

NATS

Corporate Responsibility Report 2014-15



Welcome!

Our Corporate Responsibility Report is in five sections:

1

Introduction

2

Air Traffic Management

How we are working with industry partners and communities to reduce fuel burn, CO₂ emissions and noise impacts to drive towards a more sustainable future for aviation.

3

Estate

How we are making smarter investments and seeking everyday efficiencies to systematically reduce the impact of our activities on the environment.

4

People and Community

How we are leading the transformation of NATS people practices in support of a sustainable and growing business.

5

Key Performance Indicators

Introduction

1.1 CEO statement

As more people choose to fly, it is NATS' responsibility to keep the UK's skies safe, while doing all we can to minimise Air Traffic Management (ATM) related CO₂ emissions and disturbance to local communities near airports.

We have reduced the average ATM related CO₂ emissions of the flights we manage by over 1m tonnes since 2006; that is 4.3%, an encouraging step towards our ambitious 10% target by 2020. We have exceeded our 2014 environmental targets, reducing the company's energy consumption by 8.5% in 2014 alone. This hasn't been easy and has required significant investment, so I'd like to thank colleagues across the business who have championed change and delivered tangible results for NATS and our customers. Through their hard work, NATS' corporate responsibility success is unparalleled among air navigation service providers globally.

Although we are almost half way to our 2020 target, the next half will be far more challenging. The low hanging fruit has been picked. Over the next five years we look forward to increased certainty on Government aviation policy; the Airports Commission's anticipated report on new runway capacity; evolving requirements from our key airport stakeholders; commitments to implementing technologies to achieve Single European Sky initiatives; global negotiations at the International Civil Aviation Organization (ICAO) on mitigating aviation's climate change impact; and challenges to balancing growth in aviation with the impact of noise on local communities.

We recognise there is only so much we can do alone and so we work closely with our partners across the aviation industry on these issues. We will be looking to them for even greater support in the coming years to enable us to reach our agreed 2020 environmental targets.

Our experts are reviewing the scope, scale and sequencing of projects which will be deployed over the next 10 years. In the meantime, we will consider what best practice looks like for our key stakeholders and ensure we are continuing to meet their expectations in our Acting Responsibly programme.

We continue to test and implement new solutions to improve the efficiency of UK airspace, reducing CO₂ emissions, fuel, costs and noise pollution around airports. Additionally, we continue to reduce our direct environmental impact across our estate, look after our employees and give back to our local communities, while we focus on the needs of our airline and airport customers to meeting our regulatory obligations. It's all part of our Acting Responsibly programme – to consider the environmental impact of everything we do.

Martin Rolfe



Introduction

1.2 NATS' outlook

Environmental policy

As a responsible member of the aviation industry, NATS is committed to playing its part in limiting, and where possible reducing the environmental impact of our operations, whilst still delivering positive social and economic outcomes to society as a whole. Our long term success as a company is dependent on us achieving environmental improvements in parallel with our other business targets. We work with regulators and others in the aviation industry to encourage collaboration and deliver new and innovative solutions to the environmental challenges that we face as an industry.

Climate change risk

NATS recognises that there is a pressing need to adapt to climate change; both in terms of our estate and in the way we provide our services. Adaption and vigilance across flood risk, infrastructure resilience, risks to business services and supply chains, employee well-being, health and emergency planning are necessary. This takes account of UK policy and recommendations from the Cabinet Office, Department for Transport and Committee on Climate Change. In 2011 we reported on our assessment of the risks posed by climate change and how we have adapted our business to ensure resilience to these impacts.

As an industry, aviation is used to dealing with disruptive weather events. Extreme weather events and variation in the jet stream are likely to become much more frequent in the future and we need to be ready. As well as developing our own

plans, NATS works with other aviation stakeholders on how we can improve industry wide resilience and ensure we keep our skies safe.

Non-Financial Reporting

NATS does not fall within the scope of the UK Companies Act 2006 (Strategic Report and Directors Report) regulations 2013, which requires quoted companies to report on non-financial information, including greenhouse gas emissions, in their mainstream report. However it is very likely that NATS will be included within the scope of Directive 2014/95/EU, which requires large companies to disclose environment, social, corporate responsibility, human rights and diversity policies and performance from 2018.

NATS believes it is good practice and in line with the progressive stance we take on sustainability to report our greenhouse gas emissions performance transparently. As such, we are preparing for compliance with both regulations and continue to invest in our analytical tools and procedures to capture this data.



Section 2

Air Traffic Management

Our on-going 'Acting Responsibly' environment programme is focused on minimising the environmental impact of Air Traffic Management (ATM).

By working with our industry partners and communities to reduce fuel burn, CO₂ emissions and noise impacts we are driving towards a more sustainable future for aviation.

- › 2.1 Our targets and future direction
- › 2.2 Progress in 2014-15
- › 2.3 3Di - Third year performance
- › 2.4 Working in partnership

2.1 Our targets and future direction

NATS' ATM environmental performance remains a critical business issue for our customers, regulator and communities. We have a number of targets that reflect our customers' high priority for reduced CO₂ emissions and fuel burn. These include:

- › A long term strategic target to reduce ATM related CO₂ emissions by an average 10% per flight by 2020, from a 2006 baseline. This targets UK and North Atlantic airspace and airports services;
- › Annual three dimensional inefficiency (3Di) score targets, which financially incentivise our performance in line with our strategic target. This metric covers UK airspace only;
- › Specific short term fuel savings targets agreed annually with customers via the Operational Partnership Agreement (OPA) and the Fuel Efficiency Partnership (FEP). These target UK and North Atlantic airspace and airports services.

Our strategic target is challenging but is achievable and supported by the investments assumed in RP2 and other short term procedural and tactical changes we have planned. Each of our operational units has embedded business plan targets to deliver this outcome.

	Financial year							
Tonnes ('000s)	2007 / 2008	2008 / 2009	2009 / 2010	2010 / 2011	2011 / 2012	2012 / 2013	2013 / 2014	2014 / 2015
Fuel saving	6	3	25	16	41	35	21	189
CO ₂ emission reduction	17	11	80	52	131	113	66	602

NATS enabled fuel savings and CO₂ emission reductions

Following an external review of our methodology, commissioned by NATS, we have restated our baseline and previously reported ATM related CO₂ data. We continue to review and improve our models and will adjust our performance data transparently, as appropriate.

2.2 Progress in 2014-15

4% Programme

The end of CY 2014 marked an interim target for NATS to reduce ATM related CO₂ emissions by an average 4% per flight, from a 2006 baseline. At the close of the calendar year we had enabled a 4.3% reduction in ATM related CO₂ emissions (by the end of the 2014-15 financial year the reduction had increased to 4.55%), which corresponds to an enabled CO₂ emissions reduction of over 1 million tonnes, or about £155 million in enabled fuel savings for our airline customers (at £500 per metric tonne, based on average fuel prices and exchange rates).

The improvements are the result of changes to UK airspace that allow for more direct routes and improved vertical profiles; the use of more efficient procedures, such as continuous instead of stepped climbs and descents; and the introduction of new air traffic control technologies. Over 300 airspace and procedural changes have been made over the past six years in an effort to find better and more efficient routes for airlines. This includes the more flexible use of military airspace when not in use, which has enabled CO₂ emission reductions of 30,000 tonnes alone. The introduction of GAATS+, a tool that allows controllers to offer airlines the most efficient altitudes across the North Atlantic, has itself enabled a reduction of over 110,000 tonnes of CO₂ emissions.



FLOSYS

In 2014 NATS became the first air navigation services provider in the world to trial the use of near real time environmental efficiency data using an in house developed tool called FLOSYS. The tool takes real radar data and combines it with NATS' 3Di airspace efficiency metric to produce a graphical representation of every flight in UK airspace. Controllers can now analyse the efficiency of individual aircraft through each phase of flight and airspace sector, as well as compare it to the average and best

Section 2 Air Traffic Management

performing flights along the same route. By having access to this granularity of data for the first time, controllers and airspace managers are able to better identify the opportunities for operational improvements that will save airlines fuel and reduce CO₂ emissions.

Extended Arrival Manager

Since April 2014, NATS has recorded a reduction of up to a minute in airborne holding times for flights taking part in an Extended Arrival Manager (XMAN) trial at Heathrow airport, saving airlines over £1 million in fuel costs and reducing CO₂ emissions by 7,000 tonnes. The trial has seen controllers in the UK, France, Ireland and the Netherlands working in partnership to slow aircraft down up to 350 nautical miles away from London in order to minimise airborne holding times on arrival. This is the first step of a broader strategy to reduce the amount of time aircraft spend in airborne holding patterns at Heathrow. Absorbing delay in the en-route phase, when aircraft are higher and more efficient, saves fuel and reduces CO₂ emissions.



XMAN for Heathrow airport

Continuous Descent Operations

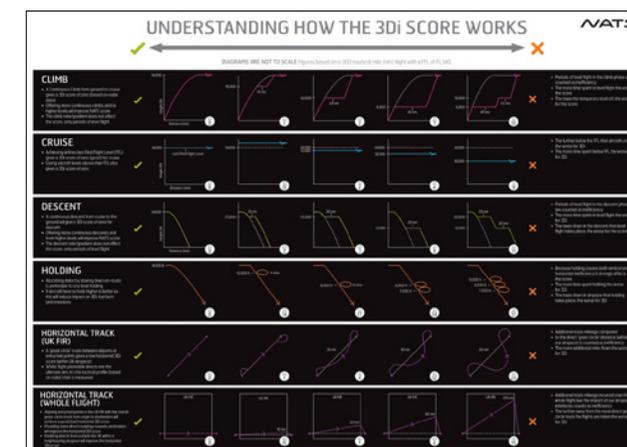
In 2014, NATS led the launch of the Sustainable Aviation coalition campaign to monitor and increase the use of Continuous Descent Operations (CDO). CDO is an aircraft descent technique that reduces noise, fuel burn and CO₂ emissions. Previously these operations have only been monitored at a handful of airports and usually only when aircraft are descending below 6,000ft. With this campaign NATS is providing CDO performance information to Sustainable Aviation partners in 23 airports and 8 airlines and therefore enabling the first broad scale insight into UK CDO performance. The campaign aims to achieve a 5% increase in CDOs across the UK, deliver over 30,000 individual quieter arrivals and a reduction of around 10,000 tonnes of CO₂ emissions and fuel costs for airlines.

Noise mitigation and innovation

NATS continues to roll out procedural changes and trials to maximise the safety and efficiency of UK airspace, as part of the UK government's Future Airspace Strategy. This has enabled greater certainty over where aircraft will fly through the use of Performance Based Navigation and trialling noise respite options for some communities. We continue to work with community representatives, our airport and airline customers, the CAA, the Department for Transport and other stakeholders to develop innovative solutions to airport noise management.

2.3 3Di - Third year performance

3Di is an indicator of fuel efficiency for flight profiles flown within UK airspace. It compares the actual trajectory that aircraft take from real radar data with an airline preferred flight trajectory that minimises fuel burn and CO₂ emissions. Every commercial flight has a specific 3Di score calculated. Each year all the scores are combined to give a single annual average score for NATS and compared to targets set by the Civil Aviation Authority, in consultation with our airline customers. Scores run from 0, which represents zero inefficiency, to over 100. In 2014 (CY) the average score was 23.2, marginally above our target of 23.0.



Click the image to see the 3Di Z-card leaflet

Section 2 Air Traffic Management

While NATS' ATM related CO₂ target captures structural changes in our operations, e.g. from projects and specific initiatives, 3Di allows NATS to establish a clear indication of the environmental efficiency of our day-to-day operations and identify opportunities to reduce NATS' ATM related CO₂ emissions.

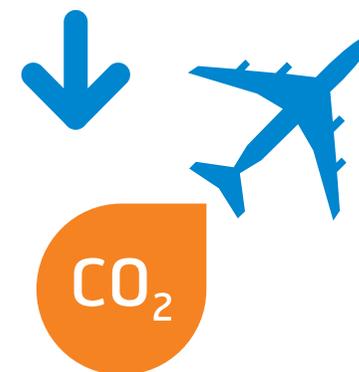


NATS has been recognised for its on-going development of 3Di and received re-accreditation for a 'Big Tick' award, by Business in the Community in 2015.

2.4 Working in partnership

Through regular engagement with our airline customers in the Operational Partnership Agreement (OPA) and Fuel Efficiency Partnership (FEP), we actively seek opportunities to make small scale procedural improvements across our airspace network that deliver fuel savings and reduce CO₂ emissions.

The results from the 2014 NATS airline customer survey show that, safety aside, flight & fuel efficiency is the airlines' highest priority. Satisfaction with the FEP and the communication of our environmental programme were each rated at approximately 80%.



Section 3

Estate

Our direct CO₂ emissions relate mostly to the fuel and energy we use in operating our air traffic control facilities and infrastructure. Data on our indirect CO₂ emissions currently includes some upstream and downstream emissions (see Section 5), but we do plan to explore our indirect CO₂ emissions further as well as those environmental impacts that go beyond CO₂ emissions.

3.1 Environmental Management System

NATS began rollout of its environmental management system (EMS) in 2013 and achieved ISO 14001 certification in 2014 for our head office. We plan to continue rolling out the EMS across the business in 2015. A training video for staff was developed as part of an on-going awareness campaign.

3.2 Environmental performance

Energy

Our overall energy consumption (kWh) for the NATS Group is down by 12.2% in the four year regulatory period (CP3) 2011-2014, and down 8.5% in the last financial year (see Table 2). This has been achieved through investing in more energy efficient facilities, energy efficiency targets and greater employee awareness, e.g. replacement of power equipment at several radar sites with standby generators and replacement of a cooling plant at our Swanwick control centre.

Waste & water

We continue to reduce the amount of waste we generate across our main sites. In 2014 (FY) 55% of waste was recycled, 44% went to 'waste to energy' plants and just 1% to landfill.

Our consolidation into three main sites has dramatically reduced our water consumption. Allied with identifying leaks, reducing water pressure, installing meters and reducing water storage, we have reduced our water consumption by 52% since 2006, with a 7% reduction in 2014 (FY).

3.3 Employee travel

We continue to support our employees in reducing our indirect CO₂ emissions through a number of sustainable travel initiatives, including car sharing (with 100+ dedicated parking bays), interest-free season tickets, cycle and motorbike loans, Cyclescheme (221 bikes), a low CO₂ emission car scheme (423 cars – including 24 electric vehicles) and a subsidised shuttle bus from Southampton Airport Parkway train station to our Swanwick control centre and our head office. We also have pool bicycles available for travel between our Swanwick control centre and our head office, while our Prestwick control centre is 1 mile from Prestwick Town train station. In 2015 we plan to install electric vehicle charging points at our three main sites.



Section 4

People and Community

4.1 Investing in people

In 2013 NATS launched its PATH development programme to help employees across the company to further develop the skills and capabilities needed to deliver our strategy in a changing business environment.

The company-wide programme is the most comprehensive in the company's history and uses a progressive approach to development designed to build a common set of knowledge, skills and behaviours throughout the organisation. Using a blended approach to learning, the programme includes a close partnership with one of the world's leading management schools, access to the latest business thinking and research, face-to-face and e-based learning solutions and is supported by mentoring and coaching.

4.2 Footprint fund

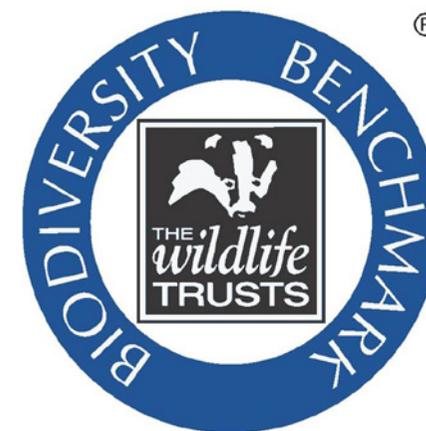
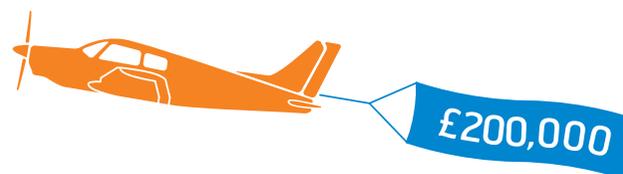
In 2008 we established our Corporate Responsibility fund, the Footprint Fund, which aims to encourage strong community partnerships, to support local projects and charities, and to support our colleagues with their volunteering, fundraising and environmental efforts. In 2014, the Footprint Fund donated £31,000 to 53 local causes (£190,000 to 328 charities since launch), while 8% of our staff made 'Give As You Earn' donations using the company payroll giving scheme, donating £133,500 to the charities they care about last year.

4.3 Swanwick Lakes Nature Reserve

We also support the Swanwick Lakes Nature Reserve, created and funded by NATS in partnership with the Hampshire and Isle of Wight Wildlife Trust. The 36 hectare reserve, adjacent to our Swanwick control centre, has a local community and educational centre. In 2014, NATS was awarded the Biodiversity Benchmark by the Royal Society of Wildlife Trusts for its work in managing the reserve, following a rigorous nine-month certification process. The benchmark is held by a select group of 17 UK-based companies. It recognises businesses who manage their land to a high standard for biodiversity protection and enhancement.

4.4 Aerobility

In addition, we continue to work with Aerobility, the disabled flying charity, and provided support through sponsorship, fund raising and expertise from within NATS. Since 2011, working with the trade unions, NATS employees have raised £200,000 for Aerobility.



Section 5

Key Performance Indicators

The table below sets out NATS' non-financial key performance indicators and results for FY 2014-15.

Environmental performance (Financial year unless stated otherwise) [1] [2] [3] [4] [5] [6]	2013 / 2014	2014 / 2015
Scope 1 emissions (tCO ₂ e) [7]	2,528	2,660
Scope 2 emissions (tCO ₂ e) [8]	29,688	30,138
Intensity metric: tCO ₂ e / £ million revenue [9]	35.1	35.5
Waste (tonnes) [10]	354	451
Water consumption (m ³) [10]	50,563	47,032
Energy (MWh) [11]	80,379	73,550
Enabled ATM related CO ₂ emissions reductions (calendar year) [12]	2.2%	4.3%
3Di score (calendar year)	23.7	23.2

Notes

- NATS is voluntarily disclosing its GHG emissions as per the UK Companies Act 2006 (Strategic Report and Directors Report) Regulations 2013.
- The data has been collected using the financial control approach. The data relates to NATS Limited, NATS (En Route) plc and NATS (Services) Limited and for all NATS' UK sites, unless stated otherwise.
- The results are for the financial year 2014-2015, unless stated otherwise.
- NATS has followed the Government's environmental reporting guidelines for mandatory greenhouse gas emissions reporting published by DEFRA in June 2013. We have used the 2014 DECC/DEFRA conversion factors.
- NATS measures Scope 1, 2 and some Scope 3 emissions where information is available.
- Our Scope 1, 2 and some Scope 3 emissions data has been certified against the Carbon Trust Standard since 2012 and has been used for CRC energy efficiency reporting.
- Scope 1: direct CO₂e emissions from activities for which NATS is responsible including the combustion of fuel and the operation of facilities. Excludes F gasses and oil which is *de minimis*. Data for 2013-14 excludes emissions from fuel used in NATS vehicles.
- Scope 2: indirect CO₂e emissions resulting from the purchase of electricity, heat, steam or cooling for NATS' own use;

- Scope 1 + Scope 2 tCO₂e emissions / £917.6 million turnover (FY 2013-14) and £922 million turnover (FY 2014-15) respectively.
- Data for NATS Corporate & Technical Centre, Prestwick and Swanwick control centres.
- Data for all NATS' UK sites.
- From a 2006 baseline.



Acting Responsibly

To find out more visit:
www.nats.aero/environment