## Glossary

Term	Definition
3Di	Three dimension inefficiency score, a metric that incorporates flight path inefficiencies.
ACOG	Airspace Change Organising Group – the organisation that is commissioned by the DfT and CAA with coordinating and project managing the airspace changes needed to modernise the UK's airspace (see AMS).
AdP	Aéroports de Paris
ADS-B	Automatic dependent surveillance – broadcast system. This is a surveillance technology in which an aircraft determines its position via satellite navigation and periodically broadcasts it, enabling the aircraft to be tracked independent of traditional radar. The receivers for ADS-B signals have to date been land-based.
AENA	Spanish company, 52% state-owned and 49% traded, that manages airports and heliports in Spain, and through a subsidiary has interests in the operation of 17 airports worldwide.
Aireon LLC	Aireon manufactures, deploys, and operates a global aircraft tracking and surveillance system, utilising satellite-based receivers to monitor the existing ADS-B transmissions of aircraft, for global air traffic surveillance.
AIS	The Aeronautical Information Service (AIS). NERL provides the Aeronautical Information Service as a specified service under its Licence.
ANSP	Air navigation services provider. Standard term for the organisations that provide Air Traffic Control services within a state or region.
ATC	Air Traffic Control

ATCOs	Air Traffic Control Officers are trained and licensed personnel
	responsible for the safe, orderly, and expeditious flow of air
	traffic in the global air traffic control system.
ATM	Air traffic management
Beta (or β)	A firm-specific measure of investors' exposure to systematic risk
C1	Average minutes of en route air traffic flow management delay attributable to air navigation services.
C2	The UK capacity metric against which financial incentives are set. It is calculated by adjusting the C1 score for certain categories of delay attributable to NERL.
C3	C3 is an Impact Score, which places greater weight on long delays and delays in the morning/evening peaks. It is determined with reference to C2 target.
C4	C4 measures and incentivises NERL to avoid days of particularly severe and exceptional disruption.
CAA	Civil Aviation Authority. The CAA is the economic regulator for NERL, and for Heathrow Airport. It is the airspace regulator for UK airspace and the safety regulator for UK aviation.
CAAPS	The defined benefit pension scheme split into two separately governed sections since PPP – one for CAA members and for NATS Group members.
capex	Capital expenditures, commonly known as capex, are funds used by a company to acquire, upgrade, and maintain physical assets such as property, buildings, an industrial plant, technology or equipment.
САРМ	The Capital Asset Pricing Model (CAPM) describes the relationship between systematic risk and expected return for assets, particularly stocks.
CCWG	Customer Consultation Working Group. Programme of customer consultation established by NERL to consult on its initial business plan over 2018. A Co-chairs' report was

	produced at the end of the process and is published on the CAA website.
Centrica	British multinational energy company. Its principal activity is electricity and gas supply to users.
СЕРА	Cambridge Economic Policy Associates. CEPA is an economic consulting firm.
СМА	The Competition and Markets Authority
CP2, CP2, CP3	Control Periods 1/2/3.
	Prior to the creation of Reference Periods under SES, NERL was regulated by the CAA under a UK only scheme. Price controls were set for Control Periods commencing at the time of the PPP in 2001. CP1 and CP2 were 5 year periods while CP3 was a 4 year period from 2011 to 2014 to bring its conclusion into line with the European Reference Periods.
CPI	Consumer price index
CPI/RPI wedge	RPI inflation differs from CPI inflation for a number of reasons. Collectively the difference between the two measures is referred to as the 'wedge'.
CSU	Chargeable service units (unit of traffic volume). Military and other exempt flight service units are not CSUs.
DB	The CAAPS Defined Benefit pensions scheme open to NATS Employees up until 2009.
DC	The Defined Contribution pension scheme that replaced the DB pension scheme when it was closed to new members in 2009.
<b>Determined Costs</b>	Net revenue allowance determined by CAA, recovered by charge per CSU.
DfT	UK Department for Transport
DGM	Dividend growth model is a valuation model that calculates the fair value of stock, assuming that the dividends grow either at a stable rate in perpetuity or at a different rate during the period at hand.

DIWE	Demonstrably Inefficient or Wasteful Expenditure.  Expenditure which is found by the regulator to qualify as DIWE may be disallowed from the Regulatory Asset Base, or otherwise reflected in adjustments to allowed revenues. This test, which had previously been used by Ofgem, was applied by the Competition Commission in its Northern Ireland Electricity plc redetermination.
DP En Route	Deploying SESAR technology programme (iTEC trajectory management 7 FourSight).
	En Route is a deployment point milestone in the Deploying SESAR technology programme.
DSESAR	Deploying Single European Sky ATM Research (DSESAR) is a collaborative project to overhaul European airspace and its Air Traffic Management (ATM). The programme is managed by the SESAR Joint Undertaking as a public–private partnership (PPP). DSESAR is also a NERL programme that will deliver major technology changes within the UK in line with the overall EU programme.
DUC	Determined Unit Cost – ratio between the determined costs and forecast traffic for a whole calendar year in a charging zone, established for each year of a reference period. The year-on-year percentage change between DUC is the cost efficiency target under the European performance scheme.
EASA	European Aviation Safety Agency, which is responsible for safety regulation at a European level
EBITDA	Earnings before interest, tax, depreciation and amortisation.
EC	The European Commission is the executive body of the European Union responsible for proposing legislation, implementing decisions, upholding the EU treaties and managing the day-to-day business of the EU.
Europe Economics	European Economic Research Limited, a consultancy
Economic Insight	Economic Insight is an economics consultancy firm that are providing advice to NERL.

ENAV	Ente Nazionale di Assistenza al Volo. Italian en route and terminal ANSP.
En route	The en route phase is that part of the flight from the end of the take-off and initial climb phase to the commencement of the approach and landing phase.
Eurocontrol	An international treaty organisation that carries out a number of flight plan co-ordination and billing activities on behalf of its member ANSPs, which are EU based or closely associated with the EU states. Provides network management, route charging, ANS performance advice, ATM policy advice more broadly and fulfils a civil-military coordination function.
ExCDS	Extended Computer Display System - This advanced electronic coordination system offers controllers automated flight data management using touch-sensitive display screens.
Exemption Day	Where C3 weighted delays and C4 Daily scores for the relevant day shall not be counted for the purposes of calculating service delivery levels.
FIR	Flight Information Region is an airspace of defined dimensions within which flight information services and alerting services are provided. There are three FIRs in UK airspace – London (covers England and Wales), Scottish (covers Scotland and Northern Ireland) and Shanwick Oceanic (covers area of the North East Atlantic).
FMARS	Future Military Area Radar Service (non-regulated) is the contractual and operational relationship between NERL and the MoD under which MoD shares parts of NERL's ATM infrastructure resulting in a joint and integrated approach to military and civil airspace use in the UK.
FourSight	FourSight is the name of the set of tools which are designed to act and behave as iFacts does today in Swanwick AC.
Fraport	Frankfurt AG Frankfurt Airport Services Worldwide. German transport company which operates Frankfurt Airport and holds interests in the operation of several other airports around the world.

	E Helion Colore
FTE	Full time equivalent
GAD	Government Actuary's Department - hired by the CAA as
	external consultancy support to review NERL's pension
	arrangements as part of its preparations for RP2 and RP3.
GDP	Gross Domestic Product
HAL	Heathrow Airport Ltd (formerly BAA). Owns and runs London
	Heathrow Airport.
IAG	International Airlines Group, that owns BA
IATA	International Air Transport Association
IBP	Initial Business Plan. This is NERL's initial Business Plan
	submitted to the CAA.
ICAO	International Civil Aviation Organisation. Principal
	international body with respect to regulation of world aviation.
	UN specialised agency, created in 1944 on the signing of the
	Convention on International Civil Aviation (Chicago
	Convention).
iFACTS	Interim Future Area Control Tools Support. A Trajectory
	Prediction (TP) and Medium Term Conflict Detection (MTCD)
	system that identifies and displays predicted conflict
	information to controllers to support decision making.
KEA	The horizontal en route flight efficiency of the actual aircraft
	trajectory flown. This is the EU framework's environmental
	KPI for RP3.
KPI	A Key Performance Indicator is a measurable value that
	demonstrates how effectively a company is achieving key
	business objectives.
Legacy Systems	A legacy system is an old method, technology, computer
	system, or application program, "of, relating to, or being a
	previous or outdated computer system," yet still in use. Often
	referencing a system as "legacy" means that it paved the way
	for the standards that would follow it. This can also imply that
	the system is out of date or in need of replacement.

London Approach	Radar approach services for the six airports inside the London TMA in order to maximise the capacity and efficiency of the Terminal Manoeuvring Area as well as the interfaces with the London airports and the wider en route network.
Market to Asset Ratio (or MAR)	The Market to Asset Ratio (MAR) is the ratio between the market value of a regulated business and its regulatory asset base (RAB).
MET	The MET Office - (officially the Meteorological Office until 2000) this is the United Kingdom's national weather service.  MET is also the generic term used for MET Data which is data relating to weather.
NATS	National Air Traffic Services - NATS Holdings Limited (formerly National Air Traffic Services) and commonly referred to as NATS is the holding company of the group of companies that provide air navigation service in the United Kingdom.
Naviair	Danish ANSP, providing en route services over Denmark, Greenland and the North Atlantic.
NERA	NERA Economic Consulting – advisors to NERL for the CAA's RP3 process
NERL	NATS (En Route) Plc - NERL (formerly NATS En Route Limited) is the sole provider of air traffic control services for aircraft flying 'en route' in UK airspace and the eastern part of the North Atlantic. It is economically regulated by the Civil Aviation Authority (CAA) within the regulatory framework of the European Commission's (EC) Single European Sky (SES) and operates under licence from the Secretary of State for Transport.
NSL	NATS (Services) Ltd - NSL is a subsidiary of NATS Holdings Limited and provides air traffic control (ATC) and aviation related services. Its core business is UK Airports. NSL provides ATC to 13 of the UK's major airports under competitive contract. In addition, it provides engineering support and airport optimisation services to UK airport operators.
Oceanic Price Control	The CAA regulates NERL's Oceanic service – that covers air traffic services NERL provides to aircraft in the Shanwick area

	of Oceanic airspace over the North Atlantic – by a price control that is implemented through the NERL Licence.
OFF	Opex Flexibility Fund – a fund of £42m over RP3, established to support NERL's costs that were unknown at the time of setting the performance plan and in relation to NERL's delivery of airspace modernisation. The OFF is part of NERL's cost base in the NPP.
Ofgem	Office of Gas and Electricity Markets
Ofwat	Water Services Regulation Authority
opex	Operational Expenditure. Operating expenses are the costs a company incurs for running their day-to-day operations.

PPP	Public Private Partnership. For the ownership structure of
	NATS, see 'NATS' above.
Pension pass-	The Regulatory mechanism that allows for the costs of the DB
through	pension scheme to be passed onto customers through
	NERL's prices.
PRB	Parformance Baylow Body, the European Commission's
PRD	Performance Review Body, the European Commission's
	advisor on performance and charging issues related to Single
	European Sky
PwC	Price Waterhouse Cooper. PwC is a global network of
	firms specialising in assurance, tax, and consulting
	services. They are advisors to NERL.
	Research & Development.
R&D	
RAB	Regulatory Asset Base
IVAD	The NERL Revised Business Plan.
RBP	THE NEIVE Nevised Business Flair.
	The risk-free rate is the theoretical rate of return on an
RFR	investment with zero risk. It is the benchmark to measure
	other investments that include an element of risk.
	Government bond yields are the most commonly used risk-
	free rates for assets.
	Reference Periods 1 and 2. The first reference period (RP1)
RP1, RP2	ran for three years from 2012 to 2014. The second reference
	period (RP2) ran from 2015-2019.
	period (111 2) fair from 2013-2013.
	RP is Reference Period under SES regulation. The third Price
RP3	Control, for period 2020 to 2024.
RP4	Reference Period 4 effective from 2025 to the end of 2029.
	retail prices index
RPI	
	Regulatory Policy Statement. This is a policy statement by the
RPS	CAA in relation to aspects of economic regulation of NERL
	To propose the circuration of FID, the ANOD will divide 1919 to
Sector	To manage the airspace in a FIR, the ANSP will divide it into
	'Sectors'.

SES	Single European Sky - is an initiative launched by the European Commission in 2004 to reform the architecture of European air traffic management. It uses a legislative approach to drive ambition and initiatives to meet future capacity and safety needs at a European rather than a local level.
SES Regulation	Single European Sky Regulation. The SES regulations imposed performance targets on EU air traffic control operators, and provided the context against which the CAA set its price control for NERL.
SESAR	SESAR (Single European Sky ATM Research) is the technological pillar of the Single European Sky.
Shanwick OACC	Shanwick Oceanic Area Control Centre is the air traffic control (ATC) name given to the area of international airspace which lies above the northeast part of the Atlantic Ocean.
SIP	NERL's Service and Investment Plan. NERL is required by Condition 10 of its licence to submit to the CAA each year a Service and Investment Plan (SIP).
STATFOR	Statistics and Forecasts Service: a team within Eurocontrol that provides statistics and forecasting services. Its objective is to monitor and analyse the evolution of the Air Transport Industry in Europe.
Steer/Helios	Producers of a Cost Efficiency report for the CAA (consultants) for the RP3 process
TA 2000	Transport Act 2000
тс	Terminal Control. Part of the Swanwick ACC that deals with the part of en route airspace that sits above all the London airports
TLS	target level of safety
TMR	Total market return

Transport Bill	The government has introduced the Air Traffic Management and Unmanned Aircraft Bill to modernise airspace and tackle illegal use of unmanned aircraft.
TSU	Total Service Units – all movements in NERL's CAS. This total includes units generated by military and exempt flights.
UKRN	UK Regulators Network
Vanilla WACC	WACC, using pre-tax cost of debt and a post-tax cost of equity
WACC	Weighted average cost of capital