



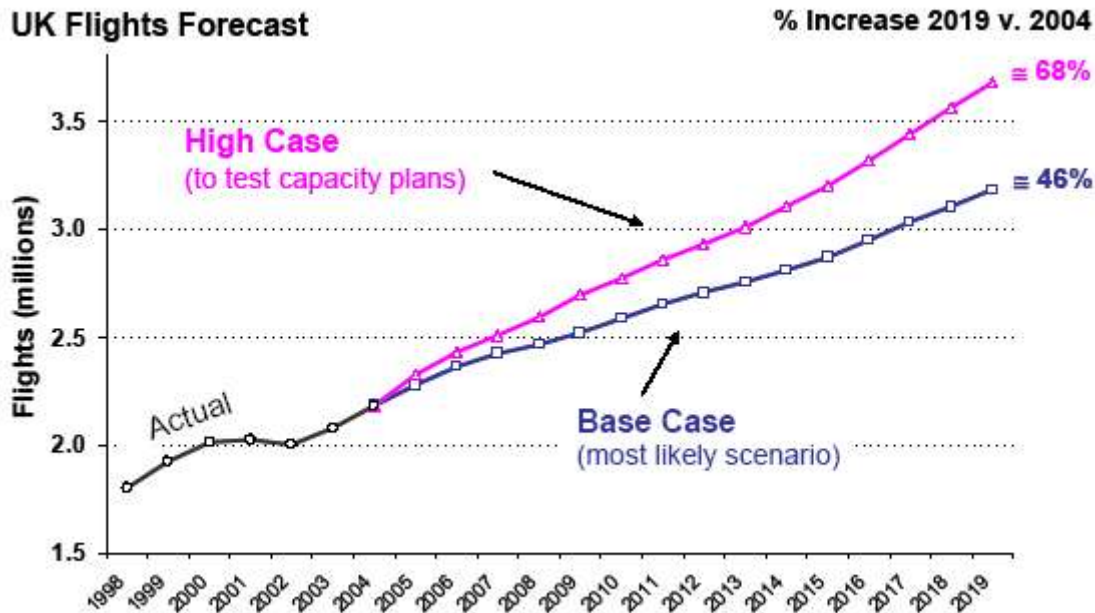
# **NATS Service Development Strategy**

**Mark Watson**  
**CNS/ATM Research**  
**NATS Ltd**

- NATS Strategy to meet future demand
- Impact on NATS Systems
- Consequence On Implementation of Data link services



# UK TRAFFIC DEMAND TO 2019



Forecast is for sustained levels of increased demand, particularly in complex, already congested airspace over south east UK

- High Forecast = 4.5% annual growth over period.
- Base = 3.25%
- 2% drop in High Forecast reflects updated forecast for trans-Atlantic overflights

Customers' requirements confirmed during 2004 consultation process.  
 Priority to be on service delivery and sufficient future capacity to meet high case demand (c.3 million flights by 2012)

# ATC Service Development - Strategy

- Capacity constraint is controller workload at individual bottlenecks during demand peaks
- Continuing need to develop en-route & TMA capacity, in line with high case demand (customer requirement)

## Capacity achieved through:

**Sectorisation** (= more controllers and improved working practices)

**Systemisation** (= more controlled airspace and/or flight profile constraints)

**Automation** (= en-route & TC Tools, iTEC Advanced FDP & MTCD)

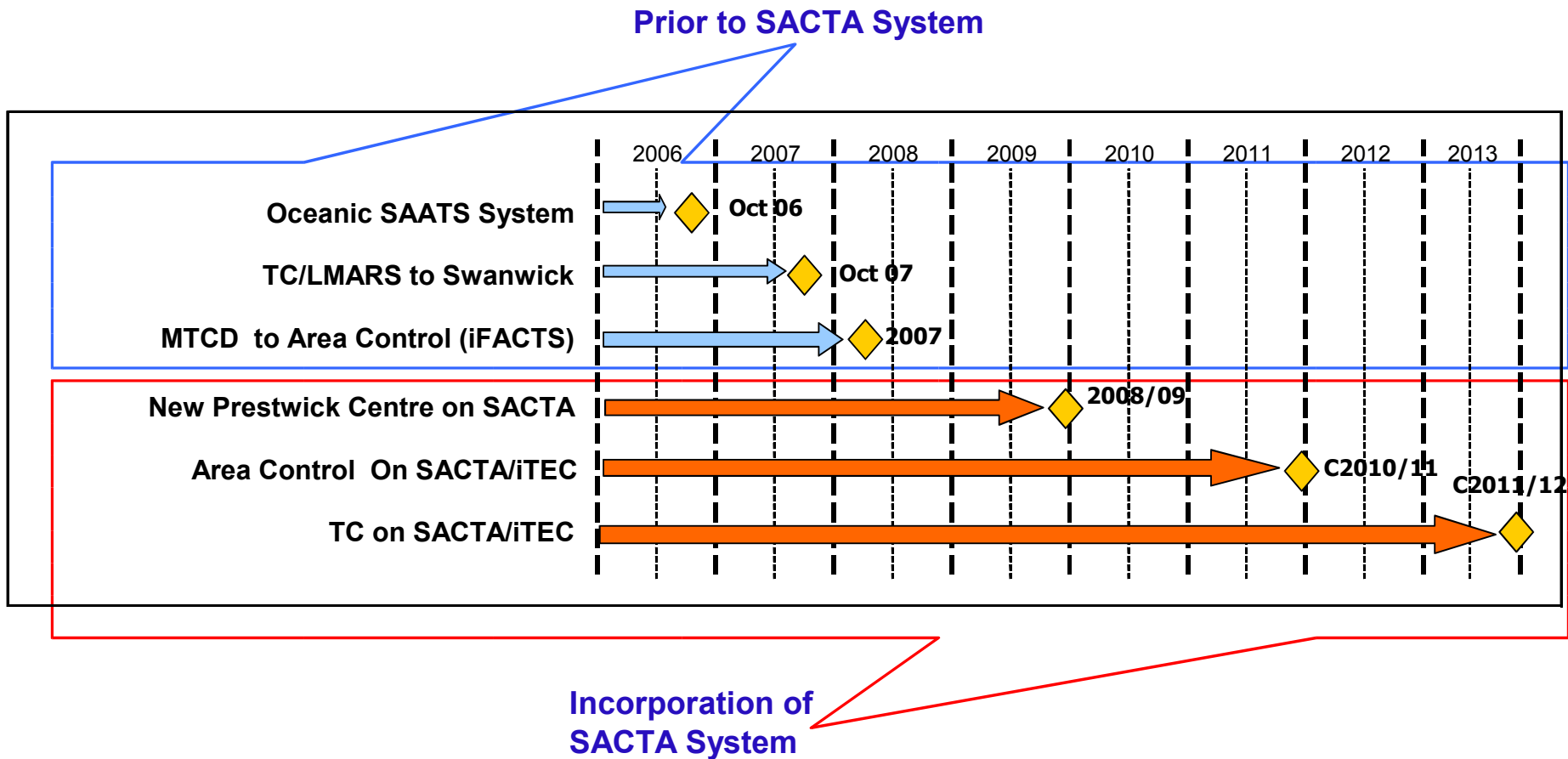
# NATS CURRENT DEVELOPMENT PLAN

- Move of Terminal Control/London Mil. to join Area Control at Swanwick
- Interim deployment of tools (MTCD) to meet capacity demands at Area Control – a “bridge” between current & future ops.
- Collaboration with AENA over use of SACTA as base Centre System
  - Current SACTA version 3.5 will be upgraded to v3.6 for Prestwick
  - Enhancement of SACTA to meet needs of London AC and TC at Swanwick (including iTEC-eFDP and MTCD tools)
- New Prestwick Centre (nPC)
  - New Operations Building to replace ageing building infrastructure at Prestwick and Manchester
- Collaboration with AENA/DFS over iTEC-eFDP as core FDP
  - Development of advanced FDP with tools to meet NATS’ needs & Single European Sky interoperability expectation

**Common system at 2 ACCs + Technical Centre to enhance contingency capability**



# NATS CURRENT DEVELOPMENT PLAN – Time-line

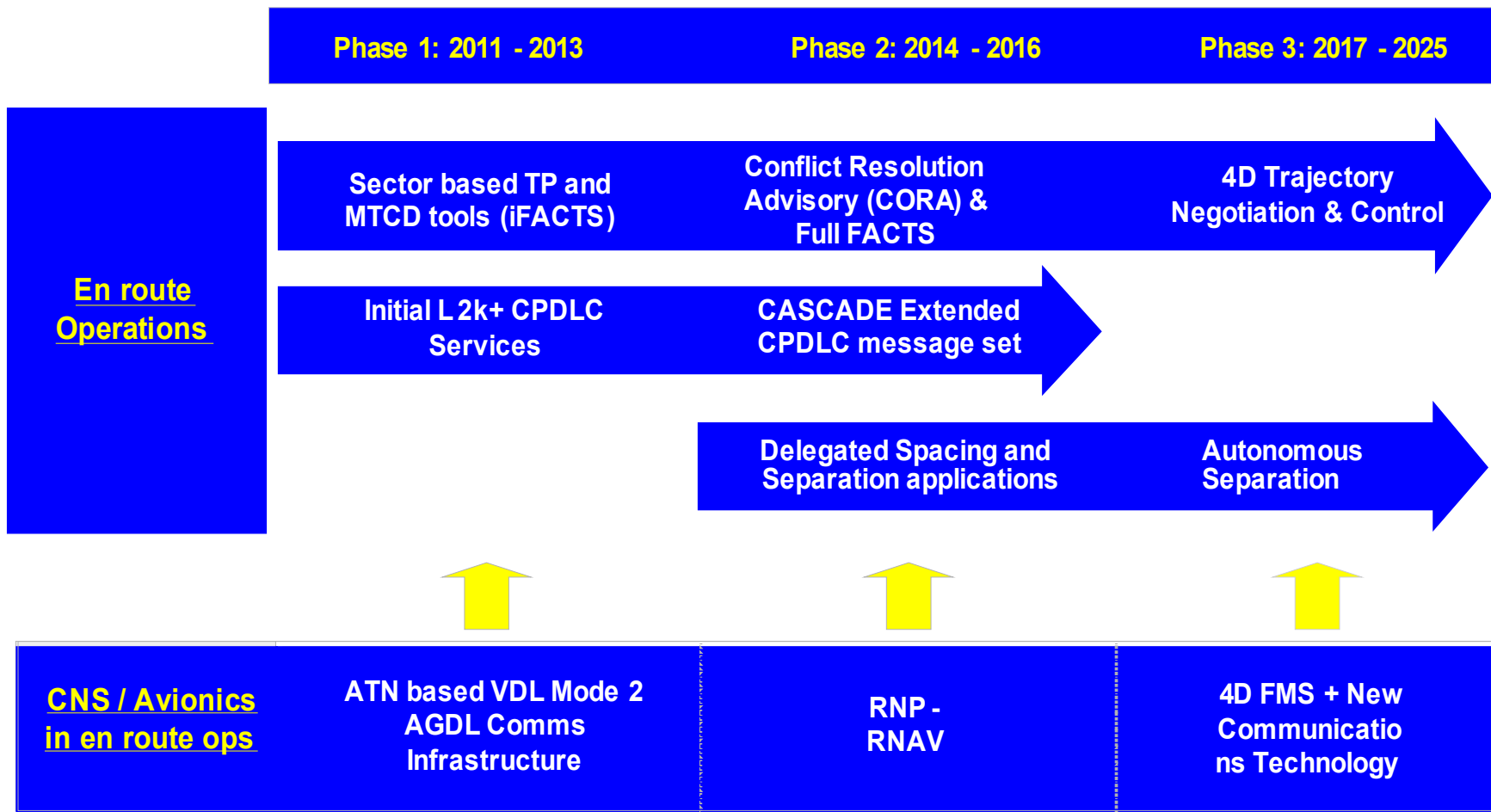




# Renewal of 80% of NATS Infrastructure

- Replacement of CNS Infrastructure
  - Radars, Networks, Voice Comms
- Replacing the Oceanic Centre system
- Consolidating ATC Centres
  - Two (operational) Centre Strategy, supported by a single Technical Centre
- Replacing ATC Centre Systems (incl. FDP)
- Development of new system functionality
  - Including new ATC tools – MTCD (FACTS), TC Tools, enhanced radar data, improved centre contingency

# En-route ATC Automation Strategy - 2011 onwards





# NATS Data link Activities

- Established an en-route data link strategy
- Intent to deploy Link2000+ Services
- Researching MTCD & data link
- ACARS services – DCL/D-ATIS, D-Volmet, PDC,
- Oceanic –Clearance delivery, ADS/FMC Waypoint Reporting, CPDLC
- International
  - Eurocontrol CASCADE, Link2000+,
  - ICAO OPLINK, Data link Harmonisation activities



# Summary

- NATS has a significant investment programme to meet future capacity demands
- Strategy of common systems nationally and with other European partners
- NATS will have L2k+ Data link service capability by 2011
- NATS continues to be responsive to customer demands for data link services and is proactive at the international standards level
  
- Further information:
  - [Mark.watson@nats.co.uk](mailto:Mark.watson@nats.co.uk), +44 1489 615828
  - Service & Investment Plan 2005
    - <http://www.nats.co.uk/news/docs/SIP2005%20Final%20Issue%20-%20300305.pdf>
  - Business Plan 2005-10
    - <http://www.nats.co.uk/news/docs/NERL%20BUSINESS%20PLAN%202005%20-%20Final%20v5.pdf>