT Dublin campus are likely to be procured by way of a PPP. Because of this, this information requested does not apply.

b) Indicate the milestone dates such as appointment of design team, planning permission, tendering, going to site, contract duration and completion.

We understand that it is likely that the 4 projects on the ITT Dublin campus are likely to be procured by way of a PPP. Because of this, this information requested does not apply.

c) Provide details of project co-ordinator, and project board to which the co-ordinator will report?

We understand that it is likely that the 4 projects on the ITT Dublin campus are likely to be procured by way of a PPP. Because of this, this information requested does not apply.

9 – Costs

a) Complete total project cost (TPC) sheet to include fees, fit out, furniture and equipment, planning and all other charges etc.

See Appendix 1

- b) **Provide indicative cash flow profile by year to distinguish between fees, contractor's costs, infrastructure works, commissioning costs, fit out, furniture and equipment.**

We understand that it is likely that the 4 projects on the ITT Dublin campus are likely to be procured by way of a PPP. Because of this, this information requested does not apply.

- c) **Detail any additional recurrent costs associated with this project.**

We envisage that additional costs such as grounds maintenance, landscaping etc. will be incurred.

10 – Risks and Constraints

- a) **Identify the risks and constraints associated with the preferred option.**

None identified.

- b) **Identify potential impact on the preferred option of adverse circumstances. (eg asbestos/dry rot/roof condition in refurbishment projects. Ground conditions/planning delays or conditions/archaeological finds in new build projects etc.)**

There is a low probability of archaeological finds.

There is a possibility of encountering difficult ground conditions.

- c) **Indicate how risks will be mitigated and /or managed**

Archaeological finds. We will have excavations monitored by an Archaeologist.

We have undertaken work in the vicinity of the proposed site with no archaeological finds to-date

Ground Conditions. An allowance for piling has been made in the cost plan.

Appendix 1

Total Project Costs

**DEPARTMENT OF EDUCATION AND SCIENCE - PLANNING AND BUILDING
UNIT**

TOTAL PROJECT

COST

INSTITUTE/COLLEGE

Institute of Technology Tallaght

PROJECT

**Infrastructure
Project**

PROJECT DESCRIPTION

Provision of infrastructure, landscaping and sports facilities to enable the orderly development of the campus in the future.

**PROJECT
STAGE**

(Stage on which Total Project Cost is based)

1

BASE DATE 31st December 2005

				TOTAL COST
				€
1	BUILDING CONTRACT	€/m²	Total	
1.1	Basic Building Cost (New Build)	m ²	0	
1.2	External Works Allowance	%		
1.3	Abnormal Costs			
1.4	Works to Existing (if applicable)	m ²		
1.5	Fixed Furniture and Associated Fittings			
	Construction Cost	€	6,957,673	6,957,673
		Less V.A.T. (13.5%)	-827,565	
			6,130,108	
2	PROFESSIONAL FEES			
2.1	Architect	6.10 %	373,937	
2.2	Quantity Surveyor	3.05 %	186,968	
2.3	Civil/Structural Engineer	2.35 %	144,058	
2.4	Services Engineer	2.35 %	144,058	
		13.85 %	849,020	
2.5	Project Supervisor Design		50,000	
			899,020	
	Value Added Tax, 21%		188,794	1,087,814
3	LOOSE FURNITURE & FITTINGS			
3.1	Estimated cost			
4	EQUIPMENT			
4.1	Estimated cost (based on submitted schedule)	included in 3 above		0
5	SUNDRY COSTS			
5.1	Advertisement for selection of tenderers		5,000	
5.2	Planning Application fee			
5.3	Fire Certificate Application fee			
5.4	Clerk of Works			
5.5	Service Charges, Statutory Contributions			
5.6	Increased Costs during construction or Price Variation Buy-out			
	(estimated amount inclusive of post contract fees, if applicable)		695,767	700,767
5.7	Other, if any (specify)			
	TOTAL PROJECT COST	€		8,746,254