

Environmental Statement to the Cork Airport Special Local Area Plan

September 2010

Section 1 Introduction:

The Special Local area Plan (SLAP) has been prepared with the purpose of facilitating the development of Cork airport by providing for, and where necessary, protecting land for the future operation and development needs of the airport, looking forward to the year 2040. The SLAP will identify the future aviation needs and associated infrastructural requirements for Cork Airport in the long term and will specify policy and objectives to safeguard the continuing growth of the Airport as a key economic driver for the region.

The Process that has been followed

The SLAP has been prepared in accordance with the Planning and Development Acts in tandem with a number of important background documents

- Cork Airport future Needs study
- Cork Airport Surface Access Plan

As in the future needs study, extensive consultation with key stakeholders was undertaken in the drafting of the Surface Access Plan. Arising from these reports there was a need identified to extend Runway 17-35, however uncertainty on the location and extent of the proposed runway extension was a major issue of concern. A study entitled 'Impacts of Runway extension to Main Runway 17-35 at Cork airport', completed by the Airport Authorities identified a northern extension as most advantageous.

Terms of Reference

This is the SEA Statement of the Cork Airport Special Local Area Plan (SLAP) and forms the final part of the requirements for the Strategic Environmental Assessment (SEA) of the Plan.

SEA Definition

SEA is a systematic process of predicting and evaluating the likely environmental effects of implementing a plan, or other strategic action, in order to ensure that these effects are appropriately addressed at the earliest stage of decision-making.

Legislative Context

Directive 2001/42/EC of the European Parliament and of the Council, of 27 June 2001, on the assessment of the effects of certain plans and programmes on the environment, referred to hereafter as the SEA Directive, introduced the requirement that SEA be carried out on plans and programmes which are prepared for a number of sectors, including land use planning. The SEA Directive was transposed into Irish Law through the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (SI No. 435 of 2004), and, the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004). Both sets of regulations became operational on 21 July 2004. The SEA Directive and the instruments transposing it into Irish Law require that after the adoption of a plan or programme, the plan or programme making authority is required to make a Statement available to the public, the competent environmental authorities and, where relevant, neighbouring countries. This Statement is referred to as an SEA Statement.

Content of the SEA Statement

The SEA Statement is required to include information summarising:

- (a) how environmental considerations have been integrated into the plan
- (b) how
 - the environmental report,
 - any submission or observation to the planning authority in response to a notice under section 12(1) or (7) of the Act, and
 - any consultations under article 13 F have been taken into account during preparation of the plan,
- (c) the reasons for choosing the plan, as adopted, in light of the other reasonable alternatives dealt with, and
- (d) the measures decided upon to monitor, in accordance with article 13J, the significant environmental effects of implementation of the plan.

The Guidelines on the implementation of the SEA Directive state that the SEA statement should summarise the issues and concisely address them (see page 47 of guidelines). Each of the above points has been addressed and is included in the various sections of the SEA statement which follow.

Influence of SEA on the Airport SLAP-Making Process:

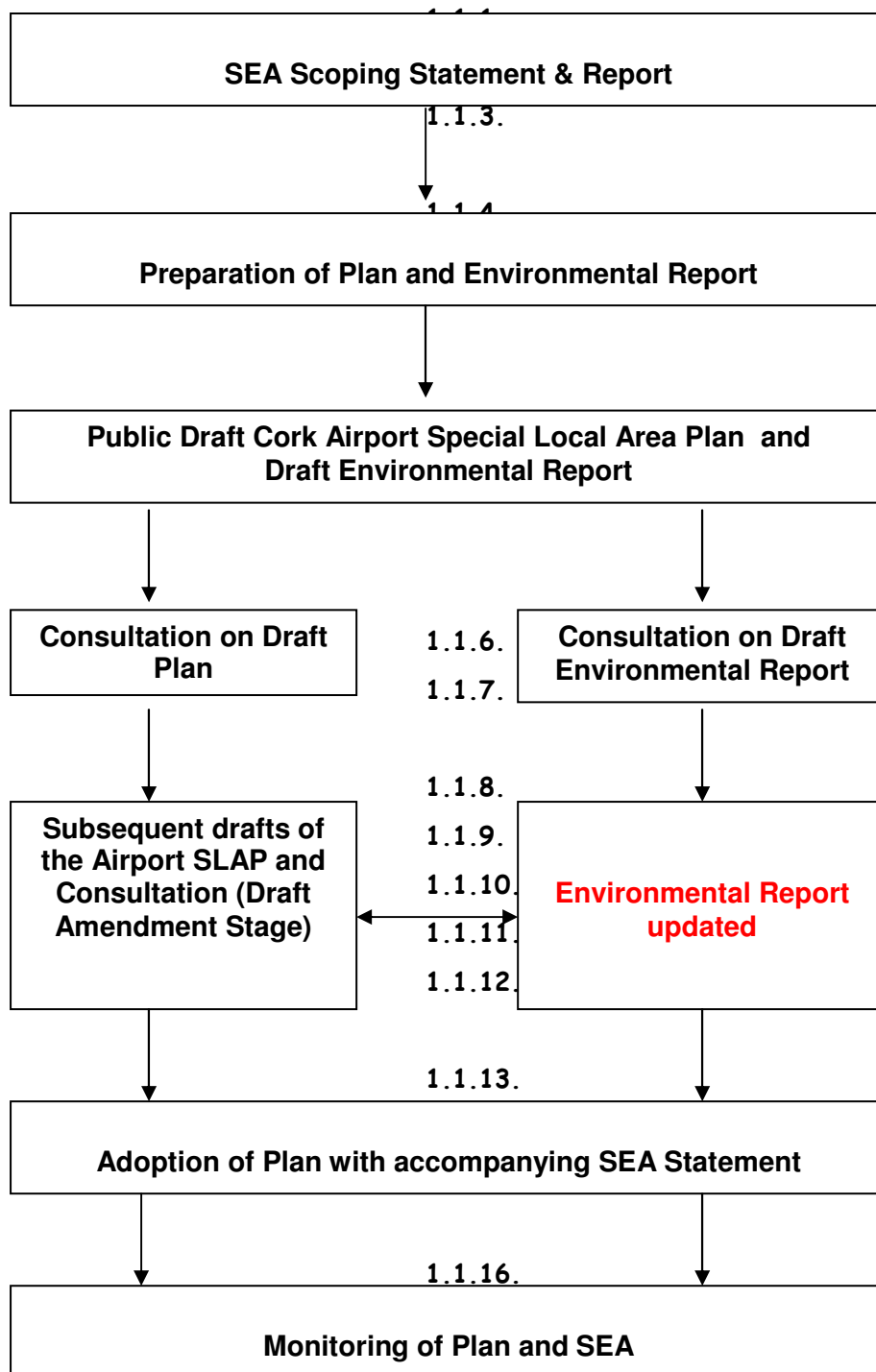


Diagram: SEA process and Cork Airport Special local Area Plan (SLAP) preparation

The SEA statement tracks the progression of the plan as presented in the diagram above, highlights how environmental considerations have been taken into account and sets out the detailed monitoring for the plan in the final chapter which it is intended will be reviewed over the lifetime of the plan. A bibliography of the list of documents which informed and ran parallel to the various stages of the SEA have been included.

Appendix: List of published documents associated with relevance to the SEA:

- Manager's Report S.20 (3) _Subs to Amendment.
- Managers report on Variation to CDP August 2010.
- Cork Airport SLAP HDA Screening.
- Environmental Report of Airport SLAP
- Airport SLAP Enabling Variation to CDP 14th June 2010.
- Strategic Environmental Assessment Environment Report February 2010.

Section 2 How Environmental Considerations and the Environmental Report were factored into the plan:

Introduction:

This Chapter outlines how the plan responds to environmental issues and how the Plan and SEA processes were integrated. The collection of baseline data identified the following key environmental issues facing the airport.

Stage 1 - Preparation of the Draft Plan (Scoping and Environmental Report)

Stage 2 - Screening Matrix and Preliminary Evaluation of the Draft Plan Objectives

Stage 3 - Secondary Analysis of Matrix & Objectives and Recommendations

Stage 4 - The Amendment Stage (including Supplementary Environmental Report)

During each of the stages as outlined the SEA team were involved in the analysis of development options and were in a position to make suggestions throughout the process of the plan preparation to ensure that environmental considerations and environmental effects were considered in the formulation of strategic aims and development objectives.

Stage 1 - Preparation of the Draft Plan (Scoping and Environmental Report)

Screening

In August 2008, Cork County Council wrote to the EPA in relation to identifying the environmental effects of the Special Local Area Plan. Since that time the scope and content of the proposed plan has changed significantly, particularly with regard to the approach taken for the proposed runway extension. Following the initial screening/scoping exercise in August 2008, the County Council carried out extensive public consultation in December 2008/January 2009. These processes

identified that the major environmental impact of the plan was likely to concern its effect on human beings through the construction of the proposed runway extension to bring aircraft movements closer to habitable dwellings near the airport site. A number of studies have been completed which have identified the Airport's future development needs. In November 2009 a screening statement for the proposed special local area plan incorporating the changes to the Airport's Plan was prepared and submitted to the EPA. The EPA's response was that in their opinion the SEA process needed to be carried out on the proposed SLAP with respect to the potential for likely significant effects.

Scoping:

The planning authority engaged in a scoping exercise to determine the range of environmental issues and the level of detail to be included in the Environmental Report which was decided upon, in consultation with the prescribed environmental authorities as a requirement of the Regulations and Guidelines. Three submissions on the Scoping Report were received from the following, the Department of Communications, Energy and Natural Resources, Cork City Council and the Development Applications Unit, Department of the Environment, Heritage and Local Government. Responses received were incorporated in the environmental assessment.

The key environmental issues relate to
Air and Climatic Factors

- A high reliance on private transport with subsequent impacts on air quality and emissions.

Biodiversity

- The replacement and disturbance of natural habitats during runway construction phase.

Built and Cultural Heritage

- No impact.

Material Assets

- The development of the airport needs to take place in an orderly manner as unplanned development would lead to congestion and diminish the attractiveness and benefits that an airport the size and scale that cork international airport provides.

Noise

- At present aircraft noise is not considered to have a significant environmental effect and it is unlikely to within the statutory lifetime of the plan. The plan will require the periodic monitoring of aircraft noise over the lifetime of the plan in the vicinity of the airport site in relation to recognised noise criteria.

Population and Human Health

- It is acknowledged that there is some potential for impact on individual

Soil

- Potential significant impacts on groundwater from airport activities may result from the release to ground of de-icing agents, hydrocarbons and other dangerous substances.

Water Resources

- Adequate capacity available subject to upgrade.

Flooding

Given the location of the site on elevated ground there is no documented record of flooding at this location. Existing attenuation tanks are located in the SE Quadrant and it is essential that these be retained and extended accordingly to accommodate any increase of paved areas resulting from the long term development of the site.

This process would inform Stage 3 which is detailed below in which the objectives were examined further.

Stage 3: Secondary Analysis of the Matrix & Objectives and Recommendations

The second analysis phase of the matrix occurred during and after the display period of the Draft Plan and Environmental Report. It considers the proposed objectives where conflict with the identified Environmental Protection Objectives (EPO's) was considered likely. General comments were made on the assessment, which were influenced by comments from the EPA (See Section 3 of this Statement), and following on from this, recommendations on potential mitigation measures were prepared.

In addition to issues arising from submissions received, a number of the amendments proposed are required to address issues arising from the Strategic Environmental Assessment (SEA) of the Draft Plan. The table lists the submissions of relevance to each of the proposed changes and an indication is also given if the change is resulting from a matter raised in the SEA.

These recommendations typically included:

- Additional wording/amendment;
- Change to wording of specific objective;
- Additional wording to specific objective;

Environmental Assessment of the draft SLAP

The Environmental Report for the draft and amended SLAP assessed plan objectives and policies against SEA objectives. SEA Objectives are:

Air and Climatic Factors

It is an objective of the plan to require the carrying out of quarterly monitoring of air quality and airborne emissions, against criteria to be agreed with the Council's environment section. A review of the SLAP objectives would indicate that the majority of actions if implemented would result in a neutral impact. The results of this monitoring shall be submitted to the Council's Environment Section annually.

Biodiversity

The SEA study area is not subject to any conservation designation, proposed, candidate or otherwise, under current legislation by the statutory authority (National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government - NPWS DoEHLG). Neither does the study area impinge on any designated conservation area. There are a number of designated and proposed conservation areas at varying distances in the wider locality.

From a biodiversity perspective the challenge is to ensure that biodiversity is conserved and enhanced in so far as consistent with the safe and efficient operation of the Airport, by ensuring that land-take is minimised, that impacts on habitats and species are mitigated to ensure that there is no net loss of biodiversity. In the absence of any further major development at the airport it might be expected that the landscape and buildings would remain as is. The landscape would continue much as it is now though it is possible that more hedgerows would be

actively managed or even removed. Bird and faunal species would be expected to continue to utilise the habitats present, their numbers reflecting their individual status in similar habitats elsewhere.

Built and Cultural Heritage

There are no buildings on the Record of Protected structures in the vicinity of the airport nor are there any architectural Conservation Areas (ACAs). It is unlikely that the proposed extension of the development boundary and the potential expansion within these lands would be of detriment to the Recorded Monuments. However, any potential subsurface archaeology within the site and all archaeological sites and their setting shall be protected in line with the objectives for the protection of archaeological heritage listed in the Cork County Development Plan 2009.

Material Assets

As part of the preparation of the Airport SLAP and in recognition of the surface access issues to Cork Airport it was considered necessary to develop a transportation strategy and a surface access plan so as to ensure adequate and efficient road access with appropriate public transport facilities.

Noise

It is considered that there is some potential for impact on individual dwellings near the preferred location of the extension to the runway at the northern end of the existing runway. With the establishment of the public safety zones and with a proposal included in the Plan to identify noise contours and to restrict development within these noise contours it is considered overall there will be limited if any impact on the general population and in some cases will have a positive impact.

If aircraft movements at Cork International Airport exceed 50,000 per annum it is a requirement of the Environmental Noise Regulations 2006 for the airport to prepare a strategic noise map and an action plan.

At present aircraft noise is not considered to have a significant environmental effect and it is unlikely to within the statutory lifetime of the plan. However, as an additional safeguard, it is considered that the special local area plan will establish appropriate noise contours around the airport with a view to limiting inappropriate and noise sensitive development with such contours. The Plan will also require the periodic

monitoring of aircraft noise over the lifetime of the plan in the vicinity of the airport site in relation to recognized noise criteria.

Soil and Geology

Any development on Greenfield sites within the Region inevitably involves altering the character of the ground and soil. Soil can be contaminated and polluted by development, particularly in cases where there isn't appropriate waste water treatment facilities. Soil can also be polluted and contaminated by agricultural and industrial activities. Construction works can also often lead to soil erosion, which in turn can lead to negative impacts on water quality and aquatic biodiversity. On-site soil erosion leads to a reduction in soil quality as a result of the loss of the nutrient-rich upper layers of the soil. Eroded soils also have a reduced water-holding capacity. Soil erosion can also have off-site effects, which result from the movement of sediment and agricultural pollutants into watercourses. This can lead to increased silting of watercourses, disruption of ecosystems and contamination of drinking water.

However, it is recognised that the Airport SLAP aims to make the best use of existing lands within the Airport complex thus this may mitigate against adverse affects on soils. The proposed construction of a 247 metre extension to the runway may have an impact on soils but the nature and extent of this impact would be better assessed at project level. Strict planning and building control is required to ensure that polluting substance emanating from either construction activities or the operation of the airport are not released to the groundwater bodies underlying the airport zone.

Water Resources

It is an objective that all new developments within the Special Local Area Plan boundary incorporate Sustainable Urban Drainage systems (SUDs) and is consistent with a comprehensive surface water Management plan for the site that is subject to approval by the County Council.

The water abstraction issue at Mount Elma may need to be further examined to determine if there will be any environmental impacts as it is uncertain as to whether this supply is capable of supporting the size and scale of any future development in the area. As stated above in order to incorporate the forecasted increase in passenger numbers, it is necessary to upgrade the foul sewer network to serve the study area.

Environmental Issues identified	Airport SLAP Objective	SEA Recommendation	Plan Stage Recommendation Made	Stage Incorporated into Airport SLAP
Surface Water Drainage	DRU 2-1	Additional wording	Pre Draft	Amended Draft
	FAN 3-3	Additional wording	Pre Draft	Pre Draft
	FAN 3-3	Clarification sought on what is meant by appropriate land uses in the vicinity of the airport	Pre Draft	Resolved without any change to wording
	FAN 3-4	Additional wording	Pre Draft	Pre Draft
	FAN 3-5	Additional wording	Pre Draft	Amended Draft
Protection of biodiversity and environmental quality	TRA 4-1	Additional wording	Pre Draft	Amended Draft
	TRA 4-2	Additional wording	Pre Draft	Pre Draft
	TRA 4-2	Additional wording	Pre Draft	Not incorporated
	TRA 4-4	Additional wording	Pre Draft	Pre Draft
	TRA 4-5	Additional wording	Pre Draft	Amended Draft
	TRA 4-7	Additional wording	Pre Draft	Amended Draft
	LUS 5-1	Additional wording	Pre Draft	Pre Draft
	LUS 5-2	Additional wording	Pre Draft	Pre Draft
	X-04	Additional	Pre Draft	Amended

		wording		Draft
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3. Summary of how submissions/consultations were taken into account:

Introduction

During the public display periods of the draft SLAP and amended draft SLAP (six weeks and five weeks respectively); associated Environmental Report was also placed on display. Submissions and observations were considered in the Manager's Report. Consultation with statutory bodies took place during the scoping stage of the SEA process as well as the display periods of the draft and amended draft LAP.

SEA Scoping Consultations

Strategic Environmental Assessment scoping letters were sent to the Department of the Environment, Heritage and Local Government (DoEHLG), Department of Communications, Marine and Natural Resources (DCMNR) and Environmental Protection Agency (EPA). The responses, where received, to these letters were taken into account during the carrying out of the Strategic Environmental Assessment and the preparation of the Environmental Report on the Airport SLAP.

Submissions and Observations on draft SLAP Environmental Report

Section 20(3) (c) of the Planning and Development Act 2000 requires a Manager's Report to be prepared on any submissions or observations received during the public display period. The Manager's report should indicate what action (if any) was taken in response to the submissions/consultations. This was published in April 2010.

A total of 8 submissions were received during the public display period (1st February - 15th March 2010) and observations were received on the amended Draft Plan during the public consultation period.

Submissions relate to surface water drainage, land uses in the vicinity of the airport, the runway extension, surface access, modal split, the secondary access, upgrading of the N27, one on zoning objectives, mobility management plans, and noise monitoring. Two new objectives

were recommended by the EPA and the DAA in relation to the requirement for a waste management plan and the need for a sustainable approach to design/ energy use for future airport buildings.

In addition to issues arising from submissions received, a number of the amendments proposed are required to address issues arising from the Strategic Environmental Assessment (SEA) of the Draft Plan. The table lists the submissions of relevance to each of the proposed changes and an indication is also given if the change is resulting from a matter raised in the SEA.

Submissions and observations on amended draft SLAP

The SEA team responded to submissions and observations made after the various public display periods. Any changes necessitated as a result of the submissions received were reviewed by the SEA team and have been incorporated where appropriate into the amendments to the Plan and documented in the Managers Report produced during the preparation of the Plan. Section 9 (f) of the Planning and Development (amendment) Act 2002 requires a Manager's report to be prepared following public display of the amended draft SLAP. The Manager's Report should again indicate what action was taken in response to the submissions/consultations.

A total of 5 submissions or observations have been received in response to the public consultation carried out regarding the proposed amendment. Responses in relation to the Environmental Report/SEA were received from the EPA and the DoEHLG which were taken into consideration.

Screening

In November 2009 a screening statement for the proposed special local area plan incorporating the changes to the airport's plan was prepared and submitted to the EPA. The EPA's response was that in their opinion the SEA process needed to be carried out on the proposed SLAP with respect to the potential for likely significant effects.

Section 4 Reasons for choosing the plan as adopted, in light of other reasonable alternatives considered.

Introduction

Article 5 of the SEA Directive requires the environmental report to consider 'reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme' and the significant environmental effects of the alternatives selected.

If the policies and objectives of the SLAP are not implemented the projected growth would be severely curtailed due to airside and landside infrastructural deficits. The SEA considered two options for the development of the Airport for the plan period. The options considered were at a local level and strategic level:

Strategic Development Options

Increased use of other airports

It was considered that other airport locations such as Waterford, Kerry and Shannon are too peripherally located in the region to best serve the area of greatest population density.

Improved use of the existing infrastructure at Cork Airport

The Cork Airport Future Needs Study identified that if there are no improvements to infrastructure that could deliver significant additional capacity without building an extension to the runway.

Retention of the old Terminal Building

The previous terminal building exists on site and is it feasible for it to be reused. The building is centrally located and thus provides easy access. Options include administering it under the auspices of the existing airport authority or handing it over to an airline company to operate.

Assessment of Alternatives

Alternative 1 Strategic phasing of future Development

The reason for the plan is for the coordination of the growth of the airport. The advantages of intervening are to ensure that the growth is coordinated orderly and is located in the optimum position on site. The

future growth in the airport will require appropriate storage of on site surface water, and the separation of pollutants from water run off from airside pavements.

Alternative 2 Focus only on operational needs

For ordered growth of the airport, there will be a requirement to expand the terminal; this will generate more business, which will have an important socio effect on both the city and region. In parallel with this the expansion of destinations will allow the operation of increased cargo activity. It is anticipated that the growth will benefit both tourism and business. With such anticipated growth there will be negatives as more passengers will mean extra pressure on the existing service infrastructure capacity on site, resulting in additional road traffic to and from the site with the resulting increase in aircraft movement. In adopting this scenario, consideration must be given as to the how the airport will be able to meet on site water and sewerage demand and if there will environmental issues arising.

Alternative 3 Plan led growth in conjunction with operational needs growth

The SLAP will provide a framework for the optimal long-term development of the Airport as a response to local and international demand for air travel as outlined in paragraph 1.2.1. of the SLAP.

Preferred option

Alternative 3 is seen as the preferred option and with the Airport Authorities in conjunction with Cork County Council having prepared a Cork Airport Surface Access Plan and a Cork Airport Future Needs Study in addition with the SLAP indicates a high level of coordination between the stakeholders, which is critical for orderly growth. Critical to this is the extension to runway 17-35 at the northern end.

Section 5 Monitoring Measures:

Introduction

Article 10 of the SEA Directive requires that the significant environmental effects of the implementation of plans are monitored in order to identify at an early stage unforeseen adverse effects and to be able to undertake appropriate remedial action. The Environmental Report which was made available for public consultation has included proposals in relation to monitoring of the plan. Monitoring can also be used to analyse whether the SLAP is achieving its environmental protection objectives and targets, whether such objectives need to be re-examined and whether the proposed mitigation measures are being implemented.

Monitoring Methodology:

Monitoring measures have been based on indicators which measure changes in the environment. These include:

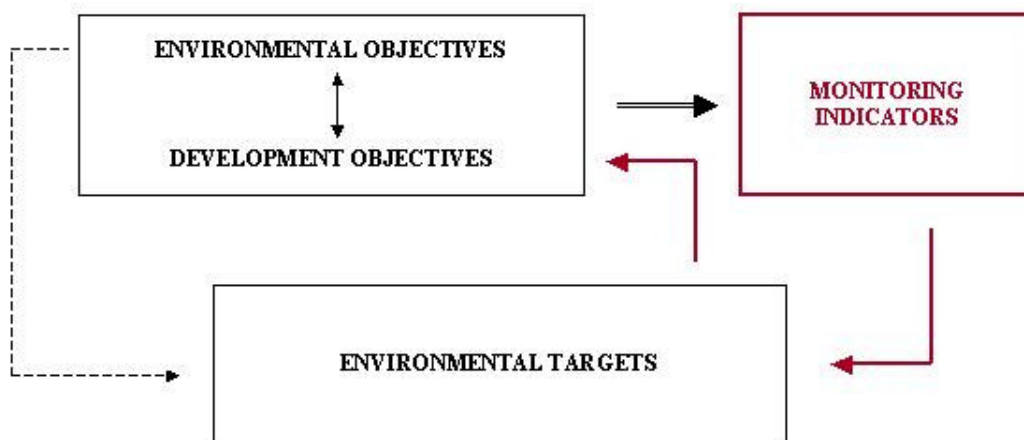


Figure 1

The Environmental objectives and targets are predominately linked to objectives contained in the Plan (Figure 1). There is a dependence on external information which is required in certain areas, particularly water objectives and their targets; however it is difficult to ascertain if this information will become frequently and readily available during the monitoring period. This reality is reflected in the matrix which follows on the monitoring indicators.

The monitoring process system can be split into several following stages:

- Collection of data (acquisition)
- Processing the data (analysis of collected data)
- Evaluation and interpretation
- Consideration of consequences (review of Plan policies)

It is proposed to use a *Geographical Information System (GIS)* based monitoring system to monitor and assess the implementation of the plan through the local area plan process and the County Development Plan review.

Table: EPO's and Targets

Environmental Protection Objectives (EPOs)	Targets	Monitoring Indicators	Data Source	Accessibility
Biodiversity				
B1: Conserve and enhance biodiversity	No decline in the population of protected species as a result of Airport activities	Monitoring should be appropriate to the scale of the development in the context of habitat and constituent species; their potential loss; or the magnitude of impact upon them.	Cork County Council	Internally available
Population and Human Health				
PH1: Improve people's quality of life based on the promotion of sustainable forms of transport to and from Cork Airport	Increase modal shift to sustainable transport including public transport, cycling and walking	To improve quality of life, provision	Cork County Council	Internally available

Soils and Geology				
S1: Safeguard soil and geological quality and quantity	Re-use of Brownfield lands, rather than developing Greenfield lands;	Area of Brownfield land available. Number of granted PA within Greenbelt or airport boundary	Cork County Council	Internally available
Water Resources				
W1: Improve water quality and the management of watercourses to comply with the standards of the Water Framework Directive and incorporate the objectives of the Floods Directive into sustainable planning and development;	No negative impacts on water quality in rivers, lakes, estuaries and groundwater as a result of Airport activities	Monitoring of the quality/strength and volume (flow and load) of sewage discharged for the Airport Zone to the public sewer should be continued and any new discharges should be monitored in a similar fashion.	Cork County Council, EPA and SWRBD	Dependant on external and internal information.
	Management of surface water and reduce risk of flooding;	Granting PA for developments in areas sensitive to flooding	Cork County Council, EPA and SWRBD	Dependant on external and internal information

Air and Climate				
A1: Maintain and promote continuing improvement in air quality through the reduction of emissions and promotion of renewable energy and energy efficiency	To remain within good air quality standards	Air quality shall be monitored and results shared with the relevant authorities.	EPA and Cork County Council	Dependant on external and internal information
	Minimise emissions of greenhouse gases			
	Reduce waste of energy, and maximise use of renewable energy sources			
	Reduction in car dependency and reduction in car based emissions	Public Transport Corridors to and from the airport	Cork County Council and transport providers.	Dependant on external and internal information

Cultural Heritage and Landscape			
C1: Promote the protection and conservation of protected structures, sites of archaeological value and the character of the landscape;	No negative impacts on protected structures, sites of archaeological value and the character of the landscape	The habitat Map plan can be used for baseline data. Archaeological and architectural heritage will be protected by the continued implementation of the County Development Plan objectives	Cork County Council Heritage Unit Internal Information
Noise			
N1: Sustainably manage and minimise the impacts of noise	Develop the carrying out of annual aircraft and airport operations noise monitoring in relation to recognised noise criteria	Monitoring of noise levels should be undertaken prior to any major development relating to external access to obtain accurate baseline conditions	Cork County Council, Airport Authorities and the EPA Dependant on external and internal information
	No increase in the number of noise complaints received	Provision of a residential sound insulation programme.	Cork County Council, Airport Authorities and the EPA Dependant on external and internal information

Material Assets				
M1: Support and improve sustainable transport to and from the airport, including public transport systems and infrastructure	Improve bus availability	An annual statement will record progress of the Mobility Management Plan, which will evolve and adapt to changing circumstances		
	No decrease in peak traffic speed			