ANNUAL PERFORMANCE REPORT 2012

CONTENTS

Chief Executive's Introduction to the Annual Performance Report 2012

It gives me great pleasure to introduce the eighth annual performance report for the Irish Aviation Authority covering the performance of the Air Navigation Services function for the year 2012.The Authority, throughout 2012, 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: Aviation-safety standards are set internationally by the International Civil Aviation Organisation (ICAO); and, in a European context, by the European Aviation Safety Agency (EASA); the European Union (EU); EUROCONTROL; the European Civil Aviation Conference (ECAC); and, in the North Atlantic, by the North Atlantic Systems Planning Group (NAT SPG).

The Safety Regulation Directorate (SRD) of the IAA **oversees and regulates the implementation of these standards for the Irish civil aviation industry** and its activities are, in turn, subject to independent audits by these organisations. In 2012, the IAA continued to maintain high standards of safety in the civil aviation industry, in full compliance with international standards.

The IAA was recently assigned responsibility by Statutory Instrument 551 of 2012 for the oversight of **civil aviation security in the State.** This responsibility covers inspection and audit of airports, air carriers, cargo companies, airport suppliers and suppliers of in-flight services.

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.

In 2013 our en- route charges is €28.20, which is a 6.3% reduction over the 2012 rate, in addition, the IAA's terminal charge will reduce by 4% p.a. (in real terms) during 2013-2015. **The IAA is amongst the lowest in Europe, for ATC charges, in 2013.**

Efficiency: The IAA is committed to ensuring that Ireland's en route and airport delays remain amongst the lowest in Europe, at just 0.001% of European delays.

Environment: The IAA was the recent winner of the **"Innovation in Action"** award from the Chartered Institute of Logistics and Transport in Ireland for its work in optimising airline routes and reducing fuel burn and CO2 emissions. The IAA remains committed to implementing future environmental projects.

Strategic Alliances: We continued to monitor **SESAR** developments through our membership of the North European and Austrian Consortium. The IAA's membership of **BOREALIS**, a formal commercial alliance, established in June 2012, comprising nine North-European air navigation service providers, which allows for **collaboration on various air traffic management projects** for the purpose of delivering efficiencies and reducing costs and reducing the impact of aviation on the environment.

During the year, a Memorandum of Understanding was signed with NAV Portugal and discussions have commenced on a feasibility study exploring the possibility of providing joint operations similar to that already in place with ISAVIA, the Icelandic air navigation service provider.

Aviation Policy: The IAA was pleased to facilitate and organise, in December 2012, on behalf of the **Department of Transport, Tourism and Sport, an Aviation Policy** for Ireland conference, attended by over 400 delegates.

Customer Consultation: The IAA will continue to consult regularly with its customers in the evaluation of the quality of service provided. In 2012, it received the **highest average customer relations score (95%)** 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 2012 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 2012 to 31 December 2012 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 2012 against planned performance in the IAA's five year corporate plan 2012 -2016".

The Authority provided forecasts in its five year corporate plan 2012-2016 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 10 of this report.

2. SAFETY

2.1 CORPORATE ATM SAFETY STRATEGY

Through the collective efforts of the ANSP staff, the IAA has a strong and effective SMS, which is continuing to mature and progress in a manner that will enable us to achieve the highest level of measured maturity of 'Continuous implementation'.

The Safety Leadership Programme modules completed in 2011 have enhanced the leadership capabilities of our key management staff, which has enabled them during 2012 to provide the leadership necessary to make the progressive steps towards this measured maturity objective.

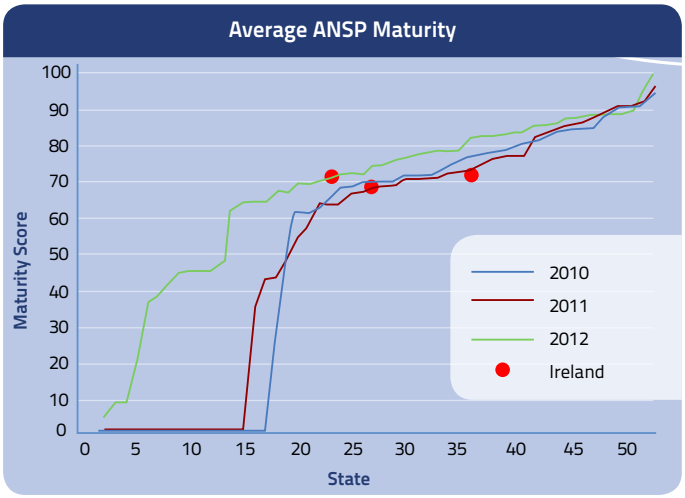
New regulatory ANSP safety performance measurement requirements, in combination with the civil aviation regulators mandatory requirements to provide a more cost efficient service, pose very significant organisational challenges in the forthcoming Reference Periods (RP1 2012 -2014 and RP2 2015-2019).In order to meet these demanding requirements and attain this level of safety maturity, we must concentrate our efforts in 5 interconnected focus areas, driven by associated strategic safety goals, contained in the Corporate Strategic Safety Plan 2012-2015 which was published in 2012. The plan contains focus areas and strategic safety indicators which are summarised as follows:

2.2 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 1216/2011 (amending 691/2010) which will be monitored from 2012 onwards at European, national and FAB levels: these are:

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

1) The outcome from this process in the 2012 survey resulted in an improvement of our 2011 maturity score overall, to a score of 70%, the accepted target value set for ANSPs. The



i. Fig.1

fluctuations of the IAA and other mature EU ANSPs in the 2009-2012 (Fig.1) reflected the effects of a more forensic approach and methodology being implemented by Eurocontrol in 2012.

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

1) This process is well embedded and all occurrences are reviewed and classified in accordance with this scheme, however we are continuing to increase the level of sophistication and effectiveness of our preventative measures and risk mitigation strategies based on the RAT severity classification outputs, thus facilitating the organisation's drive to meet our safety targets.

c) Reporting of Just Culture Implementation.

1) During 2012, the IAA commenced the development of a Just Culture process and procedures based on our published policy. This process will be rolled out and implemented during 2013, to be applied to ATM occurrence investigations.

2) To further improve the maturity, our reporting culture and to enhance our excellent levels of reporting, the ANSP introduced a Confidential ATM Occurrence Reporting (CAOR) scheme managed independently by the Head of Safety Management

2.3 Operational Safety Management

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

a) The Unit Safety Manager (USM) is a critical functional appointment for the attainment of higher levels of ANSP Safety Maturity and for the strengthening of the organisation safety management system. Therefore, the IAA has implemented a Unit Safety Manager (USM) function at each Operations Unit and continued work on the development for this role during 2012, particularly in the areas of specialised safety training and personal development, so as to further strengthen this appointment.

b) 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. This strategy includes the development of a Joint Just Culture policy which was agreed and published in both ANSPs during the year, in addition, to the development of a FAB Safety Management Arrangements document which achieved progress towards completion and acceptance by both NSAs in 2013.

c) The Head of the ATM Safety Management Unit commenced a review of strategic safety management policy and principles in 2012, 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. This review will be published in 2013.

2.4 Safety Achievement Metrics

Safety data produced from the IAA's mandatory Occurrence Reporting (MOR) scheme enables analysis of our safety trend. Throughout 2012, the IAA improved its safety reporting arrangements with Operational Units reporting 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:

- **Separation minima infringement**
- **Runway incursions**
- **Unauthorised penetration of airspace**
- **Deviation from ATC clearance**
- **Level bust**

The predicted and actual events for 2012 in the 5 Key Risk Areas were within the overall tolerable variance and continued enhancements are being implemented, particularly in the area of runway protection measures.

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 2012

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, including

- Network and route changes
- Tourism trends
- Oil Prices
- Airline reaction to aviation taxation
- Load factors
- Local effects

This forecast estimated a decline in total IFR traffic of -1.1% during 2012.

However, there were 196,566 commercial terminal traffic movements for Dublin, Shannon and Cork airports in 2012, up +0.3% on 2011.

Individually, the commercial terminal traffic figures for the three State airports were:

- Dublin 156,582 flights in 2012, an increase of +1.4% on 2011
- Shannon 18,200 flights in 2012, down -5.58% on 2011
- Cork 21,784 flights in 2012, down -1.8% on 2011

There were 301,293 en route movements in 2012 (flights that pass through Irish airspace but do not land), up +0.3% on 2011.

2012 proved to be a profoundly challenging year for the global aviation industry and the IAA has worked hard to reduce costs for our airline customers. In particular, terminal air traffic control fees were reduced by 21% in 2012 and are reduced by a further 4.1% in 2013. Our en route fees were reduced by 8.9% in 2012 and are further reduced by 6.3% in 2013. Ireland's air traffic control charges continue to be amongst the most competitive in Europe.

North Atlantic communications traffic, which is not covered by this report or Commission Regulation (EC) no 1035/2011, were down -0.76% on 2011 at 400,480 flights managed on the North Atlantic.

3.2. STAFFING

The actual staffing in 2012 was 587 staff (excluding Safety Regulatory Division) which was 3.6% less than 2011 actual staffing.

This was primarily due to a readjustment in the IAA's authorised staffing requirements following a review of staffing, as a result of the continuing downturn in traffic, the introduction of increased net weekly hours for staff and improvements in the application of crewing to workload principles.

3.3. HUMAN RESOURCE POLICY

Agreement was reached with staff representatives in 2012 on the introduction of random testing for workplace intoxicants (drugs and alcohol). Random testing commenced in November 2012. This agreement is a significant development and demonstrates to the public and industry generally the commitment of the Authority to operate to the highest international safety standards.

Significant agreements were reached with staff representatives on cost containment measures in 2012, aimed at achieving payroll savings of €4.25ml by 2015. The payroll savings will be achieved through staff reductions which will be facilitated by improved roster efficiencies and productivity measures. Payroll savings of circa one million euros were achieved in 2012 by a combination of measures including staff forgoing premium payments and reductions in call-in payments and staff numbers. The cost containment programme was activated arising from the determination of the Commission for Aviation Regulation (CAR) which will result in a 40% decrease in terminal charges at the three State airports over the four year period 2012 to 2015.

A new Hybrid Pension Plan was introduced for new entrants to the Authority from January 2012. The pension plan provides a combination of a defined benefit and defined contribution arrangement.

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 determined 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 determined 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 allows the IAA to recover only the determined costs, which have been approved by the NSA to provide the en-route service.

In the submission to the NSA (National Performance Plan) for 2012, the en route chargeable service unit rate was estimated at € 30.08.The actual en route rate charged to the IAA's customers in 2012 was € 30.08.

The submission to the NSA assumed chargeable en route determined costs for 2012 of € 118,505,000 and chargeable service units (CSU's) of 3,826,000. The actual outturn for 2012 was as follows:

	En-route Costs (Incl. MET)	Chargeable Service units
Actual outturn	€109,977,000	€3,805,985
Forecast figure (NSA Submission)	€118,505,000	€3,826,000
Variance in €	€8,828,000	-€20,015
Variance in %	7.20%	-0.50%

The en route cost base was lower than planned mainly due to exceptional cost containment measures resulting in lower headcount, lower operating expenses and depreciation costs than forecast.

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.

The IAA's terminal cost base plus a regulatory return comprises of operating costs, plus depreciation.

For 2012 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 0.8. This rate must operate within the CAR price cap.

This system operates within the price cap set by CAR, allowing the IAA to recover only those costs which have been allowed in providing a terminal service. A two year adjustment mechanism is operated so that any adjustments in relation to traffic volumes, inflation and impact of milestones 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 rate for 2012 was €160.24.

The actual outturn for 2012 was as follows:

	Terminal Costs (Incl. MET)	Terminal Service units
Actual outturn	€23,163,000	€129,598
Forecast figure (NSA Submission)	€22,000,000	€138,311
Variance in €	€1,163,000	€8,731
Variance in %	5.30%	-6.30%

The terminal cost base for 2012 was higher than planned as CAR did not allow for full costs to be recovered and exceptional measures are

5.2 NORTH ATLANTIC COMMUNICATIONS

The North Atlantic communications charge, which is not covered by this report or Commission Regulation (EC) no 1035/2011, reflects the cost of providing a High Frequency (HF) voice and communications charge to airspace users on the North Atlantic. The actual North Atlantic communications charge in 2012 of €45.00 per flight is in line with the submission to the NSA, in the business plan.

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 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.

Phase 2, which will fully integrate the technical infrastructure and offer further possibilities in joint service provision has been approved by the IAA's Board. Implementation dates are as follows:

- Installation will commence with ISAVIA in Q3 2013.
- Installation will commence with the IAA in Q4 2013.
- Following successful individual testing at both sites full implementation of VCCS switching functionality will commence in Q1 2014.

The IAA/ISAVIA initiative anticipates eventual rationalisation of the NAT HF Network; although the rationalisation time-scale is now less clearly defined and earlier HF regression planning assumptions can no longer be considered valid. The initiative, together with the recent phased replacement of essential systems, will position the joint venture as a major HF service provider for the foreseeable future. The IAA and ISAVIA are currently in discussions as to how this partnership and possible relationships with other service providers should be structured to meet future demands. Options for joint billing for the provision of this service are also under consideration. Customer consultation will be a major feature of these proposals.

5.3 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 June 2013 and highlights that the IAA:

- Is one of the most cost-effective providers in Europe and its costs are significantly below

the European average. In 2013, our en- route charge is €28.20, which is a 6.3% reduction over the 2012 rate. The IAA's terminal charge will reduce by 4% p.a. (in real terms) during 2013 to 2015.

- Is amongst the lowest in Europe, for ATC charges, in 2013.
- Has amongst the lowest level of en-route and airport delays in Europe, contributing just 0.001% of total European delays.
- Air traffic controllers are amongst the most productive in Europe and provide the service at a lower cost than most other western European air traffic controllers.
- The IAA's total costs are, on average, only 1% of the total European ATM\CNS costs.

6. CAPACITY & EFFICIENCY

6.1. SHANNON ACC CAPACITY

- 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 2012.

6.2. DUBLIN ACC CAPACITY

- During 2012, the Dublin ACC met its capacity plan of +4%, to meet requirements for the new 'Point Merge" project.

6.3 OPERATIONAL EFFICIENCY

- Irish Air Traffic Controller (ATCO) - Hour productivity is 15% higher than the European average. ATCO-hour productivity measures the efficiency with which an Air Navigation Service Provider (ANSP) deploys and makes use of its ATCOs.
- Dual runway operations at Dublin have reduced the average taxi-times during the morning peak, by 50%, delivering savings in fuel burn to our customers.
- During 2012, maximum runway capacity at Dublin was maintained at 48 movements per hour, for runway 10/28 during optimum weather conditions.
- Innovation is a secure way to achieve more efficient performance rates and services. This is why, in conjunction with NATS, the IAA introduced Network Management throughout UK/IRL FAB airspace, which has enabled both pre-tactical and tactical management of traffic to ensure that delays, where they occur, are minimized.

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 significantly less than 1% of total European delays. Total Irish delays recorded by the Central Flow Management Unit (CFMU) for the period January 2012 to December 2012 amounted to only 8,318 minutes on 380 aircraft.

- These delays were primarily attributable to traffic arriving at Dublin airport.
    - 94% were due to adverse weather conditions with 352 aircraft being delayed by 7,774 minutes and 6% being attributable to exceptional and infrequent events with 28 aircraft being delayed by 554 minutes.
- There were no en-route delays during 2012.

The low level of ATFM arrivals 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 UK/IRL Functional Airspace Block (FAB) initiatives.

The UK/IRL FAB 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:

- In 2012, it is estimated that the UK-Ireland FAB helped deliver €27m of enabled savings to airlines, including 25,000 tonnes of reduced fuel usage and 80,000 tonnes of reduced CO2 emissions.
- This brings the estimated savings to customers since 2008, as a result of the optimisation of FAB airspace through more direct routings, to over €70m, including 232,000 tonnes of reduced CO2 emissions and saving 73,000 tonnes of fuel.
- 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 was the recent winner of the 'Innovation in Action" award from the Chartered Institute of Logistics and Transport in Ireland for its work in optimising airline routes and reducing fuel burn and CO2 emissions. 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 2017.

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 2012 were as follows;

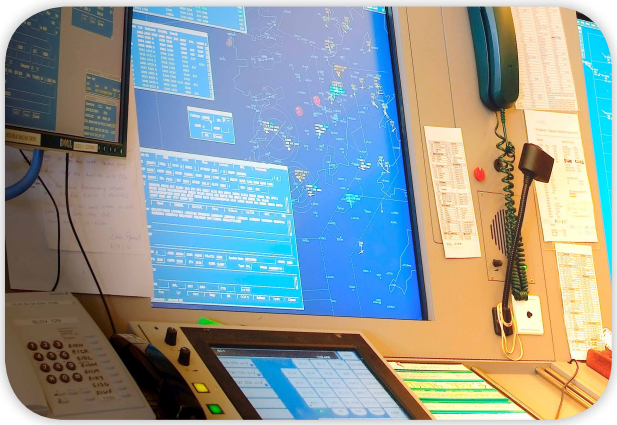
- **COOPANS Development:** The COOPANS system has new been successfully deployed by four ANSPs, the IAA, LFV of Sweden, NAVIAIR of Denmark and Austro Control; the Vienna Centre went into operation in February 2013. (Croatia Control will be the fifth ANSP to go operational with COOPANS, when the Zagreb centre goes operational in February 2014). This is a major achievement and the first of its kind in Europe, where four ANSPs have successfully deployed the same operational Flight Data Processing System. The major highlight of the COOPANS Program in 2012 was the successful introduction of CCAMS; (Centralised Code Allocation System) the IAA now receives its SSR codes assignments from the CFMU.
  The next major milestone for COOPANS will be the introduction of ATN Data linking and the IAA is currently working on validating this process.

- **Surface Movement Radar Replacement:** The IAA held a tender for a replacement surface movement radar at Dublin Airport in 2012 and planning for the system installation is at an advanced stage, with the onsite activities to commence later in 2013.

- **LIDAR network:** following the disruption caused by the volcanic eruption in Iceland in 2010 the IAA is rolling out a network of LIDARS, which will assist in determining the presence and concentration of volcanic ash.
  The IAA is working in cooperation with the National University of Ireland (Galway) NUIG is providing technical support and analysis of the LIDAR data.

- The Communications Domain completed a tender for the VCS **(Voice Communication System)** replacement program.
  Schmid were selected as the chosen supplier, a detailed delivery schedule has been agreed, and the factory and site Acceptance tests will commence in 2013. This project constitutes a major element of the 2012 – 2017 Technology Work Program.

- A new AFTN **(Aeronautical Fixed Telecommunications Network)** switch was installed. The new AFTN system is AMHS compliant, and the IAA will migrate to AMHS in coordination with its ANSP Partners.



10. CUSTOMER CONSULTATION PROCESS

The annual Customer Care Programme is a key consultation tool with our customers

It enables the IAA to identify the airlines' prime concerns, satisfaction levels and enhances the capacity of the IAA to continue improving and developing the value driven services.

Since 2007, the IAA has conducted an annual professional survey of how our customers rate the IAA's performance under five key headings:

1) Service Delivery

2) Cost Effectiveness

3) Safety

4) Customer Relations

5) Innovation

The results are presented under two broad headings:

- Customer evaluation of IAA performance during 2012 and identification of areas for improvement
- Compare results of IAA performance in the CRM area from 2007 to 2012

Taking into account the current global crisis and customer expectations outlined in the 2011 survey, during 2012, the IAA devoted particular efforts towards cost effectiveness, which can be summed up as:

"Taking cost out of the business, while maintaining a safe and efficient service"

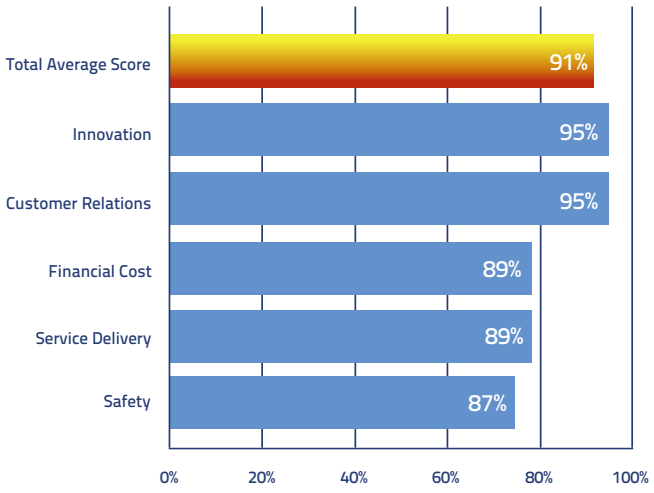
In order to achieve this objective, the following actions were put in place during 2012:

- Reduction of overall costs through the rigorous management of Operating Expenditure, thorough examination of Capital Expenditure and by improving Human Resources Management strategy.
- Improved efficiency via collaborative actions such as the introduction in March 2012 of the Network Management of traffic across UK / Ireland FAB with positive impact on the minimization of delays.
- Maintenance of high safety standards and minimizing occurrences in the five Key Risk Areas
- Investment in innovation, the IAA supported the NORACON I-4D project for the SESAR programme;

The results have been very positive and our customers recognize the efforts we have been making to reduce costs, while maintaining the highest safety standards and investing in new technology and approaches.

The results for 2012 have been the most positive since the survey was launched in 2007 and all 5 evaluated areas received higher scores than in previous years.

AVERAGE AIRLINE SCORE BY CATEGORY



"Key Consultation Recommendations"

Identified 2012 activity	2012 Status
Continue to improve joint customer relations collaboration with NATS under the FAB	✓ The IAA took on observer status at NATS OPA meeting
Explore possibility of joint IAA and NATS customer website	✓ We examined the possibility but it has been deferred
Provide information to customers relating to flight planning for the Point Merge project	✓ The Point Merge implementation team hosted 3 workshops with customers and service providers prior to introduction

GLOSSARY

A	
ACC	Area Control Centre
ADS-B	Autonomous Dependent System Broadcast
ACC	Area Control Centre
ADS-B	Autonomous Dependent System Broadcast
ANS	Air Navigation Services
ANSP	Air Navigation Services Provider
A-SMGCS	Advanced Surface Movement Guidance and Control System
ATC	Air Traffic Control
ATCO	Air Traffic Control Officer
ATM	Air Traffic Management
ATFM	Air Traffic Flow Management
C	
CAIRDE	Civil Aviation Integrated Radar Display Equipment
COOPANS	Co-operation in the Procurement of ATM Systems
CAR	Commission for Aviation Regulation
CBA	Cost Benefit Analysis
CRM	Customer Relations Module
D	
DAA	Dublin Airport Authority
DME	Distance Measuring Equipment
E	
EASA	European Aviation Safety Agency
ESARR	EUROCONTROL Safety Regulation Requirements
EoSM	Effectiveness of Safety Management
ETS	Emission Trading Scheme
F	
FAB	Functional Airspace Block
FDP	Flight Data Processing
FIR	Flight Information Region
FL	Flight Level
H	
HF	High Frequency
I	
IAA	Irish Aviation Authority
IATA	International Air Transport Association
ICAO	International Civil Aviation Organisation
ILS	Instrument Landing System
L	
LANS	Local Area Networks
LDOC	Local Distance Operational Control
LIDAR	Light Detection and Ranging
M	
MAESTRO	Airport Arrivals Manager
MODE-S	Mode Selective
MOR	Mandatory Occurrence Reporting
MSSR	Monopulse Secondary Surveillance Radar
N	
NAT SPG	North Atlantic Systems Planning Group
NATS	National Air Traffic Service
NAT	North Atlantic Traffic
NAV AIDS	Navigational aids
NOTA	Northern Oceanic Transition Area
NSA	National Supervisory Authority
P	
PSR	Primary Surveillance Radar
PRR	Performance Review Report
R	
RNAV	Area Navigation

GLOSSARY

RAT	Risk Assessment Tool
RP	Reference period
S	
SES	Single European Sky
SESAR	Single European Sky ATM Research
SMM	Safety Management Manual
SMR	Surface Movement Radar
SMS	Safety Management System
SMU	Safety Management Unit
SPO	Single Person Operations
SRD	Safety Regulation Directorate
STATFOR	Statistical Forecasts unit in EUROCONTROL
T	
TCPIP	Transmission Control Protocol, Internet Protocol
TNC	Terminal Navigation Charge
TSU	Terminal Service Unit
V	
VHF	Very High Frequency
VoIP	Voice over Internet Protocols
W	
WAM	Wide Area Multi-Lateration
VHF	Very High Frequency
VCS	Voice Communication System