ANNUAL PERFORMANCE REPORT 2011

CONTENTS

Chief Executive's Introduction to the Annual Performance Report 2011

It gives me great pleasure to introduce the seventh annual performance report for the Irish Aviation Authority covering the performance of the Air Navigation Services function for the year 2011.

The Authority, throughout 2011, continued to deliver safe, efficient and cost-effective air navigation services in Irish controlled airspace and this report sets out our performance as required under common requirements laid down in Commission Regulation (EC) no 1035/2011.

Safety: The IAA's key objective is safety and the ICAO Safety Oversight Audit Programme, carried out in 2010, was very successful. The IAA, principally through the Safety Regulation Directorate, with assistance from the Department of Transport, Tourism and Sport, was the primary focus for the intensive audit of the State under the relevant Annexes of the Chicago Convention. The results, which were published in March 2011 by ICAO, show that Ireland is ranked among the best in the world and third in Europe in its safety oversight of civil aviation.

Cost Effective: The IAA continues to deliver on its commitment to remain cost-effective and provide en-route, terminal and communications services at charges that are stable and as low as possible. We are the fifth lowest in Europe for ATC charges to airlines in 2012. In addition the IAA's terminal charge was reduced by 21% on 1st January 2012 and by 6% yearly (in real terms) from 2013-2015. We are amongst the lowest 10% in Europe for ATC terminal cost in 2012.

Environment: The IAA received a special award from the Sustainable Energy Authority of Ireland in November 2011 for its work in optimising airline routes to cut travel distances by 2.2 million kilometres, thus saving 16 million litres of airline fuel per annum. The IAA remains committed to implementing future environmental projects.

Strategic Alliances: The IAA will continue to develop strategic alliances to meet the challenge of the Single European Sky (SES) and Functional Airspace Block requirements. Throughout 2011, the IRL\UK FAB focused on additional operational integration and adding value to transatlantic aircraft crossing Irish and UK airspace. The operational efficiencies and savings in route-kms flown, flight times, fuel tonnage and carbon (CO_2) emissions, all continued to add value to the airlines, while at the same time helping to minimise the environmental impact of air traffic management activities.

SES II Package: Following the adoption of the SES II package, the IAA is ready to achieve all performance targets, as outlined in the National Performance Plan for 2012-2014, as required by EC Regulation no.691/2010.

Staff: During 2011 major progress was recorded in concluding a revised continuity of service agreement. A fresh initiative entitled 'Working through Partnership" was introduced which provides a basis for a new approach to managing employee relations in the IAA. It includes, inter alia, an industrial peace clause and a clear time-specific process for managing change, and also the appointment of a staff-side convenor.

ANS Performance: The IAA participates in the ATM Cost Effectiveness (ACE) benchmarking exercise, which presents factual data and analysis on cost-effectiveness and productivity for 37 Air Navigation Service Providers (ANSPs) in Europe. The latest available report was published in July 2012 and highlights that the IAA is;

- One of the most cost-effective providers in Europe.
- It has amongst the lowest level of both en-route and airport delays in Europe.
- Its air traffic controllers are amongst the most productive in Europe.

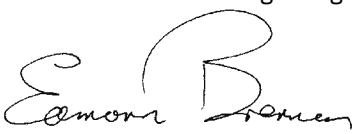
Customer Consultation: The IAA will continue to consult regularly with its customers in the evaluation of the quality of service provided. In 2011, it received the highest average customer relations score (90.3%) since this process commenced.

The IAA is dedicated to improving its performance and to greater consultation with our customers to ensure that our level of service continues to improve. We have made strong progress again in 2011 in positioning the IAA to safely meet these service requirements and also to meet future challenges in what is a dynamic and changing industry.

I would like to thank all of the staff of the Authority for delivering another successful year. In particular, I would like to express my gratitude to my management colleagues for their hard work and support throughout another challenging year.

I would also like to thank the Chairman, Ms. Anne Nolan and my colleagues on the Board for their guidance and support.

Go raibh míle maith agaibh go léir.



Eamonn Brennan
Chief Executive
Irish Aviation Authority

1. INTRODUCTION

The Irish Aviation Authority is required under Single European Sky regulations to produce an annual report on its performance.

The Single European Sky regulations provide, inter alia, that the provision of air navigation services within the European Community shall be subject to certification by Member States that they meet the common requirements laid down in Commission Regulation (EC) no 1035/2011. This imposes an obligation on individual States to certify providers that comply with the common requirements and to subsequently designate air navigation service providers.

Responsibility for the certification process rests with the National Supervisory Authority (NSA) currently the Safety Regulation Division of the Authority. The designation process is a matter for the State but in order to be considered for designation, an entity must have prior NSA certification.

Air Navigation Service Providers (ANSPs) must submit to their NSA, a five-year Business Plan, an Annual ANS Plan, and audited accounts. In addition, ANSPs must submit an Annual Performance Report at the end of their reporting period. A brief summary of the requirements under each of these areas is as follows.

1.1. FIVE YEAR BUSINESS PLAN

The IAA's Business Plan is required to cover a minimum period of five years and set out:

- The overall aims and goals of the provider, and its strategy towards achieving them, in consistency, with any overall longer term plans and with relevant Community requirements;
- Appropriate performance objectives in terms of quality and level of service, safety and cost effectiveness.

1.2. ANNUAL PLAN

The Annual Plan specifically relates to the ANSP and should specify further the features of the Business Plan and describe any changes to it. The annual plan shall cover the following provisions on the level and quality of service such as the expected level of capacity, safety and delays to flights incurred as well as on financial arrangements:

- Information on the implementation of new infrastructure or other developments and a Statement on how they will contribute to improving the level and quality of services;
- Indicators of performance against which the level and quality of service may be reasonably assessed;
- The service provider's expected short-term financial position as well as any changes to or impacts on the business plan.

1.3. ANNUAL REPORT

The Annual Report shall include as a minimum:

- an assessment of the level and quality of service generated and of the level of safety provided;

- the actual performance of the service provider, compared to the performance objectives and indicators established in the Business Plan;
- developments in operations and infrastructure;
- the financial results, if they are not separately published in accordance with article 12(1) of the Service Provision Regulation;
- Information about the formal consultation process with the users of its services, and about the human resources policy.

This publication is primarily concerned with the areas outlined above, of the Annual Report, and covers the period 1 January 2011 to 31 December 2011 and is designed to meet the common requirements laid down in Commission Regulation (EC) no 1035/2011: to 'provide a description of progress achieved in relation to the business plan, reconciling actual performance for 2011 against planned performance in the IAA's five year Corporate plan 2011 -2015".

The Authority provided forecasts in its five year corporate plan 2011-2015 in the following areas.

1. Safety
2. Efficiency
3. Cost effectiveness
4. Delays
5. Capacity

A detailed analysis of actual performance versus planned performance under each of these areas is set out under section 2 to section 7 of this report.

2. SAFETY

The IAA's key objective is safety and the ICAO Safety Oversight Audit Programme, carried out in 2010, was very successful. The IAA, principally through the Safety Regulation Directorate, with assistance from the Department of Transport, Tourism and Sport, was the primary focus for the intensive audit of the State under the relevant Annexes of the Chicago Convention. The results, which were published in March 2011 by ICAO, show that Ireland is ranked among the best in the world and third in Europe in its safety oversight of civil aviation.

2.1 CORPORATE ATM SAFETY STRATEGY

As a result of the IAA's efforts the framework of a mature and effective Safety Management System (SMS) is well established. In the coming years, the IAA must contend with competing demands and, to approach this demanding environment, the IAA will take action on the following five interconnected focus areas which are driven by associated strategic safety goals.

The focus areas are;

2.1.1. Safety Performance Indicators,

The IAA is continuously developing safety performance indicators for all aspects of the ATM system in line with ICAO, EUROCONTROL and EASA.

- In consultation with the NSA, the IAA is developing and implementing the three leading Safety Performance Indicators from Regulation 691/2010, which will be monitored from 2012 onwards at European, national and FAB levels: these are:

    i. Effectiveness of Safety Management (EoSM): based on the safety maturity survey methodology developed by the EUROCONTROL Safety Reporting Task Force (SAFREP).

    ii. Application of the severity classification scheme of the Risk Assessment Tool (RAT) methodology.

    iii. Reporting of Just Culture Implementation.

2.1.2. Operational Safety Improvement,

- The Head of ATM Safety Management is ensuring that, in collaboration with local managers, appropriate safety performance improvement plans are being developed and implemented.

2.1.3. Development of Unit Safety Manager Function,

- To further strengthen the organisation of safety management, the IAA has implemented a Unit Safety Manager (USM) function at each Operations & Strategy Unit.

2.1.4. Functional Airspace Block Implementation,

- In collaboration with the IRL\UK FAB Supervisory Committee (FSC) 'Harmonisation Working Group', we will develop and implement a FAB safety management 'harmonisation' strategy that provides for wider FAB integration.

2.1.5. Review of Strategic Safety Management Policy and Principles.

- The Head of the ATM Safety Management Unit will perform a review of strategic safety management policy and principles to provide assurance that safety risks are pro-actively identified and managed; the SMS meets applicable safety regulatory requirements, is consistent with good practice, and is applied consistently across the organisation

2.2 SAFETY ACHIEVEMENT METRICS

Safety data produced from the IAA's mandatory Occurrence Reporting (MOR) scheme enables analysis of our safety trend. Throughout 2011, the IAA embedded its improved safety reporting arrangements whereby Operational Units reported the trend in their top five Key Risk Areas in a standard Quarterly Operations Safety Report. These reports have identified that the top five IAA Key Risk Areas are:

1. Separation minima infringement
2. Runway incursions
3. Unauthorised penetration of airspace
4. Deviation from ATC clearance
5. Level bust

The variance between predicted and actual events for 2011 in the 5 Key Risk Areas was lower than predicted with the exception of runway Incursions, which were higher than predicted, however, corrective actions have been identified and are being implemented.

As part of the IAA's ATM Safety Strategy, the Authority is implementing a 'Plan, Do, Check, Act" Operational Safety Improvement process that will focus safety efforts on assuring that the occurrence trend in Key Risk Areas does not increase and, where possible, will decrease.

3. EFFICIENCY

3.1. TRAFFIC 2011

The Authority uses the EUROCONTROL STATFOR forecasts, in addition to local economic knowledge, to estimate traffic growth. There are however, a number of sources of uncertainty in these forecasts, which for example include:

- Network and route changes
- Tourism trends are variable
- Oil Prices remained changeable
- Airline strategies to aviation taxation
- Load factors
- Local effects

This forecast estimated a growth in total IFR traffic of 3.5% during 2011. However, the actual growth was 2%, which was primarily due to the continued impact of the economic downturn, which resulted in static growth of 196,000 movements in international arrivals and departures and a significant reduction in internal Irish flights. The majority of traffic growth for 2011 was in en route over flights, which were up by 2.6% to a total of just over 300,000 flights.

North Atlantic communications traffic, which is not covered by this report and Commission Regulation (EC) no 1035/2011, grew by 3.7% to over 403,000 flights.

3.2. STAFFING

The Authority's Corporate Plan provided for a staffing of 623 (excluding SRD) to meet ANSP requirements for 2011.

The actual comparative staffing for 2011 was 609 staff.

The overall variance equated to a 2% variance, whereby actual staffing was lower than authorised staffing levels. This was primarily due to a readjustment in the IAA's authorised staffing requirements, as result of the low growth rate plus fluctuations between planned retirements and planned recruitments.

3.3. HUMAN RESOURCE POLICY

An agreement was reached with staff representatives on measures to address the IAA's pension fund deficit. The measures, coupled with an effective investment strategy should, based on actuarial advice, return the IAA's pension fund to solvency in 2018 following which a comprehensive review of pension arrangements will be carried out.

Implementation of the 2011 Training and Development Plan, which is approved and overseen by the Training and Development Management Committee, progressed as expected.

The IAA's Training Centre is licensed by the National Supervisory Authority (NSA) in line with EASA requirements. It is primarily charged with the development and delivery of technical training to the Operations Directorate. Training services are also supplied to external customers on a commercial basis, subject to capacity constraints. The internal training demand, year-on-year, continues to be high, thereby limiting the supply of training services to external customers. During 2011, internal training concentrated on training SCP (Student Controller Programme) 8, 9 and 10 and also the COOPANS operational staff training requirements. More than 6,500 man-days of training were conducted in 2011.

The IAA, throughout 2011, continued its support for College Ireland in promoting Ireland as a centre of excellence for aviation and transport and in providing a 'one stop shop" for education, training and consultancy in the sector. In all, more than twenty Irish organisations from aviation, emergency services, transport and the university sector are active participants in this initiative.

During 2011 major progress was recorded in concluding a revised continuity of service agreement. A fresh initiative entitled 'Working through Partnership" was introduced which provides a basis for a new approach to managing employee relations in the IAA. It includes, inter alia, an industrial peace clause and a clear time-specific process for managing change, and also the appointment of a staff-side convenor.

In 2011 forty-eight students were selected to join our Student Air Traffic Controller Programme, following a recruitment campaign which had over 4,100 applicants seeking a place.

The Authority continues to monitor and put in place measures to ensure compliance with the Safety, Health and Welfare at Work Acts, and associated regulations to ensure, in so far as is reasonably practicable, the safety, health and welfare of all employees, members of the public and others coming into contact with the IAA in the normal course of business.

4. FINANCIAL RESULTS

The Authority does not propose to review its financial results in this report as the financial results are separately published and independently audited in accordance with article 12(1) of the Service Provision Regulation. These can be accessed on the IAA's website www.iaa.ie

5. COST EFFECTIVENESS

5.1. ESTIMATED COMMERCIAL RATES

The IAA is responsible for the provision of safe, efficient and cost effective air navigation services in Irish-controlled airspace. The costs of providing these services and facilities are funded by charges levied on airspace users.

5.1.1. EN ROUTE

The IAA recovers the costs of en route air navigation facilities and services by means of en route charges. A charge is levied on airspace users for each flight made under Instrument Flight Rules taking into account the distance flown and the weight of the aircraft (service units).

The IAA establishes its forecast en route cost base for the year in which the charges are collected. This cost base comprises operating costs plus depreciation plus interest on capital expenditure plus the State's share of EUROCONTROL costs. Ireland is a member of EUROCONTROL, the European organisation responsible for the safety of navigation and also responsible for helping to develop a coherent and co-ordinated air traffic management system in Europe.

The unit rate of charge is determined by the IAA by dividing the estimated costs by the estimated traffic, measured in terms of service units, to give the en route service unit rate. The unit rate is applicable from 1 January.

This system operates on a cost recovery basis (up to the 31st December 2011) allowing the IAA to recover only those costs which have been incurred in providing an en route service. Towards this end, a two year adjustment mechanism is operated so that any under/ over recoveries of costs in a particular year are taken into account in determining the unit rate for the following year.

In the submission to the NSA (Corporate Plan) for 2011, the en route chargeable service unit rate was estimated at € 33.01.The actual en route rate charged to the IAA's customers in 2011 was € 33.01.

The submission to the NSA assumed chargeable en route costs for 2011 of € 117,548,000 and chargeable service units (CSU's) of 3,561,000. The actual outturn for 2011 was as follows:

	En-route (incl. MET)	Chargeable service units
Actual outturn	€113, 811, 026	€3, 710, 390
Forecast figure (NSA Submission)	€117, 548, 000	€3, 561, 000
Variance in €	€3, 736, 974	€149, 390
Variance in %	3.2%	4.2%

The en route cost base was lower than planned mainly due to lower headcount than anticipated as well as savings in the areas of MET, administration and training.

5.1.2. TERMINAL

The IAA recovers the costs of terminal navigation facilities and services by means of terminal charges established within the price cap allowed by the Commission for Aviation Regulation (CAR). A charge is levied on users for approach, landing and take-off services provided at each of the State airports, Cork, Dublin and Shannon, taking into account the weight of the aircraft where this weight exceeds two tonnes.

Similar to en route, the IAA establishes its forecast terminal cost base for the year in which the charges are collected. This cost base comprises operating costs plus depreciation plus interest on capital expenditure.

Since 1st January 2011, and in accordance with EC regulations, the IAA's terminal service charge has been calculated as the maximum take-off weight divided by fifty to the power of 0.9. This rate must operate within the CAR price cap.

This system operates on a cost recovery basis, within the price cap set by CAR, allowing the IAA to recover only those costs which have been incurred in providing a terminal service. Towards this end, a two year adjustment mechanism is operated so that any under/over recoveries of costs in a particular year are taken into account in determining the unit rate of a future year.

The Commission for Aviation Regulation (CAR) was established under the Aviation Regulation Act, 2001, to regulate, inter alia, certain aspects of the aviation sector in Ireland. In accordance with the Act, CAR is required to make determinations governing the maximum levels of aviation terminal services charges that can be levied at Dublin, Cork and Shannon by the IAA.

The terminal service unit for 2011, as submitted to the NSA (in the Corporate Plan), was €202.74.

The submission to the NSA (Corporate Plan) assumed terminal costs of €26,123,000 and terminal service units of 139,900. The actual outturn for 2011 was as follows:

	Terminal Costs (incl. MET)	Terminal Service Units
Actual outturn	€25, 246, 535	€135, 723
Forecast figure (NSA Submission)	€26, 123, 000	€139, 900
Variance in €	€876, 465	€4, 177
Variance in %	3.4%	3.0%

The terminal cost base for 2011 was 3.4% lower than planned due to lower headcount than expected and operational cost savings.

Terminal commercial traffic at Cork, Dublin and Shannon airports has declined significantly over the last few years resulting in an under-recovery of costs to be recovered in future years.

5.1.3. NORTH ATLANTIC COMMUNICATIONS

The North Atlantic communications charge reflects the cost of providing a High Frequency (HF) voice and communications charge to airspace users on the North Atlantic.

Consistent with other air navigation services, the IAA establishes its forecast cost base for North Atlantic communications for the year in which the charges are collected. This cost base comprises operating costs plus depreciation plus interest on capital expenditure.

The unit rate of charge is determined by the IAA by dividing the estimated costs by the estimated traffic, measured in terms of numbers of flights, to give the North Atlantic communications charge per flight. The actual North Atlantic communications charge in 2011 of €44.10 per flight is in line with the submission to the NSA.

The IAA signed a Memorandum of Understanding with its Icelandic counterpart ISAVIA in 2003 under which the HF stations at Ballygirreen and Gufunes, Iceland operate as one, serving the combined Flight Information Regions (FIRs) of Reykjavik / Sondrestrom and Shanwick.

Joint operations commenced in April 2006 resulting in significant savings and a 60% increase in efficiency. This co-operation was enhanced in 2011 and will create a full virtual centre with full integration of both RF systems. Both parties will have access to all assets from either centre. Again, the IAA has demonstrated its commitment to its radio communications centre at Ballygirreen by investing €2 million to complete this second phase of the co-operation.

5.1.4. PERFORMANCE BENCHMARKING

The IAA participates in the ATM Cost Effectiveness (ACE) benchmarking exercise, which presents factual data and analysis on cost-effectiveness and productivity for 37 Air Navigation Service Providers (ANSPs) in Europe.

The latest available report was published in July 2012 and highlights that the IAA is;

- One of the most cost-effective providers in Europe and its costs are significantly below the European average.
- It has amongst the lowest level of en-route and airport delays in Europe.
- Its air traffic controllers are amongst the most productive in Europe and provide the service at a lower cost than other most other western European air traffic controllers.

The latest report published in July 2012 highlights that the IAA is the 13th most cost effective ANSP, out of the 37 ANSPs, in relation to En Route costs per Flight hour and is the 15th most cost effective ANSP, out of the 37 ANSPs Terminal costs per Airport Movement. The IAA is also significantly below the European cost average in both areas.

The ACE benchmarking work is carried out by the Performance Review Commission (PRC) and the Performance Review Body (PRB) in the context of Articles 3.3(i), 3.6(b) (c), and 3.8 of EC Regulation N°691/2010 and is based on information provided by ANSPs in compliance with Decision No. 88 of the Permanent Commission of EUROCONTROL on economic information disclosure and in the context of Annex IV 2.1(a) of EC regulation N°691/2010.

6. CAPACITY

6.1. SHANNON ACC CAPACITY

The Shannon ACC is a very complex airspace block; however, the dynamic sectorisation scheme in the upper airspace ensured that Shannon ACC met its capacity plan of +3% during 2011.

6.2. DUBLIN ACC CAPACITY

During 2011, the Dublin ACC did not require any planned increases in capacity due to the on-going decrease in international arrivals and departures.

7. DELAYS

7.1. ATFM REGULATION DELAYS

It should be noted that Ireland has one of the lowest levels of delays, as recorded by the central flow management unit (CFMU) in EUROCONTROL; they are normally less than 1% of total European delays.

It was estimated that Ireland's level of delays would remain at low levels and the Authority forecasted that total ATFM regulation delays during 2011 would be circa 16,000 minutes.

However, total actual Irish delays recorded by the Central Flow Management Unit (CFMU) for the period January 2011 to December 2011 amounted to only 3,571 minutes on 214 aircraft.

- These delays were primarily attributable to traffic arriving at Dublin airport.
- 76% of these delays were attributable to two exceptional and infrequent events on the 18th and 23rd of May i.e. the Europa League final and the US President's visit to Ireland with 124 aircraft being delayed by 2,589 minutes.
- 17% were due to adverse weather conditions with 51 aircraft being delayed by 590 minutes.

The variance between forecast and actual ATFM delays was primarily due to the reduction in traffic levels across Europe.

8. ENVIRONMENT

8.1. FUNCTIONAL AIRSPACE BLOCK INITIATIVES

The Authority has, since 2009, been delivering significant savings to airlines through the various Functional Airspace Block (FAB) initiatives, including optimisation of the P600 airway and introducing a new route between Dublin and Belfast, removal of Minimum Navigation Performance Standards (MNPS) requirement in our Southern airspace and elimination of high level routes to maximise aircraft capability.

We have also implemented continuous descent approach for Manchester arrivals, and Night Time Fuel Saving Routes for other European destinations etc.

The FAB, with our UK partner NATS, is providing significant savings to our airline customers in terms of reduced fuel burn, reduced CO2 emissions and reductions in other airline operating costs (via reduced delay savings).

In summary:

- Delivered to date: Total savings of €43.4m., including 48,000 tonnes of fuel, equivalent to €30.2m in fuel costs. Customers have also saved over 152,000 tonnes of CO2 and €13.2m in non-fuel savings from delay savings (reduced maintenance, crew and aircraft ownership costs);

- Estimate for 2012: Total savings will be €26.6m, including 25,000 tonnes of fuel and 80,000 tonnes of CO2. In our original FAB proposal in 2008, we estimated that the savings by 2013 would be in the region of €12m.; therefore, one year ahead of schedule, the FAB is delivering more than twice as much as previously expected; and

- Cumulative 2008-2020: Total savings of €336m, including €241m in fuel costs (through 332,000 tonnes of reduced fuel), €80m in non-fuel savings, and also €15m in reduced Emission Trading Scheme (ETS) credits (over a €1 billion in reduced CO2 emissions).

The IAA also received a special award from the Sustainable Energy Authority of Ireland in November 2011 for its work in optimising airline routes to cut travel distances by 2.2 million kilometres, thus saving 16 million litres of airline fuel per annum. The IAA remains committed to implementing future environmental projects.

9. DEVELOPMENTS IN OPERATIONS AND INFRASTRUCTURE

The aim of the Authority's Technology plan is to deliver a strategic roadmap for the IAA's Air Traffic Management (ATM) Technology Directorate up to 2016.

The methodology used in compiling the Technology Strategy is to:

- Identify the Communications, Navigation and Surveillance (CNS) goals we wish to achieve;
- Identify which emerging technologies the IAA must monitor and evaluate in order to position the organisation for the challenges ahead.

All identified technology projects are subject to approval by the Air Traffic Management Planning Group to ensure that the proposed technology changes meet operational requirements. Projects are also subject to internal scrutiny from the 'CAPEX committee" which approves business cases and tracks budgets.

Operational requirements are the driver for technology change, and can be expressed as requirements to increase the system capacity improve safety, improve performance or remain compatible with changing SES requirements. The most significant developments in Operations and Infrastructure during 2011 were as follows;

- **COOPANS Development:** The major highlight of the 2011 Technology Work Program was the successful introduction into operation of the COOPANS Flight Data Processing System in the Shannon FIR in April 2011, followed three weeks later by the Dublin TMA. This was a major milestone not just for the IAA but for all of the COOPANS partners and Thales who have worked together to bring about this successful outcome. The original framework agreement that created the COOPANS partnership was signed in April 2006, so the Shannon and Dublin O-Dates represent the culmination of five years' work. The initial COOPANS contract was for the development of a single harmonized software build that was based on the DATMAS program and incorporated functionality from S2k (LFV) and CAIRE2000 (IAA). The program expanded in 2007, 2008, and 2009, as the COOPANS partners signed further development and integration orders. The IAA required a complete hardware replacement program to support the new COOPANS software, which was completed in 2009. The final Site Acceptance Tests of the operational software and hardware were completed in March 2010 in Ballycasey. The system was then handed over to the IAA to begin its own internal verification, validation and ATC training programs.

  The collaborative procurement of the COOPANS Air Traffic Management system, with LFV Sweden and Naviair Denmark, was delivered on time, to specification and within budget. Collaborative procurement saved €21m, representing a 30% discount on what the IAA would have paid had we procured it alone.

  Following on from the successful operation of Build 1, the IAA and the other COOPANS partners, who now include Austro-control and Croatia Control, signed an order in June 2011 for COOPANS Build 2, which will go into operation in on a phased basis from 2012.

- **Radar Replacement:** The final RADAR to be replaced as part of the RADAR replacement program was completed, when the Shannon RADAR was restored to operations in Q3 2011. Again this marked the final step in a program which was carried out on a phased basis over five years. Two complete new RADAR installations were commissioned as part of the RADAR replacement program, one at Cork Airport and the other at Malin Head. The original Shannon RADAR tower was fully refurbished as part of the Shannon RADAR replacement program.

- **ASMGCS (Advanced Surface Movement Guidance and Control System) Introduction:** Following an extensive period of site tuning and data validation, Runway Incursion Monitoring (RIM) and Stop Bar Violation capabilities were enabled on the ASMGSC system at Dublin Airport in June 2011. RIM is a major safety enhancement, and will assist in reducing the risk of runway incursions at Dublin Airport. Further upgrades are planned to improve coverage in the vicinity of Terminal 2.

- **IRVR (Instrumented Runway Visual Range) upgrade:** The IRVR upgrade program was completed at Shannon Airport in Q3 2011. All the IRVR systems at Cork, Shannon and Dublin now have master slave redundancy, which provides additional redundancy, during periods of low visibility operations.

- The Communications Domain launched a tender for the **VCS (Voice Communication System)** replacement program. This project will constitute a major element of the 2012 – 2016 Technology Work Program.

- The **FDP (Flight Data Processing)** domain completed a competition for the **AFTN (Aeronautical Fixed Telecommunications Network)** replacement program, the system engineering review is complete and the O-Date is scheduled for 2012.

10. CUSTOMER CONSULTATION PROCESS

10.1 INTRODUCTION

The Irish Aviation Authority is committed to customer consultation in its objective of providing, on a sound commercial basis, safe, efficient and cost-effective air navigation services which meet the needs of its customers.

On an annual basis, the Authority requests its main airline customers to complete a detailed online customer scorecard in respect of its provision of air navigation services. The feedback obtained through this process is subsequently used to identify customer needs and expectations.

10.2 RESULTS FROM 2011 CUSTOMER SCORECARD

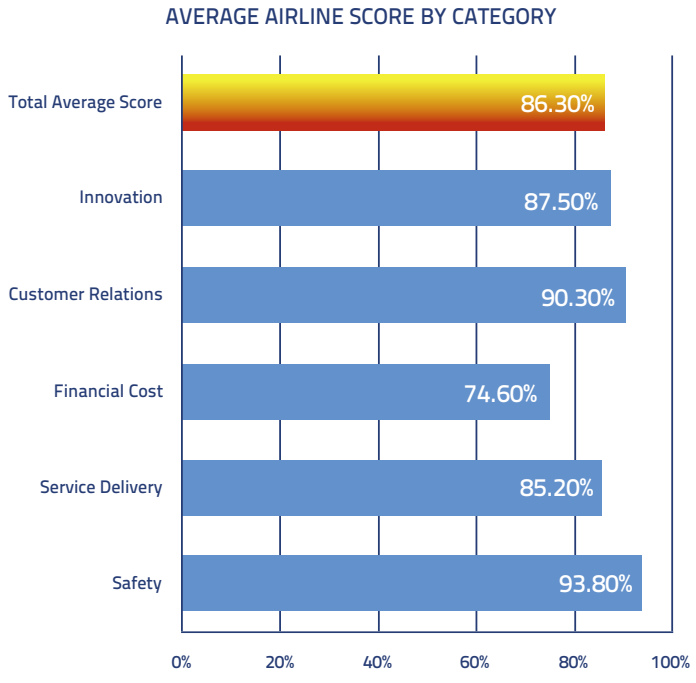
The results from the 2011 customer scorecard were very positive for the Authority:

I. Safety: continued to secure the highest score as customers acknowledged a very high level of satisfaction and confidence in the Authority's safety levels.

II. Cost containment acknowledgement by the industry: In late 2008, the Authority instigated a series of cost containment measures to support the industry, to mitigate the impact that the downfall in traffic had on air navigation charges. Efforts continued through to 2011 to minimise increases in charges due to lower traffic volumes. Customer feedback in relation to these measures was very positive and this translated into higher scores from most customers for 'Financial Cost –Effectiveness".

III. Positive Operational improvements: The Authority has successfully introduced a number of operational improvements during 2009-2011, as well enhancing the FAB partnership with NATS. Airspace changes, such as ENSURE, Reduced Longitudinal Separation on the NAT and NTFSR, which result in significant operational cost savings for the airlines, were highly commended.

The following diagram sets out the average airline scores for all categories during 2011.



10.3 RECOMMENDATIONS FROM CONSULTATION MEETINGS

Under the NSA licence, the IAA is required to conduct a consultation process with all key en-route and terminal customers. The following chart sets out the Authority's performance against key customer relation activities during 2011

Identified 2011 activity	2011 Status
Improve the CRM communications processes by introducing a new methodology for passing information to Air Operators.	✓ Utilising the NATS customer website and IAA customer portal all UK-Ireland FAB related information is jointly available on both sites. This crossover facility was introduced on the 7th Dec. 2011.
Continue and improve joint customer relations collaboration with NATS under FAB.	✓ The IAA jointly with NATS hosted a CEO Customer Forum in Dublin on the 7th Dec 2011 ✓ The IAA customer relations team participated in NATS OPA meetings as observers.
Act jointly with operations to establish a Long Distance Operations Control (LDOC) business unit with Ballygirreen Aeronautical Communications Centre.	✓ The Business plan was developed and is awaiting acceptance
Through the FAB Service Provision Working Group (SPWG), continue to further enhance Night Time Fuel Saving Routes as requested by Air Operators.	✓ NT prefix dropped on the basis that fuel saving routes are being implemented for longer periods.
Enhance safety communications and feedback mechanisms with Air Operators on safety occurrences.	✓ The IAA Safety Manager has devolved safety occurrence resolution to the station managers directly involved for more prompt action. ✓ Safety communications process will be revisited during 2012

GLOSSARY

A	
ACC	Area Control Centre
AFTN	Aeronautical Fixed Telecommunications Network
ANS	Air Navigation Services
ANSP	Air Navigation Services Provider
ATM	Air Traffic Management
ATS	Air Traffic Services
ASMGCS	Advanced Surface Movements Ground Control System
C	
CAIRDE	Civil Aviation Integrated Radar Display Equipment
COOPANS	Cooperative Purchasing for ANS Providers
CAPEX	Capital expenditure
CAR	Commission for Aviation Regulation
CRM	Customer Relations Module
D	
DAA	Dublin Airport Authority
F	
FAB	Functional Airspace Block
FDP	Flight Data Processing
H	
HF	High Frequency
I	
IAA	Irish Aviation Authority
IFR	Instrument Flight Rules
IRVR	Instrumented Runway Visual Range
K	
KPI	Key Performance Indicator
L	
LCIP	Local Convergence Implementation Plan
LIDAR	Light Detection and Ranging
M	
MHz	Mega Hertz
MSSR	Monopulse Secondary Surveillance Radar
N	
NAV AIDS	Navigation aids
S	
SES	Single European Sky
SRD	Safety Regulation Directorate
V	
VHF	Very High Frequency
VCS	Voice Communication System