

**CAPITAL INVESTMENT PROGRAMME
2005-2014**

DAA/CIP03, MAY 2005



TABLE OF CONTENTS

TABLE OF CONTENTS.....	2
INTRODUCTION AND SUMMARY.....	3
SUMMARY - PROPOSED QUANTUM OF CAPITAL EXPENDITURE 2005-2014.....	4
1. STRUCTURE OF THE DOCUMENT.....	5
PROJECT CLASSIFICATION	5
PROJECT DRIVER.....	5
STAGE OF DEVELOPMENT OF THE PROJECT.....	7
PROJECT SHEET TEMPLATE	7
2. THE BUSINESS CONTEXT	9
PASSENGER GROWTH FORECASTS.....	9
EU/US NEGOTIATIONS ON OPEN SKIES.....	11
NEW LEGISLATIVE PROPOSALS RE PASSENGERS WITH REDUCED MOBILITY	11
3. THE FINANCIAL AND REGULATORY CONTEXT	13
AIRPORT CHARGES AND THE ABILITY TO FUND INVESTMENT	13
CONSULTATION WITH USERS	14
4. DUBLIN AIRPORT INVESTMENT PROGRAMME.....	16
THE MASTERPLANNING CONTEXT	16
DRIVERS, SERVICE STANDARDS AND TRIGGER POINTS	18
KEY TRENDS.....	21
5. DUBLIN AIRPORT 10 YEAR CAPITAL INVESTMENT PROGRAMME BY PROJECT.....	29
6. GROUP AND SHARED SERVICES 10 YEAR CAPITAL INVESTMENT PROGRAMME BY PROJECT	30
APPENDIX 1 - TRACKING THE CAPEX PLAN.....	31

INTRODUCTION AND SUMMARY

Dublin Airport Authority (DAA) has a responsibility to ensure that Dublin Airport will be able to meet forecast increases in demand at an acceptable customer service standard and in a manner that does not compromise safety standards. This document sets out DAA's best assessment of capital expenditure needed to meet these requirements at Dublin Airport over the next ten years. It amounts to €1004 million in total, of which approximately €633 million is required in the next five years¹. The document also includes details of the expenditure needed to address Group and Shared Services requirements. The bulk of this expenditure relates to Information Technology. The proposed quantum of capital expenditure for Dublin Airport and Group is summarized on the next page.

The programme reflects DAA's priorities as follows:

- Short and medium term alleviation measures to cope with the acute constraints that exist in relation to certain elements of the airport system, which must be addressed if it is to facilitate forecast traffic growth until the next tranche of terminal capacity can be delivered.
- Delivery of additional terminal capacity within four years to meet demand, including critical enabling works, which must be executed in the years prior to the commencement of construction of the new terminal.
- Addressing the urgent stated customer need for additional contact stands at Dublin Airport in the form of the proposed Pier D facility.
- Maximise utilization of existing runway capacity in the near term with the provision of a parallel runway in the medium term.
- The need to deal with a range of significant constraints at Dublin Airport across most elements of infrastructure including car parking, roads, kerbs, public transport facilities, departures concourse, aircraft parking stands, baggage handling systems and retail facilities which impact on service standards and operational efficiency.
- Executing the design, planning and permitting stage of the parallel runway to enable a "just in time" approach to delivery of this crucial capacity element
- Ongoing maintenance, compliance and refurbishment capex to maintain operability of existing assets

The programme makes no allowance for expenditure on:

- Cargo
- Aircraft Maintenance areas
- Business Aviation

It is expected that any investment required in such facilities will be delivered through a joint venture or partnership approach and will not be remunerated through airport charges.

The remainder of the document is structured as follows:

Section 1 sets out the structure of the document and provides an explanation of the fields included in each of the individual project template sheets.

Section 2 describes the business context for the current plan.

Section 3 comments on the financial and regulatory environment

Sections 4 and 5 provide an analysis of the capex needs of the airport by category, and subsequently by project, with detailed commentary and supporting analysis.

¹ Figures in this document are stated in 2004 terms.

SUMMARY - PROPOSED QUANTUM OF CAPITAL EXPENDITURE 2005-2014

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Dublin Airport	€47,142,084	€123,282,888	€181,717,704	€122,060,000	€115,340,000	€43,450,000	€74,100,000	€71,000,000	€118,000,000	€108,250,000
Group & Shared Svcs	€5,270,000	€ 2,905,000	€2,250,000	€ 2,100,000	€5,710,000	€2,120,000	€1,680,000	€1,980,000	€1,980,000	€3,860,000

1. STRUCTURE OF THE DOCUMENT

PROJECT CLASSIFICATION

The capital programme is classified according to the following elements, all of which are necessary for the effective operation of the airports system in a balanced and integrated way.

Classification	Description
Car Parking	All capital projects either directly or indirectly associated with car parking infrastructure.
Commercial Property	Projects associated with the provision of facilities to third parties which are under commercial agreement i.e. hangars, accommodation etc.
Key Infrastructure	Full range of support infrastructure for the main airport operations including all underground services and utilities e.g. gas, electricity, sewage, drainage, communications infrastructure, roads, DAA accommodation, kerbs, public transport provision, security etc.
Plant and Equipment	Heating, ventilation and air conditioning systems, baggage handling systems, generators, boilers, lifts, escalators, moving walkways, switchrooms etc.
Retail	All projects associated with the development of non-property or car parking related commercial revenue streams including DAA retail and catering outlets and facilitation works carried out by DAA on behalf of retail and catering concessionaires.
Stands and Airfield	All airside works relating to the parking or movement of aircraft and all associated utilities e.g. apron, taxiways, runways, airfield drainage, airfield electrical systems etc.
Terminal Complexes	All projects involving terminals and piers which are associated with the provision of new terminal capacity or refurbishment / compliance work within existing facilities.
Local Provision	Refers to small projects generally completed within a 12 month timeframe. As they are generally maintenance upgrades or refurbishment work on existing assets they are not planned years in advance. The CIP incorporates details of the budgeted spend for 2005 and a provision for each subsequent year.
Group and Shared Services Capex	Includes infrastructure, hardware, software and consultancy services relating to all three airports or to corporate.

PROJECT DRIVER

Capital projects are further subdivided according to 3 main grounds for the expenditure as set out below. These underpin the need for the investment. It is important to remember that, in an airport context, projects in all three categories can have safety implications. The projects in the category safety/environment/regulatory are directly driven by these requirements. The consequences of not delivering new capacity or upgrade/replacement can result in congestion in the terminal, the airfield, the roads etc., which also has safety implications and can breach required standards.

CATEGORY 1 – CAPACITY

Capacity is defined as the provision of new or extended facilities, infrastructure, systems, equipment etc. in compliance with relevant regulatory standards and to an appropriate level of service (IATA level of service B, C or D) in support of increasing levels of activity, passenger, cargo and/or aircraft movement, regulatory requirements and changing conditions. The issue of the appropriate service level standard continues to be a subject of significant debate and lack of consensus with users, with clear conflicts between the expectation of the passenger as the ultimate user and that of the airlines. The situation is further exacerbated by the failure of the airlines to adopt a consensus view amongst themselves, with radically diverging views being expressed.

CATEGORY 2 – REFURBISHMENT / REPLACEMENT / UPGRADE

This category refers to the upgrade/refurbishment and replacement of existing facilities, infrastructure, systems, equipment etc. including:

- Replacement of infrastructure, facilities and equipment at end of useful life.
- Upgrade, refurbishment, replacement deriving from surveys or inspection of facilities which are either fully depreciated or near the end of useful life, but whose working life can be extended based on a defined level of reconstruction.
- Upgrade, refurbishment deriving from failure to meet declared service level standards due to increased intensity of use or change of use from original design, etc.

CATEGORY 3 – SAFETY / REGULATORY / ENVIRONMENT

Projects which fall into this category are required either as a direct consequence of compliance with licensing standards and regulations, to meet environmental pressures and/or to meet general safety responsibilities.

Safety / Regulatory / Environmental is defined as the provision and / or modification of facilities, equipment, systems to meet existing, proposed and future requirements of licensing standards and authorities, to meet environmental pressures or to meet general safety responsibilities as defined by regulatory authorities / legislation, including,

- The Air Navigation & Transport (Amendment) Act – 1998, and previous acts.
- International Civil Aviation Organisation (ICAO)
- Irish Aviation Authority (IAA)
- Local County/City Councils
- Environmental Protection Agency (EPA)
- Garda National Immigration Bureau (GNIB)
- Department of Justice
- Department of Public Enterprise (Aviation Safety and Security)
- National Civil Aviation Security Committee (NCASC)
- EU Regulations: Slot Allocation, Ground Handling etc.
- Provision of Hold Baggage Screening as defined by ECAC

STAGE OF DEVELOPMENT OF THE PROJECT

Each project passes through a series of stages from concept to final completion. Information on the stage of development of each project is supplied in the individual project sheets, which are incorporated in this document. The stages are;

- Masterplanning
- Concept
- Proof of Concept (IT Projects only)
- Project Initiation
- Brief Development
- Options / Case Development
- Approval
- Procurement - Consultants
- Preliminary Design
- Statutory Approvals
- Detailed Design / Tender Preparation
- Procurement – Contractors
- Construction
- Handover
- Closeout

In considering the programme being presented in this document, it should be appreciated that there is greater certainty surrounding the inclusion, phasing, description and costing of projects contained in the first few years of the Investment Programme. For the remaining years plans are progressively and intentionally less rigid. Some projects currently included in the programme will be replaced over time with others that are deemed to be more important, or significantly modified in the light of new ideas and/or new requirements. Such amendments might occur as a result of changes in the pattern of demand or in response to changing airline circumstances or requirements. Each project will therefore be considered on its own merits and a project's inclusion in this document does not constitute an absolute commitment to that project at the costs stated.

PROJECT SHEET TEMPLATE

A separate project sheet is provided for all material projects i.e. those with expenditure in excess of €250,000 in the period 2005-2014². The key facts about each project are incorporated in this sheet with references to support documentation where appropriate. Explanations for each of the fields incorporated in the template sheet are provided overleaf.

For commercial projects, the standard hurdle rate which must be achieved before a project is approved is ■■■ after tax. This reflects the higher level of risk inherent in purely commercial projects. Where commercial projects also play an important facilitation role, a rate closer to the regulatory WACC may be considered.

² Should the Commission wish to review specific projects listed in the master spreadsheet with spends beneath this threshold, please advise and DAA can provide further details of same.

CIP X.X

All projects have a unique CIP No. that enables projects to be tracked over time and across future CIP documents

Project Number		Project Title	Project title identifies the project
Project Description		Unique project code assigned by DAA Project Costing System upon formal initiation	
Summary of the project setting out the specification and main purpose			
Classification		Driver	
Type of project: Car Parking; Commercial Property: Key Infrastructure; Land/Cargo; Plant & Equipment; Retail; Stands & Airfield; Terminal Complexes; IT Projects		Classification of Expenditure – Capacity; Compliance; Refurbishment	
<i>Drawing / Pictures if available</i>			
Output	Details of the outputs that the project provides – These are specified and quantified where possible		
Justification	Provides the rationale for the project e.g. to facilitate demand, ensure compliance with regulations etc. References to relevant supporting documentation are provided where possible		
Project Commencement	Year that the project is forecast to commence construction		
Project Completion	Date by when the project is expected to be completed		
Capital Cost Assumptions	Key assumptions which impact the primary cost metrics for the project e.g. night works, exclusions, non-standard inclusions, preconditions and soft costs provision		
Cost Benchmarks	Benchmark cost data, based on recent DAA cost experience and info from the airports industry. Where possible we have referenced similar projects in the fixed asset register (FAR) to illustrate benchmarks		
Pre 2005 Expenditure			
2005 – 2010 Expenditure			
Total Capital Expenditure			
Project Stage	Each project passes through a series of stages from concept to final completion. Information on the stage of development of each project is supplied in the individual project sheets.		
Stakeholder Evaluation and Consultation Status	Details of any discussion / consultation with stakeholders regarding this project		

2. THE BUSINESS CONTEXT

PASSENGER GROWTH FORECASTS

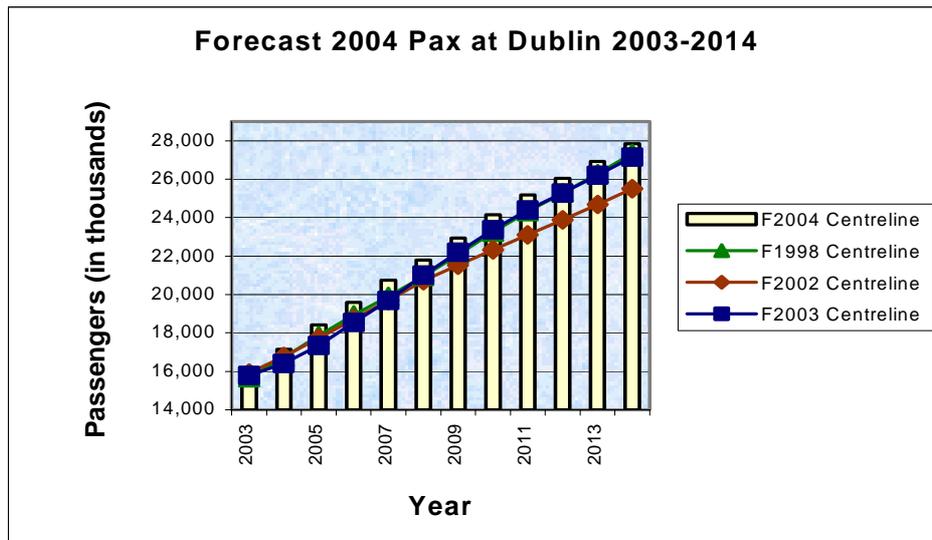
Demand passenger and aircraft forecast data are produced for Dublin Airport each year to feed into its long-term planning process. This assists the DAA in considering what investment in infrastructure is required to meet future demand and how this can be phased and funded. High and low demand forecasts are also produced to test the level of service the airport can provide if higher than expected growth occurs and to test the financial constraints implicit where growth is lower. These unconstrained projections, based on the best knowledge available, allow for a consistent and reasonable series of data to be used across the organisation.

After a series of traffic shocks in the early half of the decade (9/11, SARS, Foot and Mouth and the Iraqi War), 2004 saw a significant rebound in traffic, even though the price of jet fuel rocketed. The economic recovery, the return of business confidence, corporate investment and a pent up demand in worldwide leisure travel have all resulted in a much stronger recovery of air traffic than previously anticipated. Double-digit growth in worldwide traffic in 2004 is expected to be followed by 5% to 6% growth in 2005.

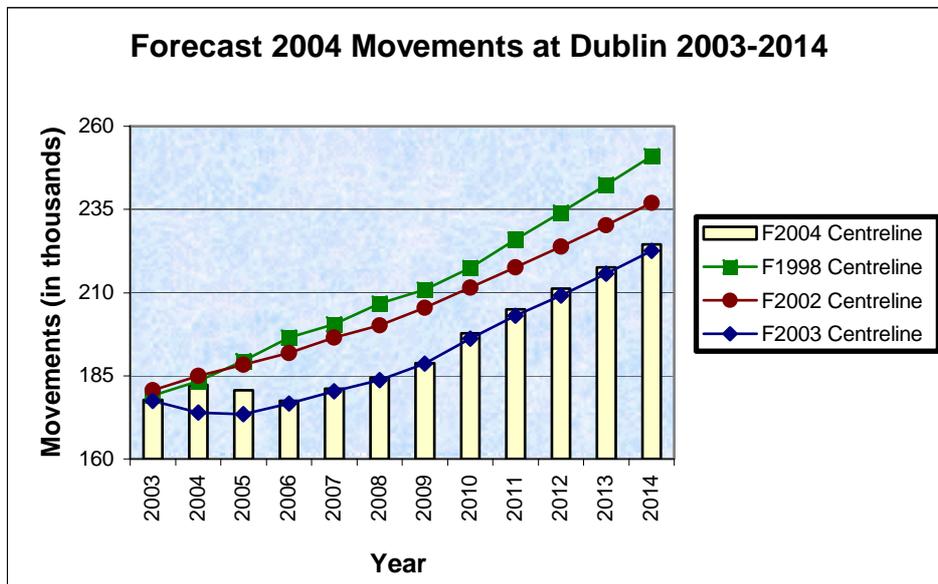
Because of the recovery in passenger numbers in 2004, after a number of sluggish years in the aviation industry, the base traffic for 2005 is significantly higher than was forecast in 2003. This means that in the short to medium term, the new forecast is roughly one year up in terms of passenger numbers, compared to the forecast done in 2003. In the longer term, the expected economic conditions and the assumptions made are quite similar. In fact Forecast 2003 gradually closes the gap on the new forecast, although it has not quite caught up by 2030.

The current forecast projects that traffic will reach 27.8 million by 2014, compared with 27.1 million in Forecast 2003. This equates to a growth of over 62% over the next 10 years, with a CAGR of 5% p.a., as compared with 5.2% p.a. in the same period for Forecast 2003.

The composition of the traffic is expected to shift markedly even over the ten-year period. Traffic on European and transatlantic routes are expected to increase because of the current expansion into Europe and open skies on transatlantic routes within the next few years. Currently Europe comprises 40% of the total traffic. This is expected to grow to 42% in 2014. Transatlantic traffic was 6% of the total in 2004, and is expected to be at 11% in 2014. UK traffic will become proportionally less important, with its overall share declining from 49% in 2004 to 44% in 2014.



The differential between aircraft movements in the current forecast and in Forecast 2003 is not particularly significant except for the opening years, due to different assumptions regarding the timing of fleet replacement. Although aircraft movements are expected to grow to accommodate increased passenger numbers, the rate of growth in aircraft movements is expected to be slower than the passenger growth rate as the average aircraft gauge increases, in particular up to 2006. This sees the number of aircraft movements flat-lining initially before it resumes climbing to reflect continuous increases in passenger numbers.



EU/US NEGOTIATIONS ON OPEN SKIES

The EU Transport Council asked the European Commission to open negotiations with the US regarding existing bilateral agreements on 5 June 2003. Following several rounds of negotiations, the Commission continues to be actively engaged with the US to develop a new legal framework for transatlantic air transport. Text has been agreed that would bring the EU-US relationship into conformity with Community law by removing all discrimination between EU airlines giving them equal opportunities to fly on any transatlantic route between the EU and US. Effectively this would provide for Open Skies between any EU airport and any US airport. Some further discussion on the final details is currently ongoing.

The traffic forecast on which this capex programme is based includes an assumption that the Irish bilateral with the US will be amended to allow two direct flights to the US from Dublin for every one flight direct from Shannon from 2006, with the introduction of full open skies between the EU/US effective from 2008. This market opening would lead to accelerated growth in wide-body traffic at Dublin Airport.

Dublin Airport has analysed the impact on the various capacity sub-systems at the airport to assess the impact of such additional traffic, in order to understand if the level of potential traffic could be accommodated. By virtue of the fact that the scenario involves additional traffic being carried mainly on larger aircraft, the effects on passenger-related elements of capacity are generally more significant than the effects on the aircraft related capacity elements, although where there is existing pressure on aircraft capacity, e.g. stands, the effect is still significant. The analysis suggests that the projected demand cannot be accommodated with existing infrastructure, even allowing for increasing operational efficiency in such areas as runway and check-in areas, without serious service deterioration.

Two main alternatives are then possible:

1. That the infrastructure is put in place to accommodate the additional transatlantic movements on contact stands i.e. development of Pier D, additional stand capacity and improvements to Piers B and C as provided for in this capex programme, or, more likely,
2. That some or the potential traffic gains at Dublin will be suppressed pending the provision of capacity.

NEW LEGISLATIVE PROPOSALS RE PASSENGERS WITH REDUCED MOBILITY

The European Commission has prepared a legislative proposal which, if implemented, will oblige airport operators to assume the responsibility for passenger handling arrangements for Persons with Reduced Mobility (PRMs). Under the terms of this proposal, an airport will be obliged to organise a centrally administered system for providing assistance to PRMs and must set quality standards for assistance as specified in the Commission's proposal. DAA fully acknowledges its responsibility in ensuring that airport infrastructure and facilities are accessible to all passengers. However, the regulation could require the extension of the range of services made available for those passengers who might require assistance within the airport complex.

The European Commission's proposal will be dealt with swiftly in the European Parliament and it is a priority under the Luxemburg and UK Presidencies (Council). The current proposed implementation date of the regulation, late 2006 / early 2007, will be within the period of the new Determination.

At this stage it is difficult to fully assess the implications for capex (and opex) of this proposed legislative development, therefore specific allowances have not been made as part of this capital programme to

deal with any issues that may arise as a result of its implementation. If it is the case that specific capital expenditure is required to address legislative requirements in this area in the course of the Determination period, then the Commission must signal that it will allow this expenditure when rolling forward the RAB at the next occasion.

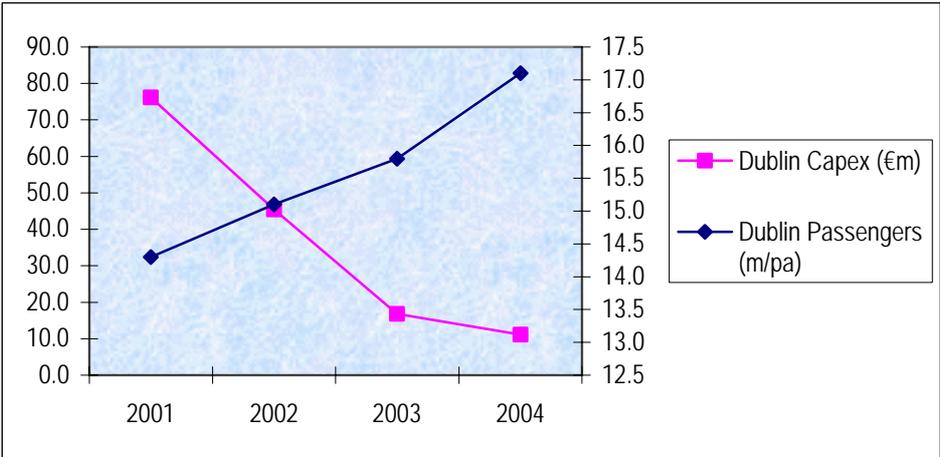
3. THE FINANCIAL AND REGULATORY CONTEXT

AIRPORT CHARGES AND THE ABILITY TO FUND INVESTMENT

Section 33 of the Aviation Regulation Act 2001, as amended by the State Airports Act 2004, stipulates that in making its Determination, the Commission for Aviation Regulation must aim to facilitate the efficient and economic development and operation of Dublin Airport, which meet the requirements of current and prospective users. In doing so it must also have regard to, inter alia, the level of investment in airport facilities, in line with safety requirements and commercial operations, in order to meet current and prospective user needs.

In the regulated environment in which DAA operates, the extent of the capital expenditure that is allowed by the Commission for Aviation Regulation to be recouped through airport charges has a critical impact on the scale and scope of infrastructure, which can be delivered by the airport authority and on the timing of that delivery. In a single till environment investment must be underpinned by additional aeronautical revenue as commercial revenue is already built into the Determination. In order to undertake investment DAA must be in a position to earn a reasonable return both on and of its required investments. This is necessary to attract the requisite capital, be it debt or equity, to support the investment, otherwise the investment cannot take place.

The graph below illustrates this point. In its 2001 Determination the Commission allowed €235 million in recoverable capital expenditure for Dublin Airport over the period 2001-06. In DAA's view, this was insufficient to meet the capital investment requirement for Dublin Airport. However as the company is not remunerated for any capex in excess of that allowed and therefore could not fund the required level of expenditure, DAA was forced to confine capital expenditure in light of levels allowed in the Determination. In addition Pier D was put on hold following a statutory direction from the Minister for Transport. As a result, in the period from 2001-2004, the annual capital expenditure at Dublin Airport reduced dramatically to a level of €10m in 2004, while in the same period the numbers of passengers passing through the airport grew strongly. This is clearly an unsustainable situation.



In this context, the current plan reflects the impact of a number of years of intense capital rationing and the resultant deferral of projects. If the critical under-funding of capital requirements is not addressed in the current Determination, the company will not be in a position to put capacity in place to meet demand.

The implications of this are as follows:

- Serious service level deficiencies will continue to be imposed on passengers and other airport users – in essence a re-run of the difficulties experienced in the late 1990s, which were also due to externally imposed delays on DAA's investment plans.
- The ratio of passengers that can be accommodated through pier served stands will rapidly reduce resulting in delays, inconvenience and increased costs for passengers and airlines.
- When construction can eventually begin it will have to take place in an extremely pressurized, congested environment with attendant cost and service level issues.
- In a situation where DAA is not in a position to service expected increases in demand at service and safety levels which are acceptable, then the coordinator will have no option but to set an effective ceiling on the allowable traffic at the airport. This will have potentially negative implications for the Irish economy, particularly in relation to trade, tourism, inward investment and employment.

CONSULTATION WITH USERS

The State Airports Act 2004 states that in making a Determination one of the Commission's objectives is as follows:

"to facilitate the efficient and economic development and operation of Dublin Airport which meets the requirements of current and prospective users of Dublin Airport".

Users are defined in Section 22(5) of the Act as meaning any person:

- a) For whom any services or facilities the subject of airport charges are provided at Dublin Airport,*
- b) Using any of the services for the carriage by air of passengers or cargo provided at Dublin Airport*
- c) Otherwise providing goods or services at the airport*

In this context, DAA has sought to consult with passengers and airline users at the airport in an effort to understand their requirements as follows:

PASSENGERS

DAA recently commissioned a comprehensive survey of passengers using Dublin Airport. The purpose of the survey was to provide accurate and credible information to allow DAA to identify levels of satisfaction with airport facilities and desired enhancements to customer standards and facilities where relevant. The outcome of the analysis, which was undertaken by TNS mrbi, indicates that passengers see the following areas as most in need of improvement:

- Check-in Desks
- Departure Gates/Lounges
- Passenger search area
- Baggage Delivery Facilities

- Catering/Retail Facilities

The survey (provided to the Commission on 18th April 2005) also illustrated that a majority of passengers are willing to pay up to an additional €3 per passenger in airport charges to fund improvements in these services/facilities.

AIRLINES

Following a detailed interaction with users regarding the masterplan for the airport in 2002/3, DAA has engaged in a series of consultative meetings with users over the past seven months during which the drivers for proposed capex and details of major projects have been communicated. No substantive comments were received in relation to the detailed information provided in respect of individual projects.

In the course of the consultative process, users were also provided with details of the direct capex impact of the proposed Dublin Airport expenditure on charges. Based on the existing regulatory formula, DAA estimates that this amounts to circa █████ per passenger over the course of the ten-year plan, using the current CAR assumptions. Though this increase is within the range that passengers are willing to pay as communicated in the passenger survey (and ultimately the passenger pays airport charges which are separately identified on tickets and passed through directly to them by the airlines), the airline users were unanimous in their opposition to the level of increase implied by the proposed investment levels. Airlines have informed DAA that they will only accept an amount of allowed capex that does not alter the current level of charges. DAA has informed users that this level of capex would remunerate investment in repairs and refurbishments but would not allow for the provision of any significant additional terminal or airside capacity at the airport for the period of the Determination - DAA cannot and will not invest if it is not remunerated.

CAR has placed a high emphasis on its preference for a degree of consensus between the airlines and the airport authority regarding the level of capex it should allow in its Determination on the maximum level of airport charges. Despite DAA's best efforts, this consensus has proved impossible to achieve, principally due to the short-term nature of airline views.

In this context, the Commission must decide whether the DAA's informed view of capex requirements of the airport for the next ten years is appropriate in the context of the strong demand projections for the future, CAR's statutory obligations to facilitate the development of the airport to meet that demand and the expressed views of other users i.e. passengers. In making its decision the Commission's should note the short-term focus of airlines as opposed to the long-term planning and development requirements of airports and assess whether it is appropriate that this short-term focus should determine the level of investment in airport facilities. Failure to provide capacity for expansion results in reduced scope for competition between airlines, fewer new entrants in the marketplace, less choice and higher prices for consumers.

4. DUBLIN AIRPORT INVESTMENT PROGRAMME

THE MASTERPLANNING CONTEXT

The ability of an airport to expand and evolve with the growth of its traffic is greatly influenced by proper long-term planning for airport development. Previous master plans for Dublin Airport together with a professional approach to development planning on the part of the Local Authority have enabled the airport to grow to its current level and create the potential for it to continue to grow to meet demand for years to come. It is important that future plans maintain the farsighted approach to infrastructure development adopted in the past so that future generations can benefit from this visionary approach.

If Dublin Airport's key role is to be sustained in the future, it is vital that its future development is not constrained. The adoption of a long-term view is critical and it is essential that plans are properly integrated into the wider planning process i.e. National Development Plan, County Development Plan and the National Spatial Strategy. In this way, approaches to runways can be kept free of inappropriate development, adequate drainage and sewerage services can be assured and allowances can be made for access and public transport. In short, a long-range plan - over a twenty to thirty year horizon - is vital to ensure that the vision for Dublin Airport is achieved.

In December 2001, the Aer Rianta Board approved the appointment of consultants to carry out the Dublin Airport Master Plan and Optioneering Study. The company appointed Project Management International³ in association with Skidmore Owings Merrill (SOM)⁴ and TPS Consult to oversee the consultation and optioneering processes and the development of the preferred Master Plan for Dublin Airport including specific proposals for Terminal, Pier and Airside facilities. Aer Rianta also appointed Parsons Brinckerhoff⁵ to oversee the development of the internal transportation plan in support of the preferred Master Plan to include the Metro alignment, the on-airport station and a feasibility study for an internal rail link. The consultants commenced a formal structured process in January 2002 with the objective of developing a vision for Dublin Airport as a 30 million plus passenger processing facility. This process was signalled in a series of preliminary consultation sessions with Stakeholders in spring 2001.

The process was conducted over the period January 2002 to August 2003 and included a most comprehensive consultative process across the full spectrum of stakeholders including all on-airport operators and relevant key external parties. This consultative process produced the Pier D project as a critical early deliverable to meet the urgent need for contact stands at Dublin Airport.

The process comprised the following key stages;

- A detailed critical appraisal of current capacity and service levels across all elements of the system at Dublin Airport. This analysis was subsequently presented as the "Baseline Study"

³ Project Management is one of the largest project management and design service providers in Ireland

⁴ Skidmore Owings Merrill is one of the largest international Master Architect Planners with extensive airport planning and design experience including JFK Terminal 4, San Francisco, Toronto International etc

⁵ Parsons Brinckerhoff is one of the largest international multidisciplinary engineering firms with extensive transportation experience including the JFK Rail Link and the Metro alignment studies for the Railway Procurement Agency in Dublin.

-
- A detailed assessment of future needs for Dublin at 30 million passengers per annum using sophisticated forecasting models and a detailed computation of facility needs based on aircraft schedule data originating from the airlines.
 - Identification of all possible developmental scenarios assuming no constraints.
 - Reduction from all possible scenarios to 4 generic developmental scenarios based on land use criteria that are consistent with achieving the ultimate potential of the airport site.
 - The four, land use options were subsequently developed into full conceptual schemes and these schemes were subjected to rigorous critical assessment with respect to functionality, buildability and cost.
 - A detailed sensitivity analysis was conducted with reference to the agreed evaluation criteria and the four options were ranked for various attributions of weighting factors.

The process was concluded at the end of 2003 and a detailed record of the process and the outputs was produced in the form of a comprehensive report from the consultants. The report details four possible options for the development of Dublin Airport, which may be described generically as;

- Option 1 - New Airport to the West
- Option 2 - New Terminal to the West to complement the current development to the East
- Option 3 - New Terminal on the Eastern side, situated South of the short stay car parks.
- Option 4 - New Terminal on the eastern side, situated North in the location of the current maintenance Hangars

The Board of the Dublin Airport Authority has recently instituted a review of this report in the context of requirements to deliver a solution that is mindful of the following issues;

- Developments should occur on Dublin Airport Authority Lands up to the design horizon of 30 million passengers per annum. This assumption has implications for all of the Western options, as the authority does not currently possess an adequate land bank in that area. However, a sufficient land bank exists on the Eastern side of the complex to facilitate development.
- Whether development will be permitted adjacent to the Old Central Terminal Building given the sensitivity attached to it being a listed and historic building. The successful planning permission for Pier D (including access) demonstrates that a sensitive design process can align heritage protection and airport operational needs.
- The existing Multi Storey Car Parks should remain in their current locations.
- In so far as it is practical and not excessively impacting of customer service, alignments of existing access roads should be maintained.
- Whether the leases relating to buildings, which are surplus to requirements and constraining on development, can be re-negotiated in an expeditious manner. This assumption is based on the premise that key stakeholders will buy into the need for airport, and in particular terminal development, and will thus not unreasonably impose any delay on the process.
- The chosen option must offer the opportunity for the design of customised facilities tailored to the specific needs of low cost carriers. Cognisant of Government policy, the chosen option

must offer the opportunity for full physical separation consistent with the objective of maintaining the potential for full independent operation without dependence on the existing terminal or its utilities.

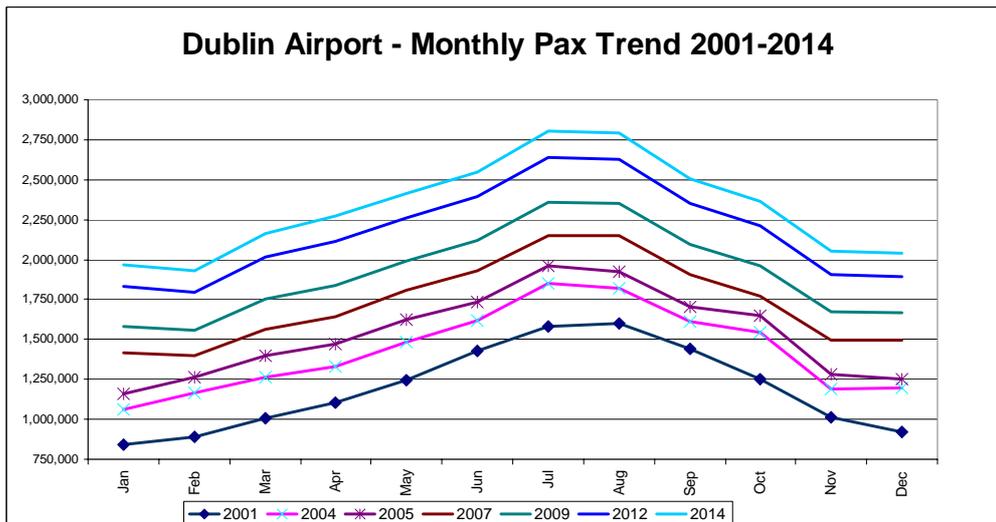
The DAA is currently in the process of completing this review and a final decision is yet to be made in respect of the location of the terminal. There are many elements to be dealt with in selecting the site for the terminal including the planning process with Fingal County Council. The two options that best address the issues identified above are Option 3 – located on the south of the short term car park and Option 4 situated north in the location of the maintenance Hangers. Both options require site clearance, road access and other ancillary work to deliver a new terminal. Both options are very similar in terms of the quantum of capex. Having the two options available provides a degree of flexibility should the selected option prove difficult to deliver for reasons outside the control of the DAA e.g. planning refusal or planning restrictions.

For the purposes of this CIP which translates the masterplan into a development plan having regard to consultation with users and other interested parties, the actual projects to be undertaken and the estimated cost associated with same are based on a modified version of Masterplan Option 4, reflecting the above points.

DRIVERS, SERVICE STANDARDS AND TRIGGER POINTS

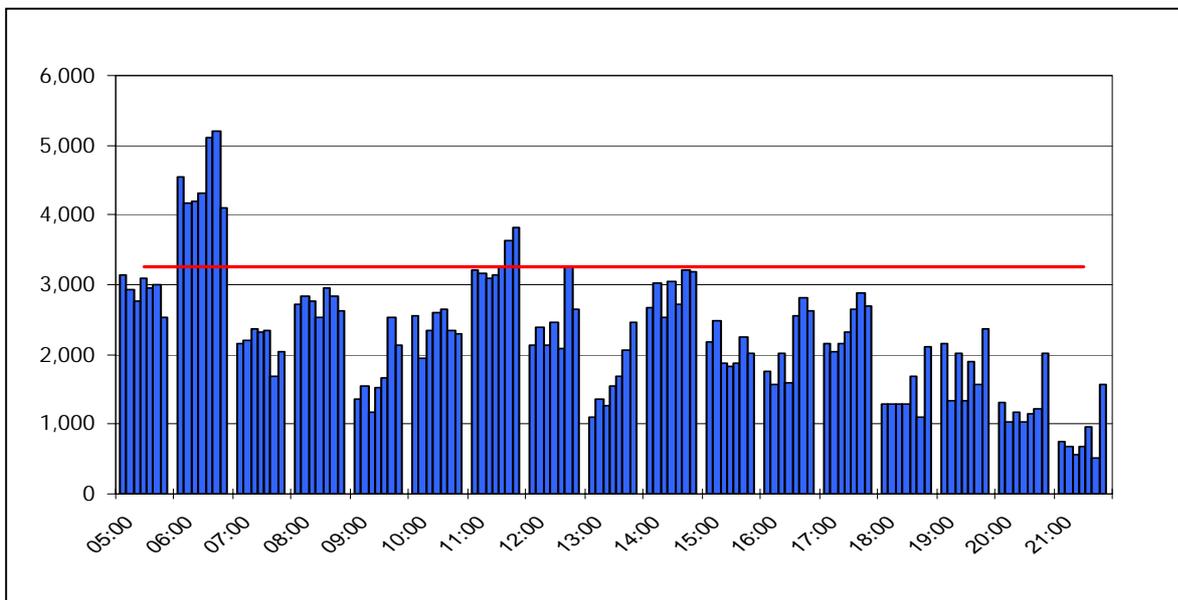
The key driver for development is demand (details of forecast demand in terms of passengers and ATMs have been provided in Section 2 of this document). For the airfield, the driver is aircraft movements; for the terminal, passenger volumes; and for piers, a combination of a demand for contact stands for aircraft parking and gate holding areas to allow for passenger assembly. The quantum of the development is both a function of service/quality standards adopted, and a function of user (airline, ground handling agent etc) efficiency. The relevant trigger point determines the timing of the delivery of the development element, with the aim of providing capacity on a “just in time” basis. The planning environment in Ireland combined with the complexities relating to the procurement of large scale infrastructure such as the next phase of terminal development and the proposed northern runway, underline the need to execute the planning, design and enabling phases of these projects with great urgency to have any prospect of providing the required capacity within a reasonable timeframe.

The graph below illustrates the forecast passenger demand, it should be noted that the two peak months in 2005 are surpassed by almost every month in 2012 and summer peaks are each 1m higher by end of plan.



Current levels of demand for airport facilities are driven by the aircraft schedules. Dublin Airport's coordinator, Airport Coordination Limited has produced information regarding the scheduled demand for the current Summer 2005 season. The chart below shows the hourly demand across the day for departure operations. The estimated number of passengers exceeds the declared capacity⁶ of 3250 passengers per hour by some 2000 passengers during peak periods (in excess of 60% over capacity). Clearly, even with the advent of a change in coordination status it will be difficult to accommodate this peak within the preceding, or subsequent hour.

Hourly Departing Passengers – Summer 2005



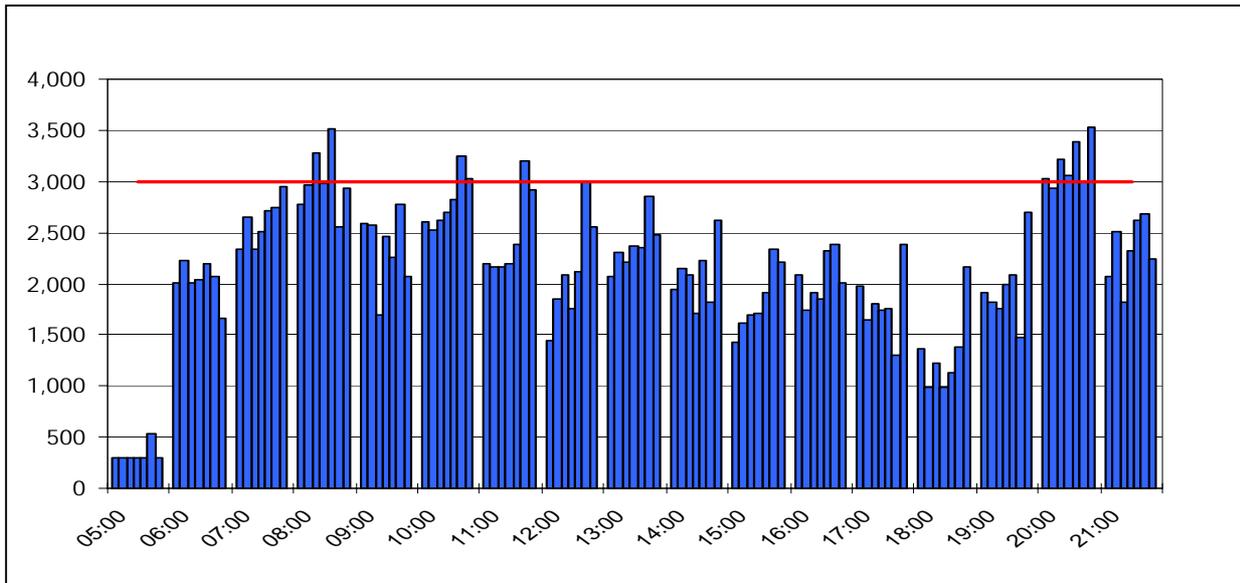
Source: ACL

⁶ Current levels of capacity on the runway and within the terminal building are determined by the declared scheduling limits established for these areas. These have been derived through independent assessment and agreed by the Dublin Airport Coordination Committee's airline, airport and ATC members.

Data from passenger counts during Summer 2004 indicate that these levels will increase further when meeters/greeters and staff, all requiring the use of areas of the terminal building are included.

Similarly, the chart below illustrates that hourly arrival passenger figures for Summer 2005 exceed the agreed limit of 3000 passengers per hour by some 500 passengers at regular intervals.

Hourly Arriving Passengers – Summer 2005

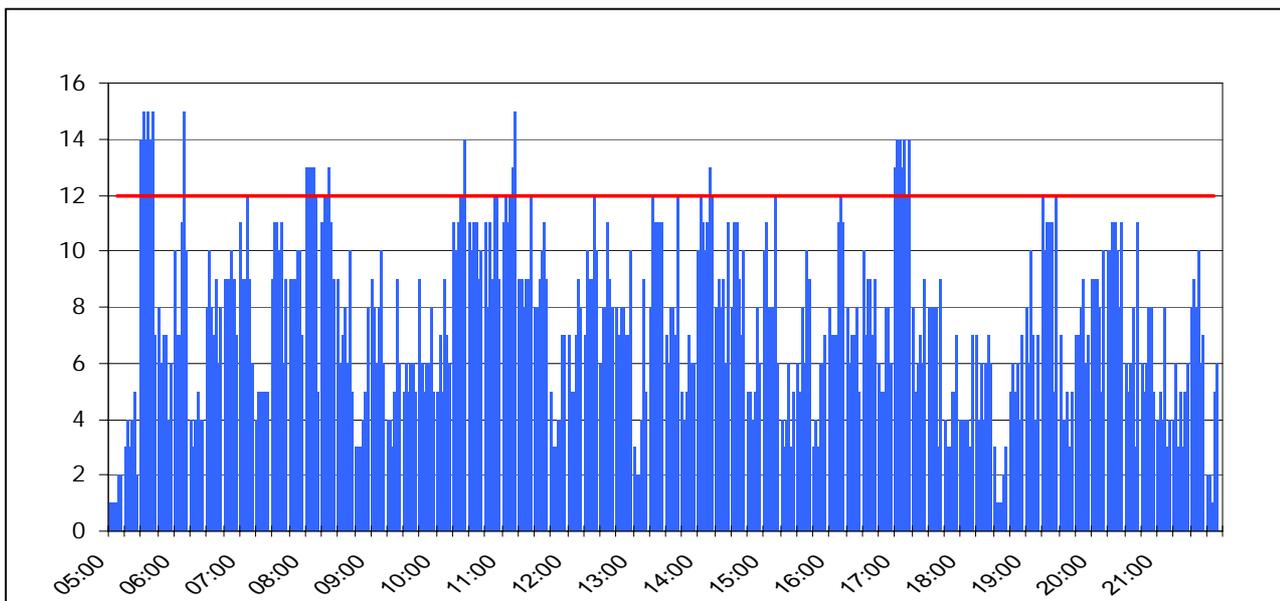


Source: ACL

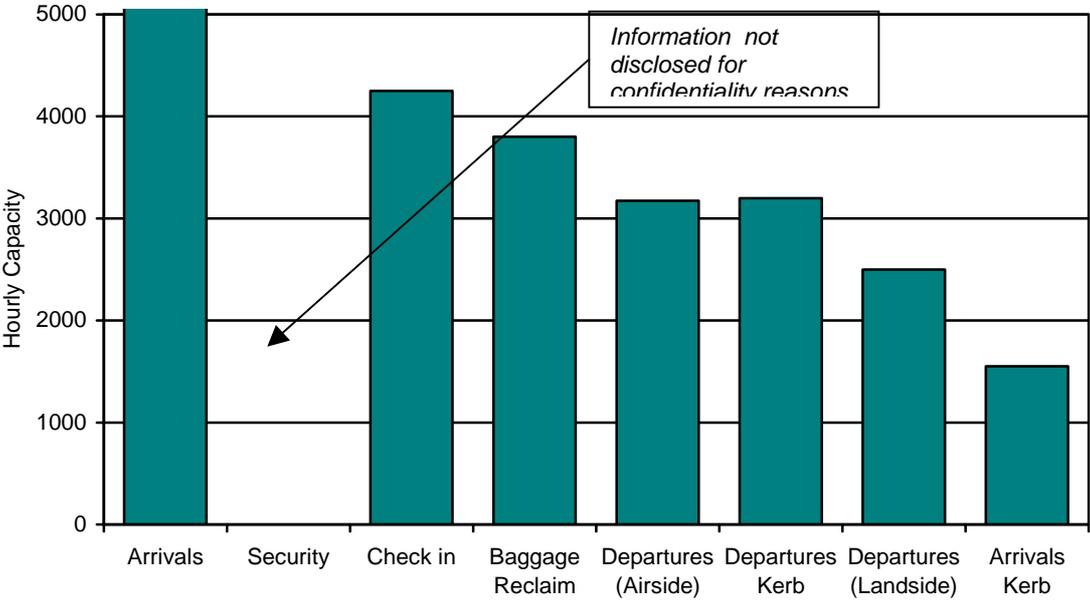
Runway limits, defined by National Air Traffic Services and also agreed by the Dublin Airport Runway Capacity Group, peak at a current hourly maximum of 46 movements. A programme has been devised by this group, in conjunction with the IAA, to maximise peak capacity to 49/50 movements on Runway 10/28.

However, the fifteen minute scheduling periods within this hourly limit are currently in excess of their capacity of 12 movements per 15-minute period. The current capacity limits match those declared at both Gatwick and Stansted, despite the additional infrastructure present at the latter two sites.

Scheduled Runway Movements Summer 2005 – Totals 15-minute period



Current levels of capacity have previously been defined within the terminal building. The following chart shows the current hourly capacity levels for each resource. It should be noted that recent changes in the security process have led to a reduction in the processing capacity of this area and subsequent resources have been required (shown in light blue) to meet the levels of demand.



* Security Process based upon survey information.

KEY TRENDS

The review of capital investment needs for infrastructure at Dublin Airport has been conducted in a highly structured manner and has been driven by consideration of the following;

- Passenger growth performance and its impact on the need for infrastructure.
- Ongoing DAA studies on the relationship between passenger growth (or aircraft growth) and demand for elements of airport infrastructure.
- The capacity studies for Dublin Airport, utilising an industry accepted best practice approach, which clearly highlight current constraints and the major areas of deficit in the context of the characteristics of the airline business as it is today following major structural changes since September 11th, 2001, and the increasing trend to the adoption of the low cost model by users, which places additional demands on elements of the airport system.
- The recently reviewed Dublin Airport masterplan, and related studies, which clearly identify the options for the delivery of future capacity along with associated timelines and capital cost estimates.

In this section, each major category of Dublin Airport infrastructure is assessed against the above four factors as they provide the essential context to DAA's assessment of Capex needs to the end of 2014.

It should be noted that the capital expenditure associated with car parking and other landside commercial developments remains under review and is not yet finalised.

CAR PARKING

The airport has more than 17,700 public parking spaces and last year provided parking for more than 2.7 million customers. An estimated 10,000 employee cars are also catered for on a daily basis representing as many parking events as passengers. DAA's public car parks are the largest single business unit in the Irish parking industry with annual turnover of €■■ million p.a. and profits in excess of €■■ million p.a. Parking charges are in line with parking charges in Dublin city centre but are low compared to tariffs at comparable airports in the UK.

During most of the year there is sufficient capacity to meet the parking requirements of passengers, their families and friends. The 3,800 space short-term car parks at the terminal building are seldom under sustained pressure. Long-term parking capacity at the airport, 13,900 spaces, was stretched to its limit during the peak summer season of 2004. The airport faces a challenge in meeting the forecast growth in parking demand. This issue is already critical in the long-term car parks where capacity, including the 3,500-space privately operated Swords Road capacity, will not meet demand in July/August 2005.

An analysis of historical data shows significant trends in parking penetration i.e. parking events per '000 passenger movements, at the airport. These rates have been declining:

In the short-term car parks, the decline has averaged 4.7% pa since 1992. In 2004, the rate was 128/'000 compared to 228/'000 in 1992.

In long-term car parks, a declining trend was also evident but the rate of decline was only of the order of < 1% pa. The 2003 level of 34/'000 was down from the 1992 level of 36/'000.

The true significance of these trends lies in their implications for the most profitable part of the car park business at the airport i.e. short-term parking that represents

■■■ of all paid parking events,
■■■ of parking revenues and
■■■ of parking profits.

A combination of passenger traffic forecasts, car park occupancy patterns and historic trends in parking penetration levels has been adapted to generate forecasts for peak parking capacity requirements and annual parking volumes for the period from 2005 to 2014. This analysis reveals the following:

Forecasts of Peak Parking Demand (Actual peak requirement)

Year	2004	2006	2008	2010	Change
Short-term DAA only New & Lost* Spaces	2,800	■■■	■■■	■■■	■■■
Long-term DAA Swords Rd DAA – Divert Other	13,900 3,500 1,000 <u>1,600</u> 20,000	■■■	■■■	■■■	■■■
Total	22,800	■■■	■■■	■■■	■■■
New Spaces		■■■	■■■	■■■	■■■

Note. These figures make no allowance for additional staff parking requirements

*Lost spaces reflect reduction in capacity due to new set down/pick up area in the horseshoe

The current practice of diverting long-term parkers to the short-term surface car park will be phased out to accommodate the increased demand for short-term parking. Similarly, the future use of car park areas within the horseshoe for drop off and pick up will result in reduced parking capacity for pay parkers.

Annual Parking Volumes



The following figures emerged from the analysis:

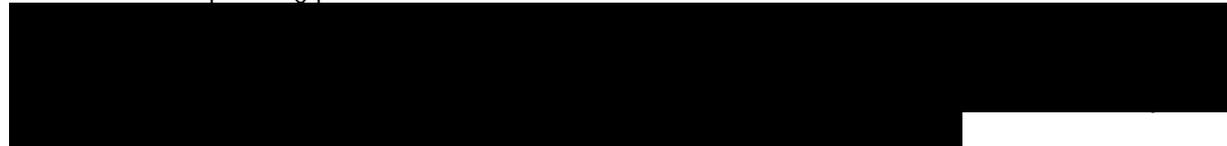
Forecast Annual Parking Volumes (000's)

Year	2004	2006	2008	2010	Change
Short-term	2,200	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Long-term	488	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Total	2,688	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

The model recognised the increasing levels of car ownership in Ireland but offset this against the increased familiarity and decline in the 'novelty factor' associated with flying generally and with visiting the airport specifically. The effects of mobile phone usage was also noted i.e. passengers phoning partners as they land and being picked up on the Departures Road without use of the airport car parks.

Capital Investment

The strategy envisages a requirement to develop 10,000 additional long-term parking spaces by 2010 and, subject to demand levels, to begin to develop additional short-term parking capacity. In addition, there is a requirement to invest in modern technologies to replace the outdated and inadequate car park control system. The multi-storey car parks require investment to bring them to modern standards and to repair damaged expansion joints. The long-term car parks require investment to comply with the conditions of the planning permissions.



COMMERCIAL PROPERTY DEVELOPMENT

There continues to be an underprovision in terms of the facilities for car hire operators since the last submission. Included in this submission is the provision of additional car hire facilities for the car hire operators to meet their current and future needs over the next five years. This will provide more car parking and operating facilities to be located in and around the existing areas occupied by the operators.

The impacts of September 11 and the downsizing activities of a number of airlines have somewhat reduced the demand for airline accommodation. Dublin Airport Authority's previously stated plan for on-campus office accommodation will be met via a joint venture investment and does not form part of this submission.

KEY INFRASTRUCTURE

Industry accepted best practice capacity studies have confirmed previously identified constraints relating to both departures and arrivals kerbs as well as the internal road network. The masterplan study has identified a range of internal road schemes that are fully integrated with the kerb systems but which are likely to require grade separation, which has significant cost impacts.

Extensive consultation has been undertaken with key statutory authorities including Fingal County Council and the National Roads Authority on the issue of access to Dublin Airport and the relationship between the external and on-airport road systems.

The proposed ground transportation centre (Bus / Coach Park) which is fully integrated with the next phase of multi storey car parking, Metro and the next phase of proposed terminal development is consistent with options in the reviewed masterplan.

The masterplan study has identified locations for the next phase of terminal expansion / development at Dublin Airport, which, when combined with associated requirements for departures and arrivals kerbside capacity and associated road network will necessitate the demolition of a range of current facilities in the immediate term. These demolitions are provided for within this submission and are key critical path items for the delivery of the next phase of terminal capacity. The masterplan study has also identified a broad range of needs relating to the provision of utilities in support of the next phase of terminal development which are also incorporated here.

PLANT AND EQUIPMENT

Much of the existing plant and equipment in the older sections of Dublin Airport is beyond its useful operational life, leading to increased maintenance costs and issues with reliability in critical systems. Increasing passenger throughput is exposing the marginal status of many elements of this category, in particular air handling and air conditioning.

It should be noted that an intensive review of security is currently underway following recent developments in this area. It is likely that this will result in a need to increase the capex for security as evolving requirements are factored in.

RETAIL

In the single till environment, DAA is hugely dependant upon retail activities to underpin business profitability and thus fund investment in infrastructure.

- This CIP contains a substantial component of refurbishment type investment for older generation offerings in Piers A and B to assist in increasing the commercial return from retailing.
- A commercial opportunity exists for the provision of airside catering facilities. Dublin Airport does not have full airside catering facilities, which is no longer sustainable for an airport of its size. Provision has been made for such facilities.
- No significant retail capacity has been added since 2001. An extension to the street concept is critical to increasing retail sales, capitalising on passenger footfall towards Pier A and to exploiting the potential offered by the proposed Pier D facility. Mindful of the constraints at Dublin Airport, the

extension to the street offers excellent synergy with the need to provide additional space in the departures concourse. An integrated proposal involving an extension to the north of the existing terminal provides a cost effective and efficient mechanism for addressing these two major short term needs within the terminal, whilst at the same time leveraging the benefits of the proposed Pier D facility.

STANDS AND AIRFIELD

The major imperatives in this category are the requirement for additional aircraft parking stands, the need to continuously refurbish life expired pavement and ground power systems. The need for additional runway capacity has also been reviewed further since the last CIP and comments on this are set out within the runway section of this document.

Stand Capacity

Current indications from internal capacity assessments have identified the need for both additional contact and remote stand capacity in the short term and also the need to realign stands in the existing layout to cater for the introduction of wider aircraft by both the two largest carriers at Dublin Airport, and other non-based carriers.

The construction of Pier D is a response to a number of needs:

- Ongoing customer demand for contact stands: - The level of contact stand utilisation for departing passengers and aircraft at Dublin airport in 2004 was 96% and 95% respectively. Based on current traffic projections and analysis, it will be necessary to provide additional contact stand capacity in the short term in the form of Pier D, to maintain this high level of performance. Levels of demand at Piers A, B and C has been detailed within DAA's document, "Review of WHA Draft Assessment of Capacity at Dublin Airport". See Figures 2.3, 2.4 and 2.5.
- There is an ongoing expectation, certainly among our home-based carriers that they should receive 100% contact stand allocation. This has been stated in various written and verbal communications from them.
- Security restrictions in Pier A: - Arrivals from certain European airports are not permitted into Pier A in response to Department of Transport requirements. This form of restriction impacts on DAA's ability to accommodate current traffic and future growth at this Pier.
- Likelihood of the ending of the "Shannon stop-over" and the gradual increase in transatlantic activity from 2006, culminating with the introduction of full open skies between the EU/US effective from 2008: - The potential growth in transatlantic activity will place a high demand on contact stands at Piers B and C. The effect of this will be to discommode short haul and other long haul activity, which would otherwise have been accommodated at these piers.
- This transatlantic activity is also likely to entail long dwell time on stands, which will result in the need to tow aircraft off contact stands to remote stands, to facilitate other aircraft operations on contact stands. Therefore, there is a need to provide additional wide-body remote stands infrastructure.

Parallel Runway

A primary assumption of the recently completed master planning process was that a second runway, parallel to the existing east – west runway would be constructed, thus allowing the airport business to grow and thereby maximising the potential of the site. The provision of a parallel runway at Dublin Airport is essential if airlines are not to experience constraints on growth in the medium term.

A programme of work to maximise the ability of the current runway system to serve projected demand (runway capacity) has been developed by the Runway Capacity Group (RCG) which comprises representatives from ATC, IAA Regulatory division, Airlines and the Airport Authority. The RCG has developed a strategy to maximise runway capacity on the main runway at Dublin Airport, based on extensive capacity studies by NATS. This strategy will permit the peak hour runway movements to increase by 5 movements per hour to 49/50 movements per hour by 2009 on runway 10/28, and raise hourly sustainable capacity to circa 44 movements per hour. This work, when combined with the recent decision by the Commission for Aviation Regulation to change the co-ordination status of Dublin Airport to Level 3 from Summer 2006 and other measures to spread demand throughout the day, means that the timing of the construction of the proposed parallel runway can be postponed. However, essential planning and permitting work must be completed in the short-term to ensure that DAA has the ability to move quickly once the specified trigger point for delivery is reached – currently estimated to be circa 2012.

TERMINAL COMPLEXES

Piers

The latest baseline study indicates a significant shortage of capacity in the gate lounges and contact stands. The recent passenger survey undertaken by TNS mrbi for DAA at Dublin Airport also indicates a high level of passenger dissatisfaction with facilities in the piers and gate lounges. In January 2002, Professor Rigas Doganis in his report, Consultancy Advice on Aviation Issues for the Department of the Taoiseach, supported the view that a pier, Pier D, should be built at Dublin Airport.

Following an instruction from Government, post Doganis, Aer Rianta instructed the masterplanning consultants to prioritise the provision of contact stands both on a temporary and permanent basis. The National Civil Aviation Security Council (NCASC) was instructed to ensure that any new facility fully complied with ECAC and Irish requirements with respect to security and immigration.

An extensive optioneering and brief development process was undertaken in consultation with a very broad range of consultees including airlines, handlers, an Garda Síochána, Department of Justice, National Immigration Bureau, Customs Authorities, NCASC, FLS etc. The final brief resulted in a 14,800 m² two storey segregated 12 stand Pier facility to be located north of the OCTB with access to the terminal via a high level link structure.

DAA has secured planning permission for this facility, following the successful outcome of a review by An Bord Pleanála. This submission provides for the construction in full of this facility. The bridge walkway structure, which was originally proposed to link the existing terminal to Pier D has been deleted from this plan due to a possible conflict between its development and the location of the proposed T2. Modifications to the OCTB to enable it to be used as the link route between the terminal and the Pier have been included in the plan instead.

Terminals

The complex political and economic circumstances that continue to prevail lead to considerable uncertainty with regard to the second terminal proposal. A series of steps (consultation, location, planning, tender and contract) must also be concluded prior to commencement. Pending any Government decision and given DAA's statutory mandate to develop the airport an assessment of what is required has been included in this document. As noted in the section on masterplanning above, the DAA proposals for the second terminal proposed in this CIP are based on a modified version of Masterplan Option 4. The proposal is predicated on a two-storey facility of circa 47,000sqm. Capacity will be determined by the type of operation but with a highly efficient operator could reach 8-10mppa.

In the event that the Government decision is that Dublin Airport Authority is to undertake the development of T2, it is critical that the charging and regulatory certainty is available to allow such a decision to be progressed. If the decision is to award the development of T2 to another body, then the Commission can subsequently reduce the amount of allowed capex in the Determination to reflect that decision.

There is widespread demand for further terminal facilities at Dublin Airport. Areas of the terminal facilities are under stress and measures will have to be taken to address these in the short term, prior to the delivery of any significant quantum of terminal capacity. It is vital to manage the infrastructure/capacity shortfall, and capacity management measures include:

- The use of process improvement techniques to more efficiently use existing capacity
- Coordination, which will be introduced with effect from the Summer 2006 scheduling season
- Increasing the efficiency of check in, by working with users and supporting the introduction of new technology such as Self Service Kiosks and web based check in

Short term measures to address congestion due to increased demand on the existing processing capacity in the next 4/5 years, ahead of the delivery of additional terminal capacity, will include:

- minor enhancements to the existing terminal to provide extra space for check in
- additional baggage make up facilities,
- additional capacity in Pier A,
- and the realignment of the layout of existing aircraft parking stands to cater for the introduction of larger aircraft by the two largest carriers at Dublin Airport.

It is important to note that these measures are unlikely to add significant additional passenger processing capacity but are essential to passenger handling and service standards.

GROUP AND SHARED SERVICES CAPEX

Group and Shared Services capex principally relates to IT investment, with a small allowance included for vehicle replacements and refurbishments. IT expenditure is primarily related to infrastructure which underpins Dublin Airport Authority's IT platform, storage and main applications for its airports and retailing businesses. In a number of cases, a contribution towards these costs may be recovered from Cork and Shannon airports, with the medium term continuation of this contingent on post separation arrangements yet to be concluded.

Dublin Airport Authority's programme for IT investment in the period 2005 – 2006 will see further development and enhancement of core business applications in Airport Operations and Retail as well as implementation of integrated Oracle applications in Property, and a critical replacement of a legacy billing system. Dublin Airport Authority will complete the implementation and deployment of integrated Business Intelligence solutions. With a single data-warehouse source of report information, the company has improved the quality and consistency of reporting and planning for both business and regulatory requirements.

As part of its strategy, Dublin Airport Authority has established its main computer processing and data-centre in Dublin Airport. Appropriate business continuity and contingency planning arrangements require investment in storage and revised back up arrangements. With existing facilities running close to capacity we are planning the development and fitting out of a new computer room that will meet business requirements for existing and new systems and also provide for higher availability of applications.



The forecast going forward to 2014 is broken out over the various areas of responsibility covered by Group IT. We are allowing for growth in mobile solutions and in web based access to applications, data and mail etc. This is seen as a major area for development with resultant increases expected in employee and process productivity. On the application front we are allowing for implementation of some new application solutions and replacement of some legacy solutions. We also see developments in integration of applications, redesign of processes and expansion of links to suppliers and customers. Major refreshes or replacements are factored in at 2009 and 2014 with matching increases to allow for the supporting database technologies and licensing. Consultation will take place with relevant internal and external bodies and individual users as we progress individual projects over the coming years. Project information will be updated as greater detail is agreed and becomes available

Desktop is an area where significant ongoing investment is expected. The lifecycle for investments in this area is shrinking and we would be looking at a depreciation period of three years or less for many of the new portable devices. We are also allowing for increasing mobility and use of technology by staff across the organisation. A major development of networks is factored into 2007/2008 to follow completion of the Fibre Network around Dublin Airport. This will enable delivery of greater bandwidth, video services, IP mobility, application and communication mobility, some of which cannot be delivered over the existing equipment.

Investments in servers and data storage are planned on the basis of expanded usage and growth in application and processing requirements together with the supporting recovery requirements. IT security is an area that requires ongoing investment to protect our working environment. We are allowing for a major review of security solutions in 2007/2008.

5. DUBLIN AIRPORT 10 YEAR CAPITAL INVESTMENT PROGRAMME BY PROJECT

**6. GROUP AND SHARED SERVICES 10 YEAR CAPITAL INVESTMENT
PROGRAMME BY PROJECT**

APPENDIX 1 - TRACKING THE CAPEX PLAN

This sheet attempts to track projects included in ARCIP02, the previous CIP which was submitted to the Commission in October 2003. As will be noted from the document, some projects have been completed, deleted or are now incorporated as projects in the current CIP. Where the latter is the case, the CIP reference number for the relevant project in the current CIP is provided for ease of reference.

**Capital Investment Programme
2005 – 2014
Submission to the Commission for
Aviation Regulation – May 2005**

Introduction

1. It is the responsibility of the Board of the DAA to set out clearly the Airport's needs, to promote as strongly as it can the need for the right level of investment, and to highlight the implications for all if investment is not undertaken.
2. This presentation summarises DAA's current best assessment of capital expenditure needed to meet these requirements at Dublin Airport over the next ten years. This amounts to €1,004 million in total (excluding Group and Shared Services requirements), of which approximately €633 million is required in the next five years.
3. The capital expenditure associated with car parking and other landside commercial developments remain under review and are not yet finalised.
4. DAA would welcome the opportunity to discuss these requirements with the Commission once it has had the opportunity to reflect on its contents.
5. A separate document has already been provided to the Commission which sets out the individual capital expenditure projects in more detail.

Contents

This presentation sets out the following:

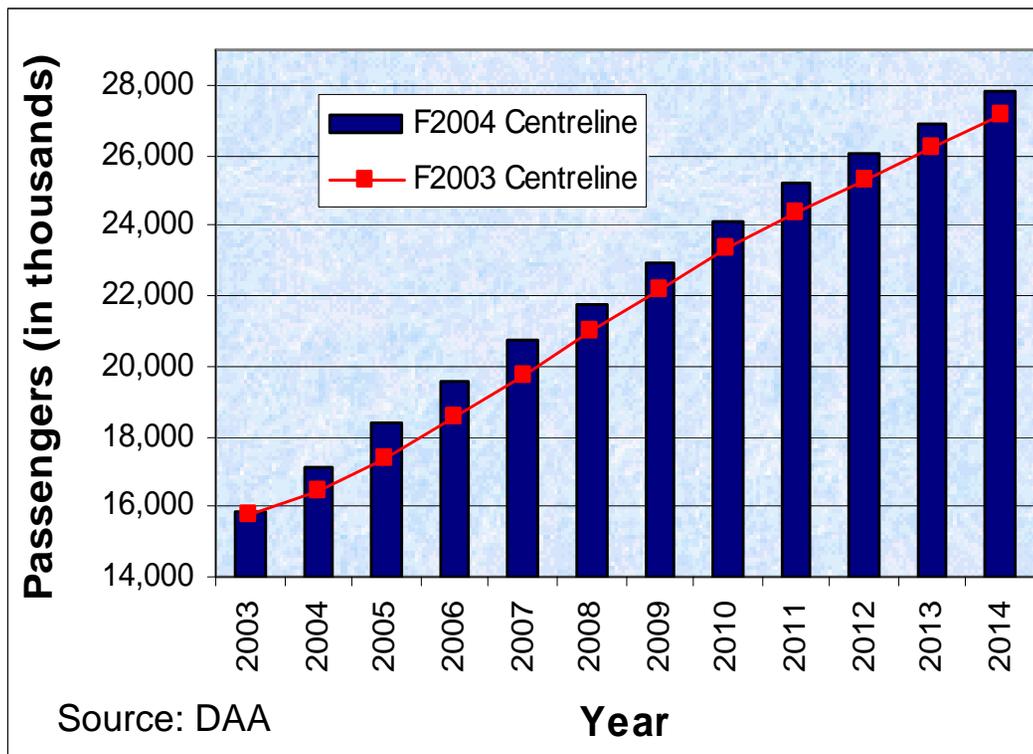
- ❑ Considerations underlying the capital programme
- ❑ Unconstrained traffic growth forecasts
- ❑ Dublin Airport master planning
- ❑ Existing capacity deficit
- ❑ User consultation
- ❑ DAA Priorities
- ❑ Areas not covered by the plan

Considerations underlying the 10 year capital programme

- ❑ Passenger growth performance and its impact on the need for infrastructure
- ❑ Existing capacity deficit
- ❑ DAA studies on the relationship between passenger/aircraft growth and demand for elements of airport infrastructure
- ❑ Increasing trend to the adoption of the low cost model by users, which places additional demands on elements of the airport system
- ❑ Dublin Airport master planning process and related capacity studies clearly identify the options for the delivery of future capacity along with associated timelines and capital cost estimates.

Unconstrained Traffic Growth Forecast at Dublin Airport

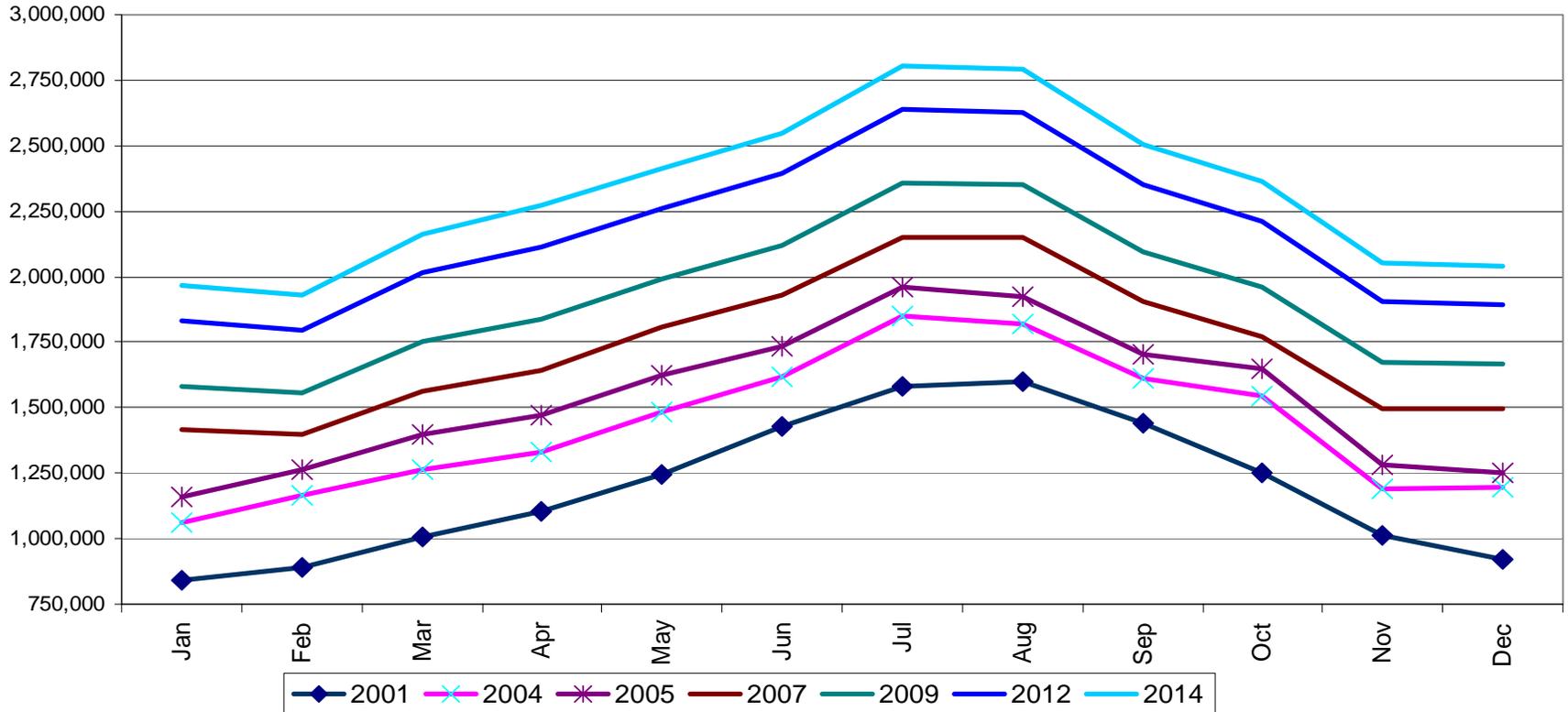
- ❑ Passenger numbers are forecast to increase to c. 21 million in 2007 and c.28 million over the life of the plan
- ❑ Forecasts assume full Open Skies by 2008
- ❑ High growth forecast model leads to passenger numbers of 31.4 million by 2014
- ❑ DAA committed to developing the airport to efficiently cater for the reasonable demands of customers and provision of appropriate economic gateway



Year	TOTAL (000)	% variation
2002	15,085	
2003	15,856	5.1%
2004	17,138	8.1%
2005	18,418	7.5%
2006	19,586	6.3%
2007	20,730	5.8%
2008	21,779	5.1%
2009	22,947	5.4%
2010	24,147	5.2%
2011	25,178	4.3%
2012	26,037	3.4%
2013	26,927	3.4%
2014	27,849	3.4%

Forecast Traffic Growth at Dublin Airport

Dublin Airport - Monthly Pax Trend 2001-2014



Previous summer peaks becoming normal level of demand through the year:

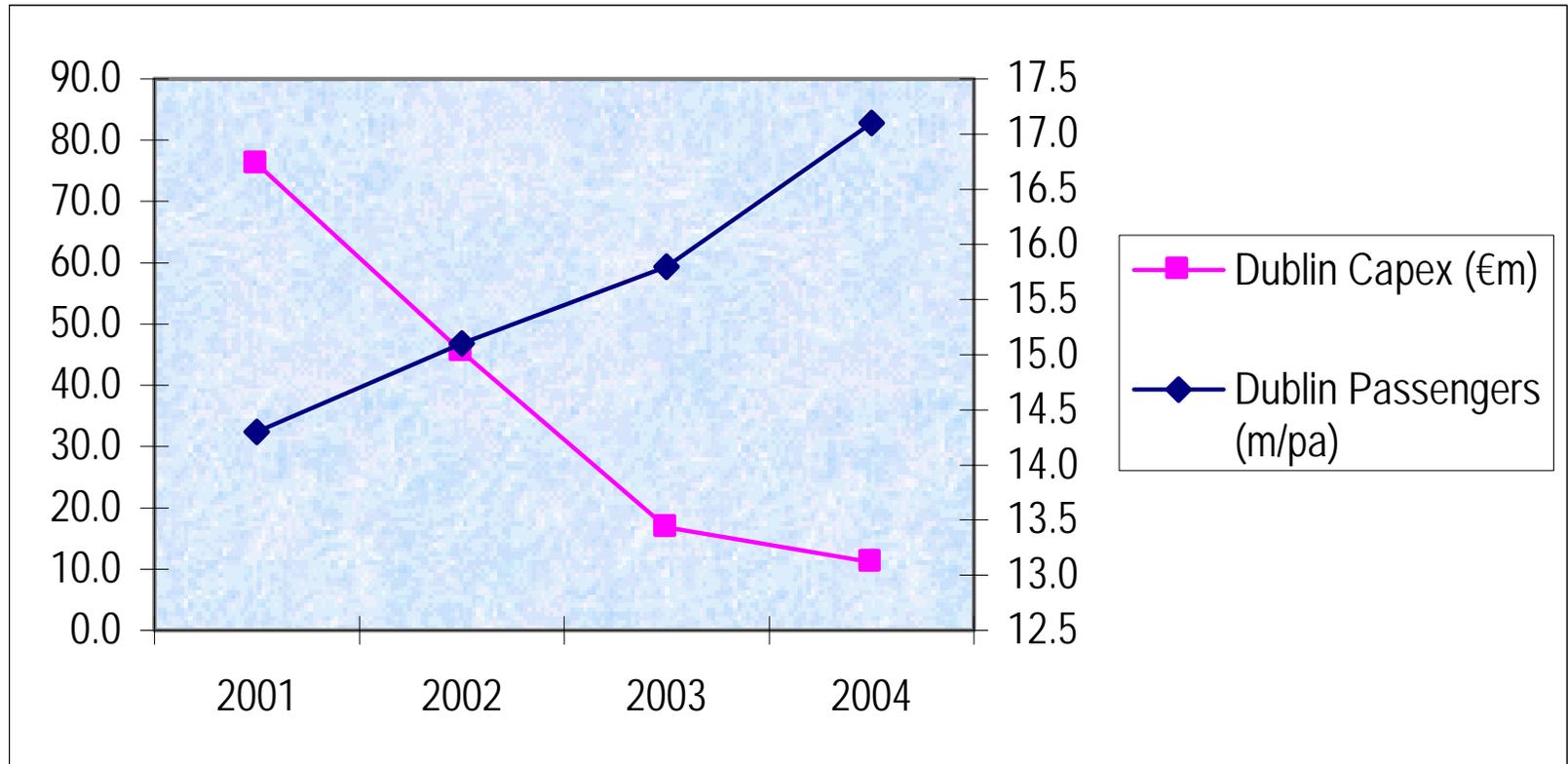
- 2 peak months in 2001 surpassed by 6 months in 2005
- 2 peak months in 2004 surpassed by every month in 2012
- 2014 summer peaks are each c1m higher than 2004

Dublin Airport Masterplan

- ❑ Measured the existing capacity and identified constraints
- ❑ Concluded demand can only be satisfied by a step change in investment
- ❑ Examined all realistic options for development and set up a robust framework for evaluation
- ❑ Planned for 30 million passengers, future proofed against different business models, and protecting the ultimate potential of aerodrome
- ❑ Carried out in the context of consultation with all stakeholders
- ❑ Balanced across all elements of infrastructure:
 - ➔ Airfield – Runway, Stands, Taxiways
 - ➔ Terminal Areas incl. Piers (Contact stands)
 - ➔ Access Infrastructure (Roads, Kerbs)
 - ➔ Transportation incl. Public Transport
 - ➔ Car Parking

Declining Capital Investment; Growing Demand

□ Unsustainable situation

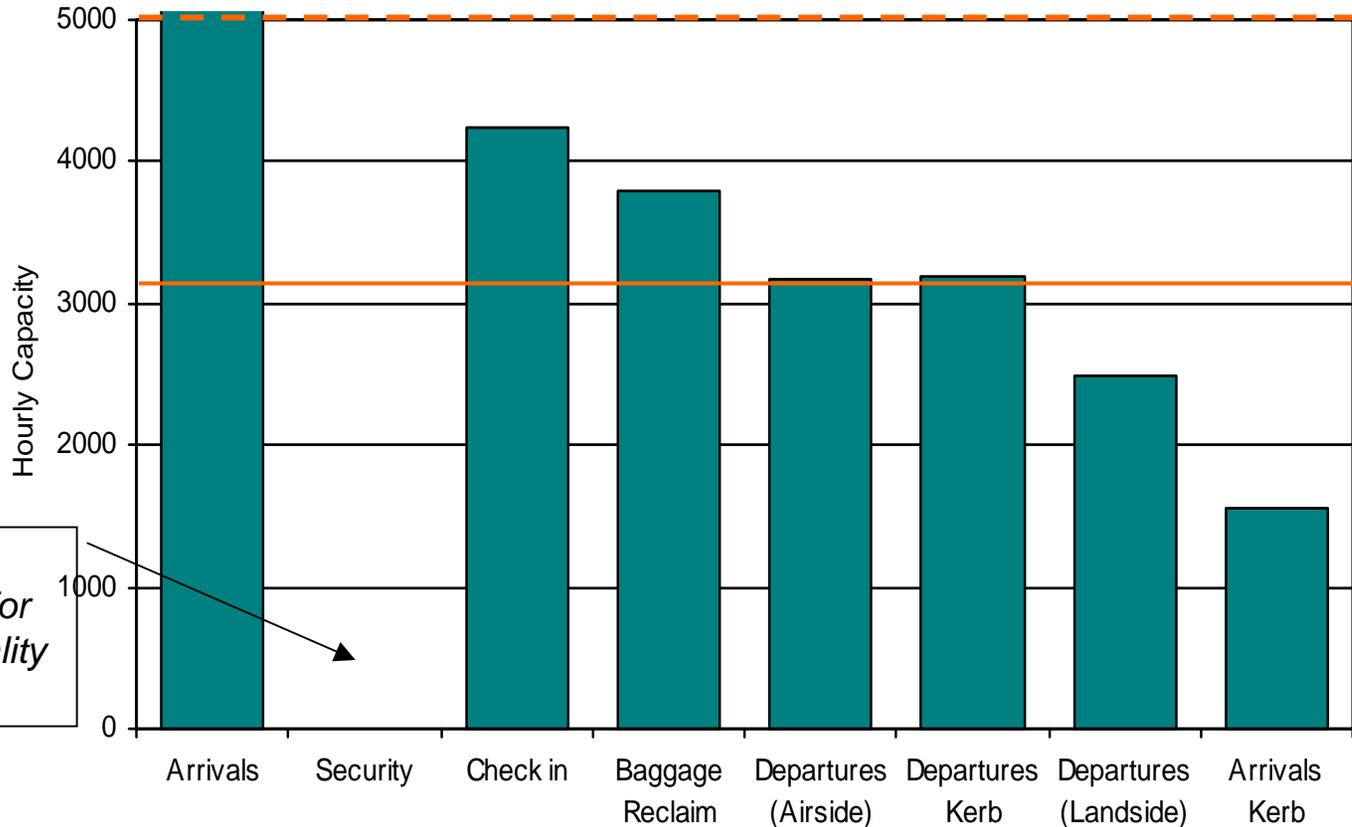


The 2001 Determination was insufficient to fund capex to meet growth. Capex reduced dramatically to a level of €10m in 2004, while at the same time passenger numbers grew to the highest levels for four years.

Capacity Deficit - Operational Bottlenecks

❑ **Unsustainable situation - Peak demand exceeds declared capacity by 60%**

— Declared capacity 2005
 - - Peak demand per Summer 2005 schedule (source ACL)



Info not disclosed for confidentiality reasons

Security capacity reflects the enhanced security position at Dublin Airport

User Consultation

❑ Passenger Survey

- ❑ A clear majority of passengers would find an increase in passenger charges acceptable to achieve satisfactory levels of facilities and services.
- ❑ Services Most in Need of Improvement
 - ➔ Check in desks
 - ➔ Departures
Gates/Lounges
 - ➔ Catering/Retail facilities
 - ➔ Passenger Search Area
 - ➔ Baggage Delivery facilities

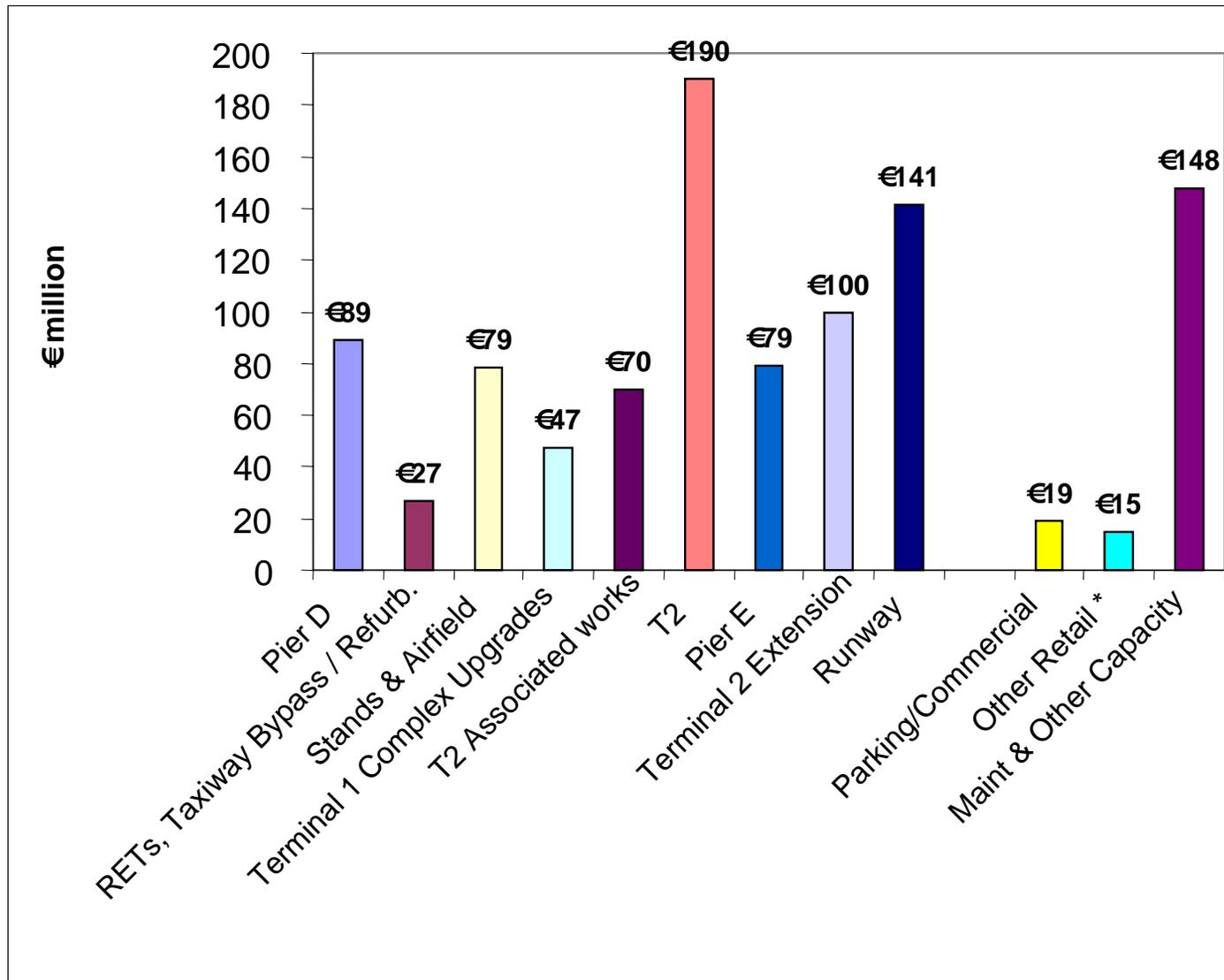
❑ Airline Consultation

- ➔ Airline users acknowledge additional passenger and aircraft capacity required, including new pier, terminal and contacts stands.
- ➔ Airline users unanimously opposed to charge increases implied by required investment

DAA Priorities

1. Short & medium term alleviation measures to facilitate traffic growth until incremental terminal capacity is delivered
2. Additional contact stands and pier capacity
3. Delivery of additional terminal capacity (including critical enabling works)
4. Maximise utilisation of existing runway capacity in near term with provision of second parallel runway in medium term
5. Deal with infrastructure constraints which impact on service standards and operational efficiency
6. Ongoing maintenance to maintain operability of existing assets

10 Year Capital Plan Elements

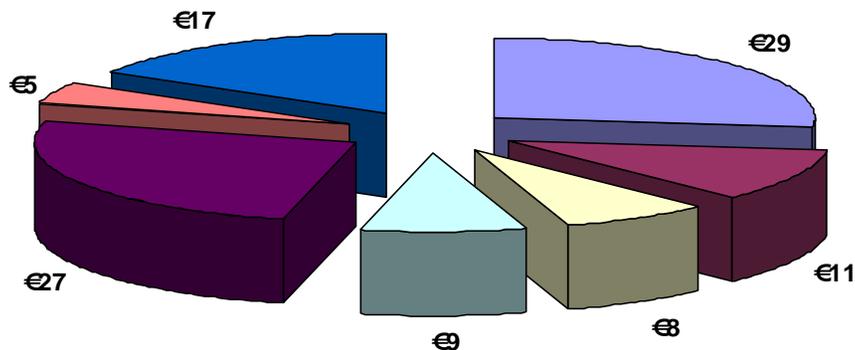


Capital investment on Stands & Airfield and Maintenance & Other Capacity is set out overleaf

* c€43m spend on retail capacity is included within the overall costing of Pier D/E, T1 Complex Upgrade and Terminal 2

Stands & Airfield and Maintenance & Other Capacity

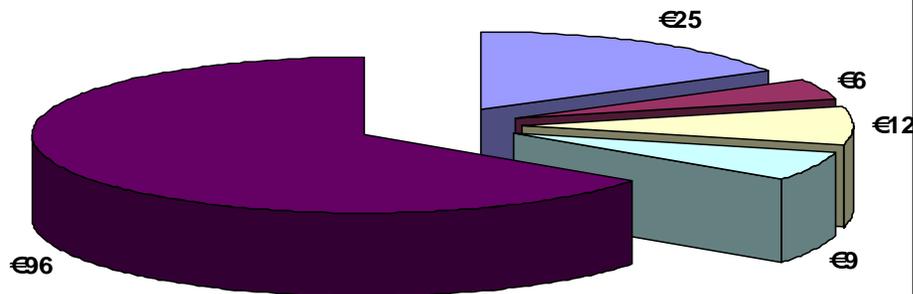
Stands & Airfield (Incl. Taxiways)



- Aircraft Stands Phase 6A (10)
- Aircraft Stands Phase 6B (5)
- Apron Recon Nth Side Pier A
- Overlay 10/28
- RETs / Taxiway Bypass / Taxiway Refurb
- Surface Water Attenuation
- Other Airfield Works

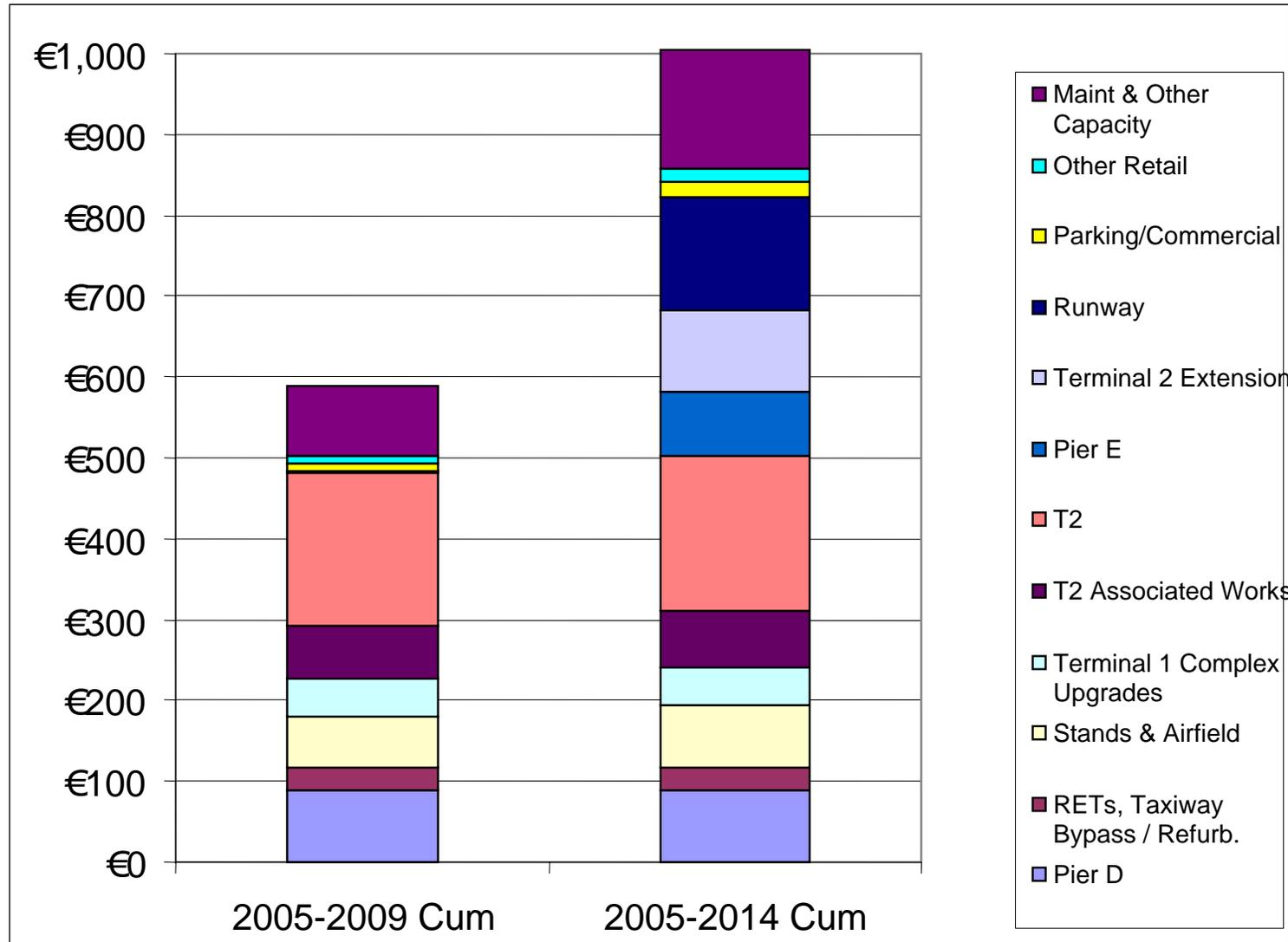
Total spend on Maintenance & Other Capacity is <math><€15m</math> pa on average (14.7% of capital plan)

Maintenance & Other Capacity

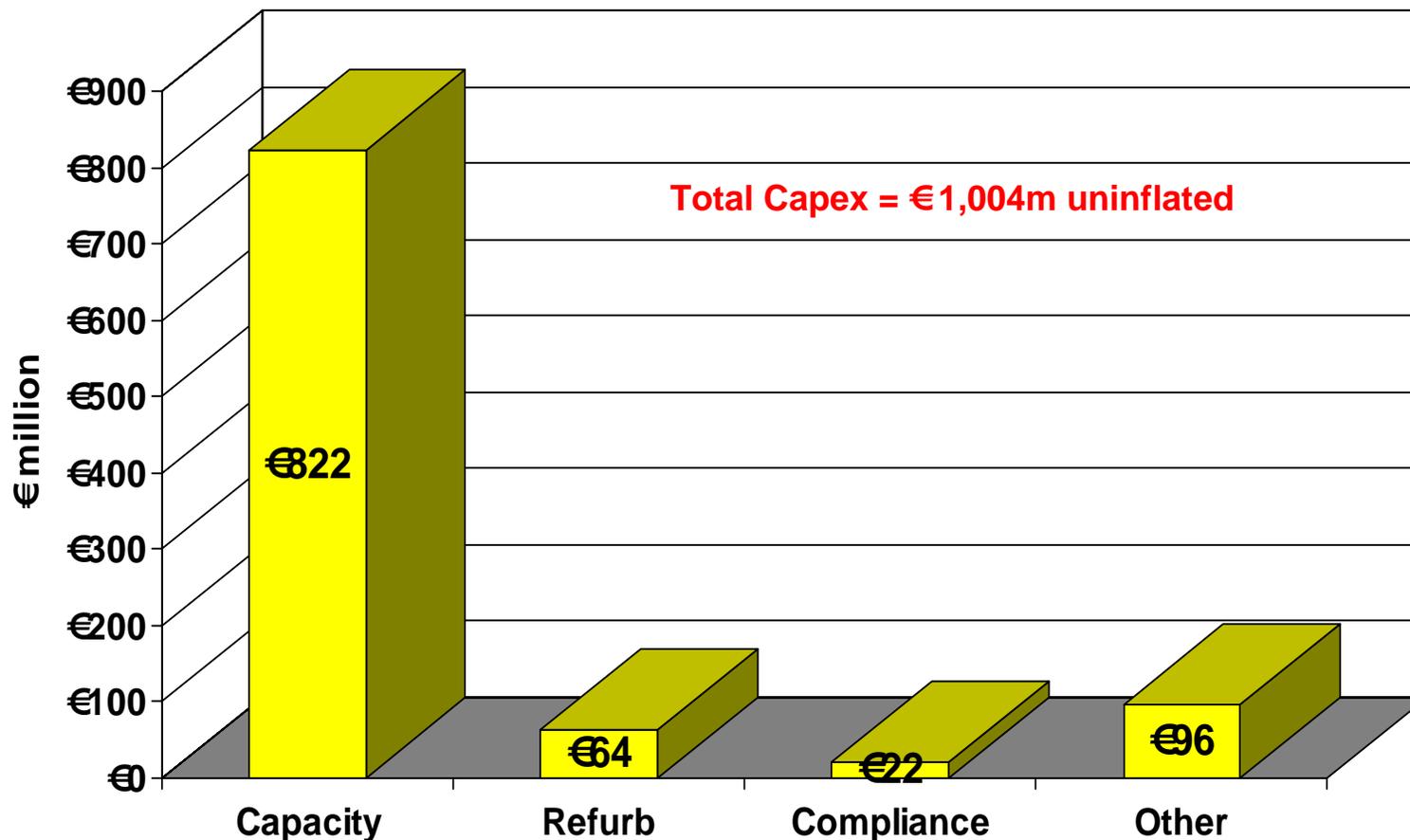


- Roads & Transport
- Baggage Systems
- Plant & Equipment
- Other Maintenance
- ART & Local & IT

Capital Plan Cumulative 5 Year & 10 Year

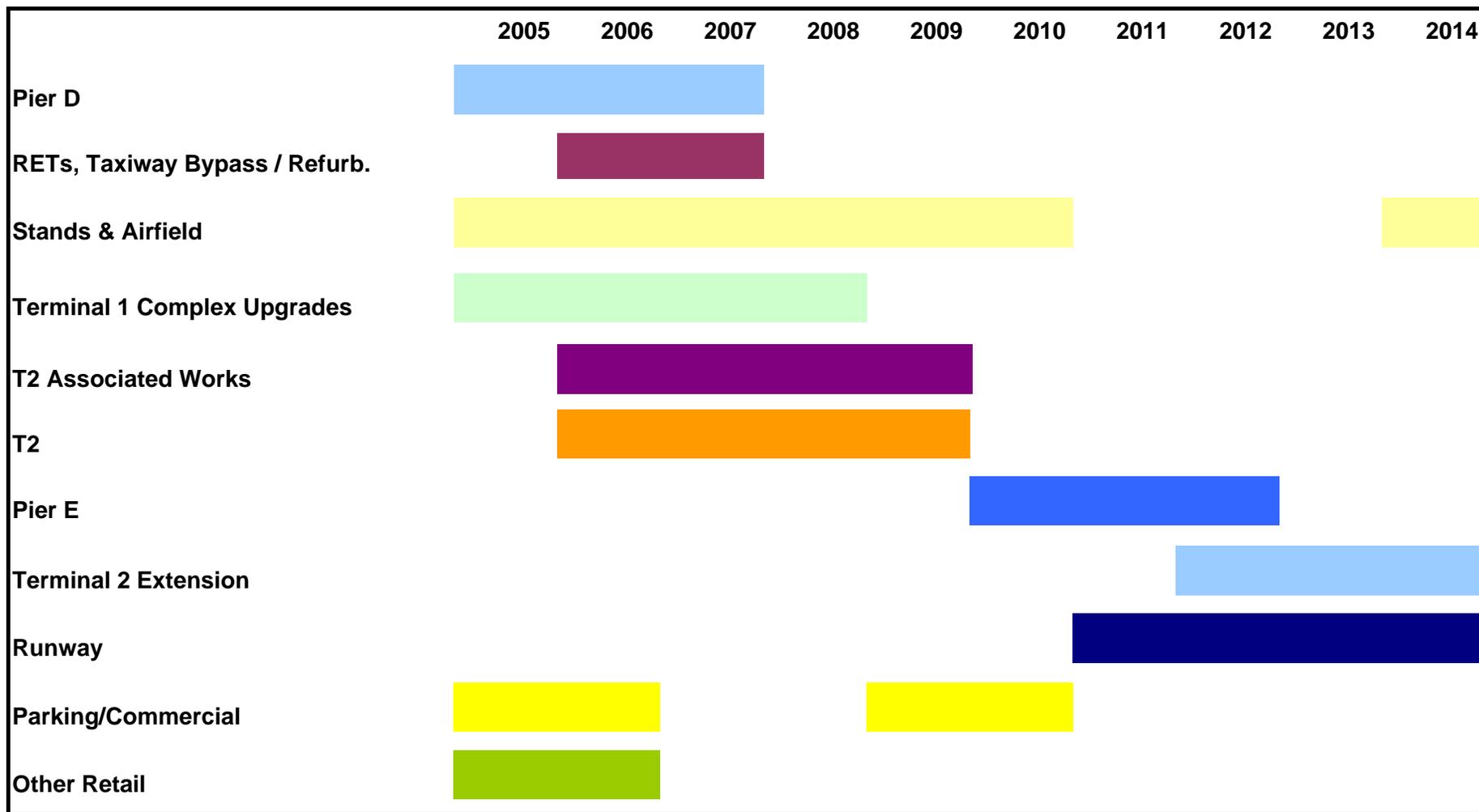


10 Year Capital Plan – Key Drivers



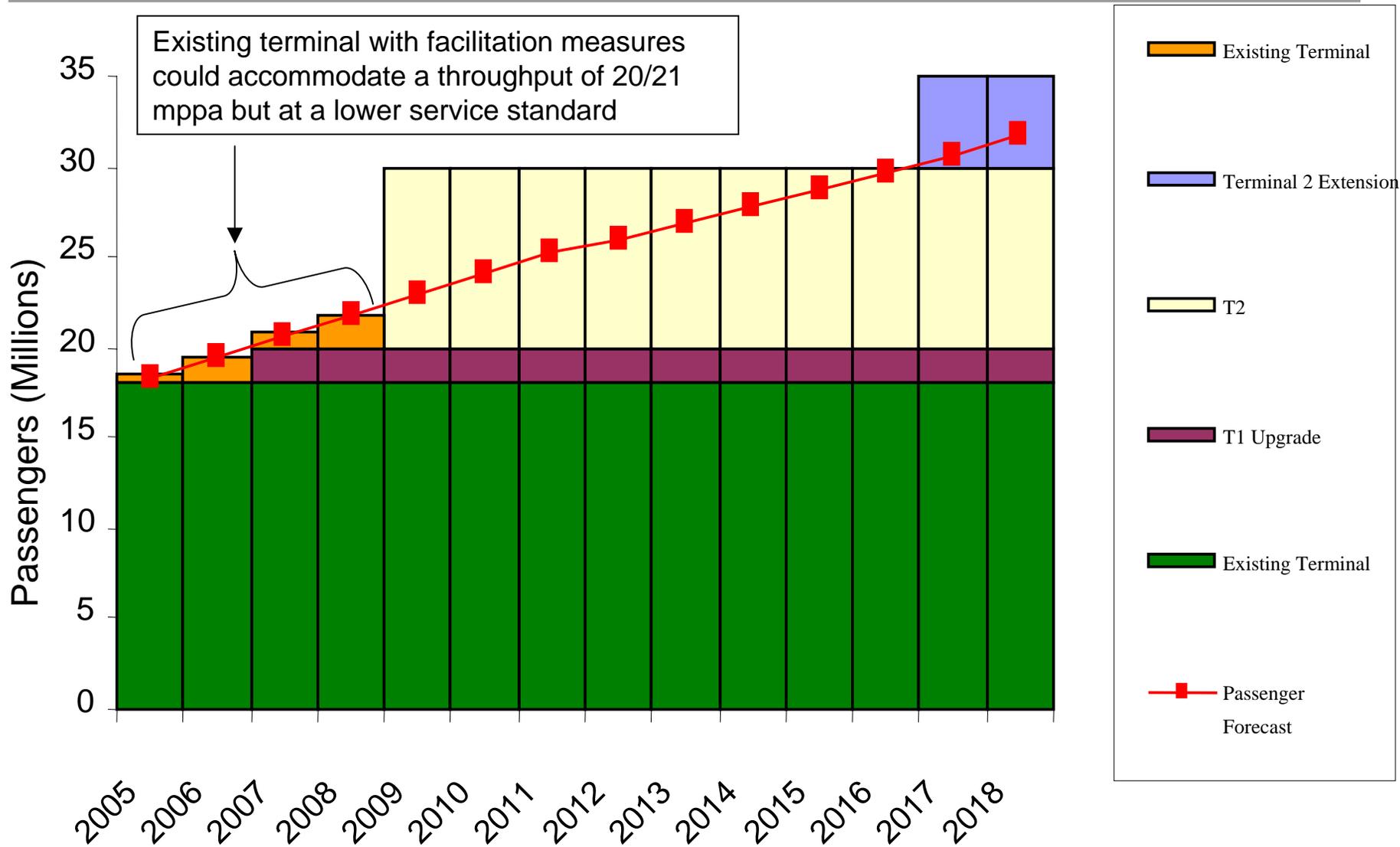
Note that capacity spend will include necessary safety & compliance costs associated with new infrastructure

Capital Plan Elements - Timeline

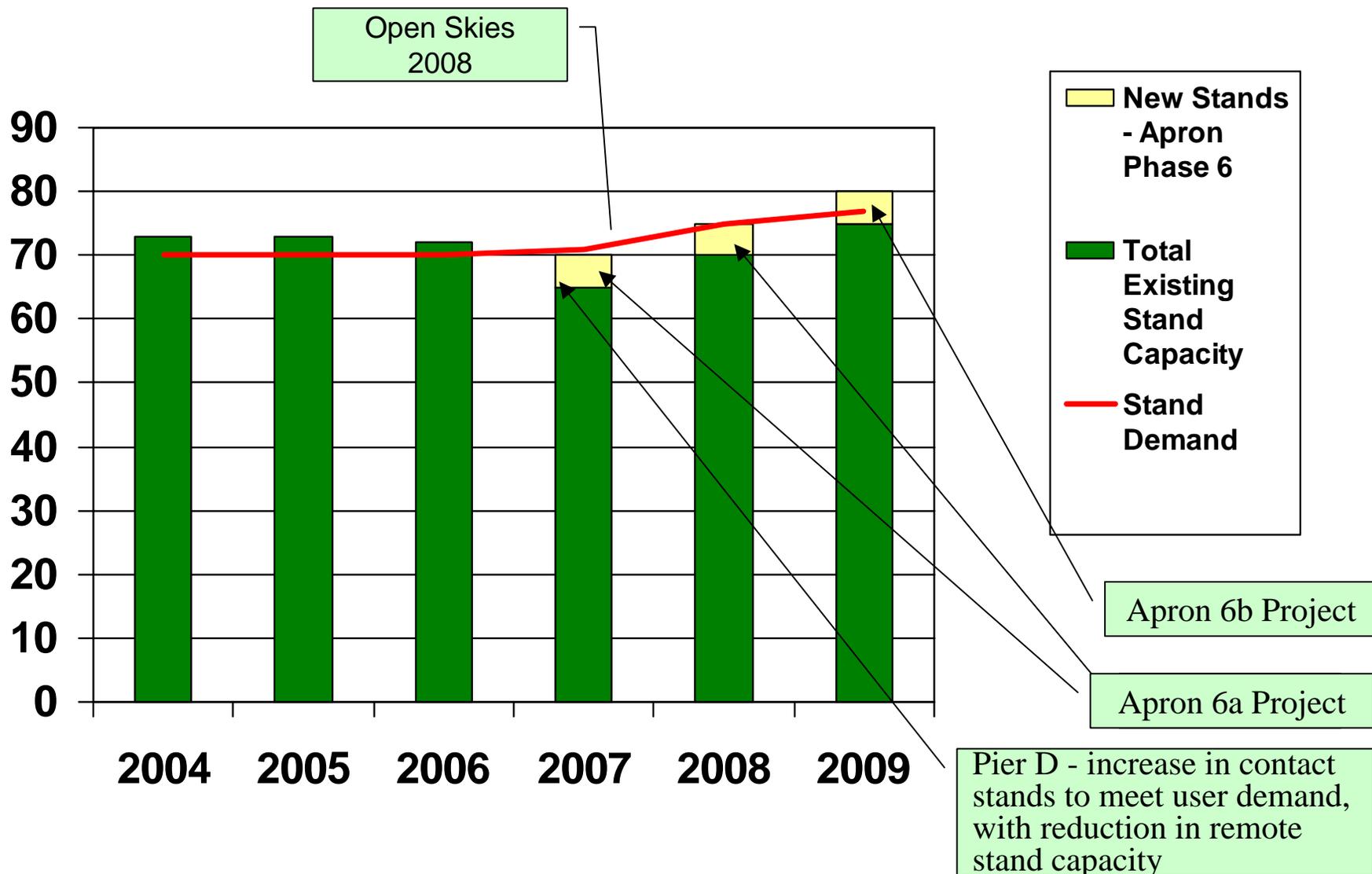


Note - Timeline excludes years with project spend <€2m

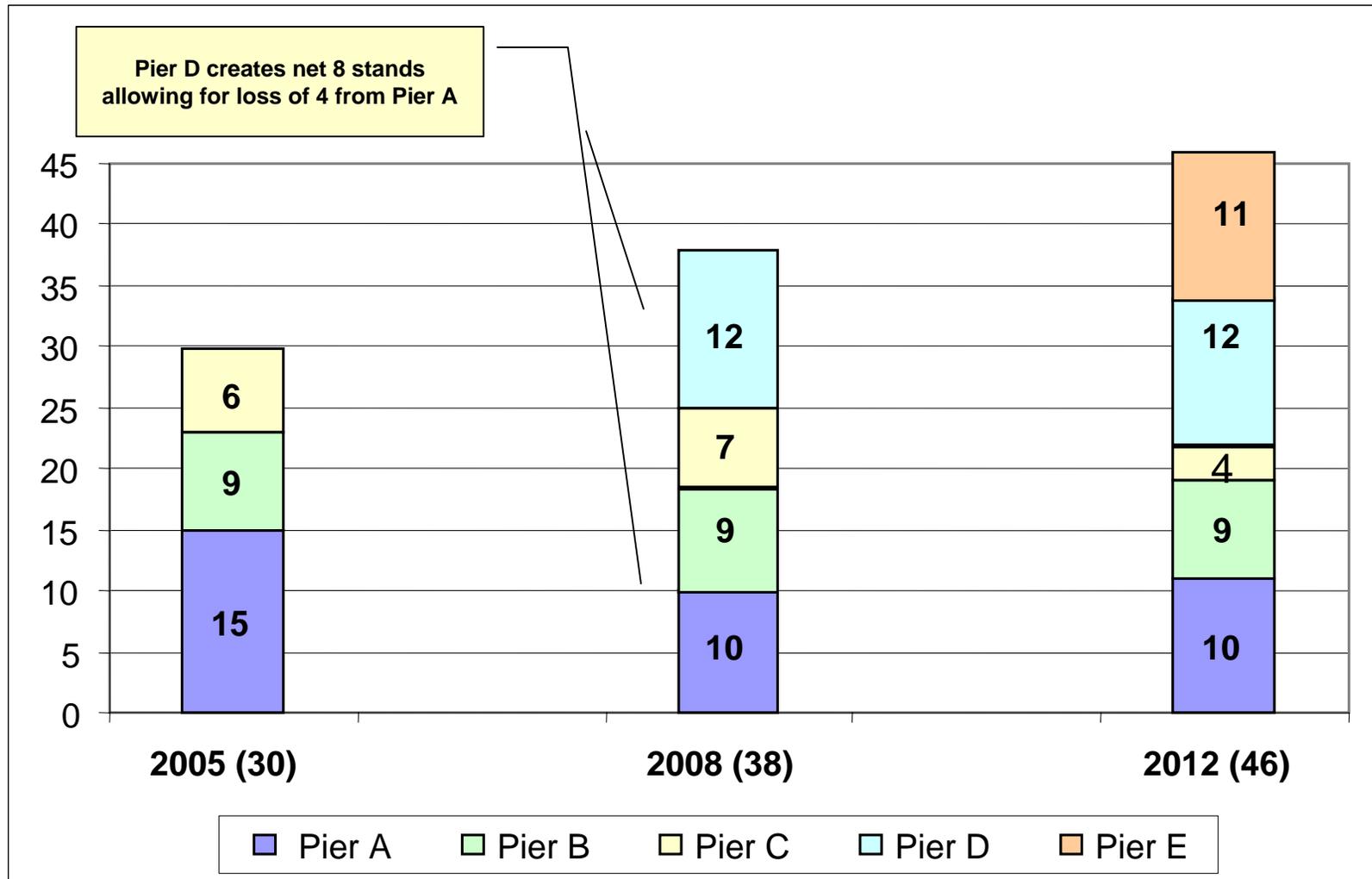
Terminal Capacity v Demand



Aircraft Stands Capacity vs. Demand 2004 - 2009



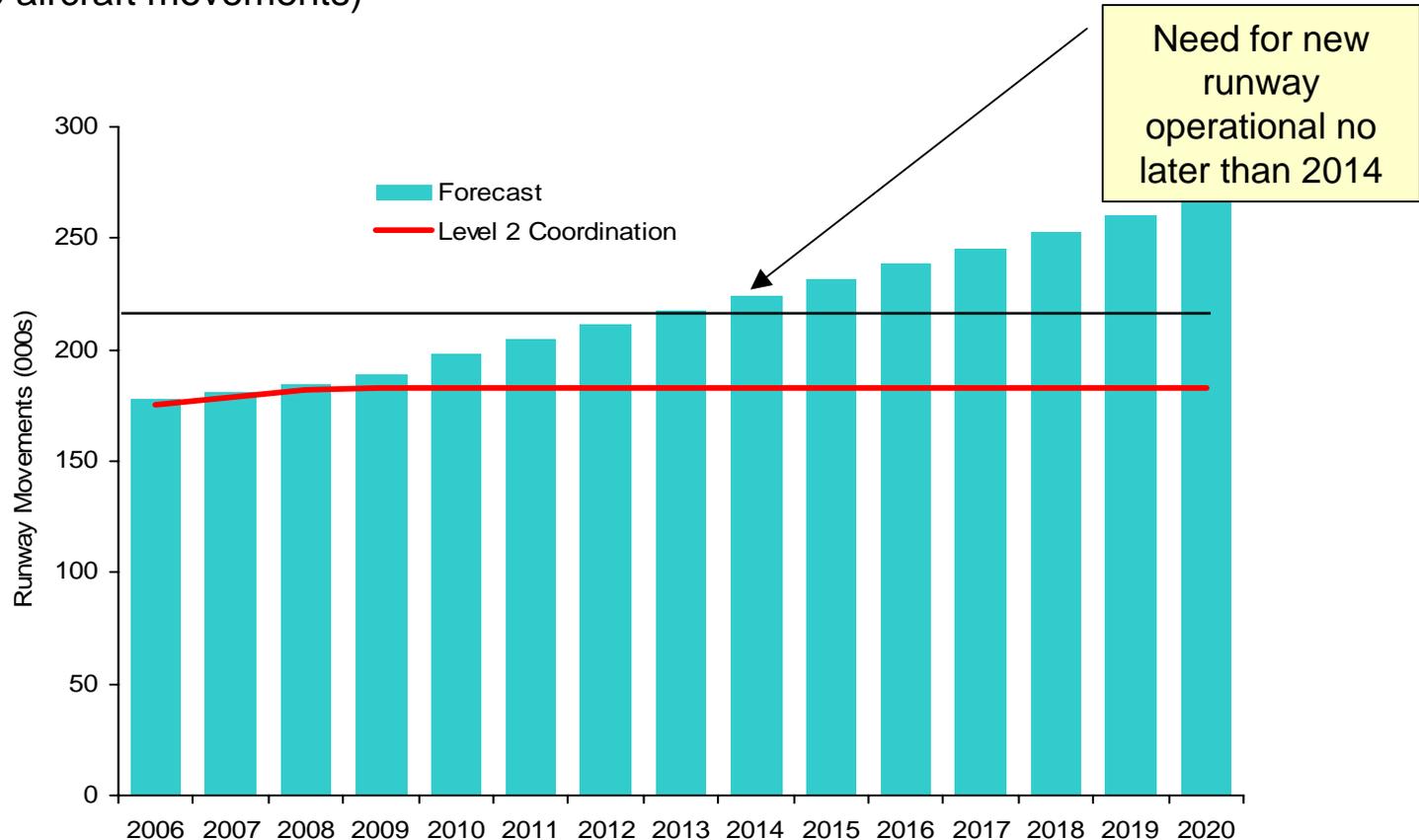
Contact Stands Capacity



Note – Does not take into account potential loss of stand(s) due to changes in aircraft size / wingspan

Runway Capacity v Demand

- Under “voluntary” Level 2 coordination, new runway would be required in 2009/2010
- On the basis that full schedule co-ordination (Level 3) is now being introduced for Summer 2006, a new runway will be required between 2012 and 2014 to meet projected demand (of c. 220,000 aircraft movements)



Areas not covered by the 10 Year Plan

Cargo, Maintenance & Business Aviation

There is currently no allowance within the plan for:

- Cargo
- Aircraft Maintenance
- Business Aviation

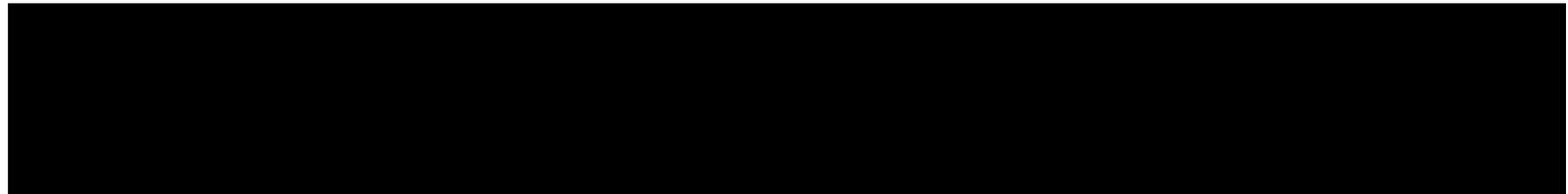
Assumed these investments will be delivered via joint ventures or partnerships

Group and Shared Services requirements

- Group and Shared Services requirements are included separately in the detailed document provided to the Commission

Car parking and other landside commercial developments

- The capital expenditure associated with car parking and other landside commercial developments remains under review and is not yet finalised.



Conclusion

- ❑ Existing capacity is insufficient and unsustainable
- ❑ Meeting forecast demand requires a step change in investment
- ❑ Lead times for step changes in investment will further pressurise existing service quality
- ❑ Passenger users want satisfactory levels of facilities and services and are prepared to pay through higher airport charges
- ❑ Airlines acknowledge the need for capacity increases but are opposed to increases in charges to fund the required investment
- ❑ Importance of providing an appropriate economic gateway, especially for an island nation with one of the most open economies in the world
- ❑ Airport charges must be sufficient if the required level of investment is to occur
- ❑ Otherwise:
 - ➔ Demand exceeds capacity
 - ➔ Serious service level deficiencies
 - ➔ Delays, inconvenience and increased costs for passengers and airlines
 - ➔ Financial instability and uncertainty for DAA
 - ➔ Co-ordinator may have no option but to set an effective ceiling on traffic at the airport with negative implications for the Irish economy, particularly tourism, trade, inward investment and employment

Class	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2005 - 2014
Car Parking	2,829,000	1,840,000	1,000,000	0	3,120,000	10,800,000	0	0	0	0	19,589,000
Commercial Property	204,620	2,145,000	0	0	0	500,000	500,000	0	0	0	3,349,620
Key Infrastructure	5,185,000	9,195,000	31,707,000	11,160,000	14,160,000	6,500,000	6,300,000	0	0	600,000	84,807,000
Plant and Equipment	8,126,409	2,680,000	1,080,000	500,000	4,000,000	1,000,000	0	0	0	0	17,386,409
Retail	5,242,610	2,700,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	0	14,942,610
Stands and Airfield	7,508,555	27,690,740	26,980,000	22,900,000	24,210,000	6,000,000	6,000,000	23,000,000	57,000,000	61,650,000	262,939,295
Terminal Complexes	9,392,890	69,532,148	109,950,704	76,500,000	58,850,000	7,650,000	50,300,000	37,000,000	50,000,000	36,000,000	505,175,742
Dublin Local	8,653,000	7,500,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	96,153,000
Sub-Total - Dublin	47,142,084	123,282,888	181,717,704	122,060,000	115,340,000	43,450,000	74,100,000	71,000,000	118,000,000	108,250,000	1,004,342,676
Group Capex Total	5,270,000	2,905,000	2,250,000	2,100,000	5,710,000	2,120,000	1,680,000	1,980,000	1,980,000	3,860,000	29,855,000
Total	€52,412,084	€126,187,888	€183,967,704	€124,160,000	€121,050,000	€45,570,000	€75,780,000	€72,980,000	€119,980,000	€112,110,000	€1,034,197,676