

Aviation forecasting that informs decisions

Connect traffic outlooks to staffing, capacity, service and investment choices.

LE CHENE INSIGHT BRIEFING | Taryn Bray

Decide what the forecast must change

Forecasting is useful only when it changes a decision. An airport needs different horizons for terminal staffing, gate use, equipment investment and route development. Define the unit and the decision before choosing the model: flight movements, passengers, peaks, transfer flows, dwell time and resource hours answer different questions. One annual growth figure cannot describe a busy morning wave.

EUROCONTROL publishes regularly updated European aviation forecasts and notes material uncertainty in its Spring 2026 outlook. External forecasts provide context, but an operator must reconcile them with local airline schedules, observed throughput and operational constraints. Separate a planning baseline from a stretch case and a disruption case.

- Set a decision owner and forecast horizon for each use.
- Segment by route, airline, daypart, season and passenger type when relevant.
- Document assumptions and the date each dataset was refreshed.

Link demand to the operating system

Translate traffic into workload using measured ratios, not only passenger totals. Check-in demand depends on self-service adoption and bags; security depends on arrival curves; ground handling depends on fleet mix and turnaround patterns. A single passenger forecast can create several distinct staffing curves across the same day.

Build a handoff between commercial planning and operations so schedule changes are visible. Measure forecast error at the level where a decision is made. A monthly total can be accurate while a peak-hour queue is missed. Compare actuals to predicted ranges and retain a record of which assumptions drove the gap.

- Forecast the peak as well as the total.
- Link each forecast to staffing or asset thresholds.
- Track bias and error by segment, not just headline volume.

Make uncertainty actionable

Scenario planning should specify triggers and responses: if a route is delayed, suspended or grows unexpectedly, what changes in staffing, contracts and customer communication? A common operating dashboard helps people see the latest forecast, the confidence range and the actions already agreed.

Reviewing forecast performance is an operational discipline. When the model misses repeatedly, check whether the cause is data latency, changed traveller behaviour or a flawed assumption. Use a regular review between finance, commercial, technology and frontline operations to update the model and its consequences.

- Agree triggers that release additional capacity.
- Review forecast error after every peak season.

- Keep a clear human owner for the final operating decision.

A worked planning example

Imagine an airport expects ten per cent more passengers across a season. That number alone does not tell the security team what to do. If most growth falls into two early-morning banks, and a larger proportion of travellers checks bags, the important forecasts are arrival profile, processing time and queue exposure at those peaks. The terminal may need different rostering and a changed opening pattern even if annual floor-space capacity is adequate.

Build the example from real operating data. Combine bookings and filed schedules with observed passenger arrivals, transfer rates, processing distributions and disruption history. Calculate a central case and a range; identify where the upper case breaches a service or safety threshold. Assign an action that the operator can actually take, such as flex staffing, queue management or a change in stand allocation.

This is a method, not a prediction for a particular airport. Validate assumptions with ground handlers, airlines and frontline supervisors before committing resources.

- Inputs: schedule, passenger mix, arrival curve and processing time.
- Outputs: workload by 15- or 30-minute window, queue risk and staff hours.
- Decision: which resource threshold triggers a response?

Governance and a first ninety days

Forecast ownership should remain explicit even if analytics is automated. A planning owner accepts assumptions; operational leads use the output; analysts maintain data quality; finance connects scenarios to cost. Record the forecast version used for every important decision so that later reviews compare like with like. When demand deviates, update both the forecast and the response plan rather than merely report an error.

In the first month, agree the decisions and compile a clean baseline from schedules and observed flows. In the second month, test a small number of scenarios against staffing and infrastructure constraints. In the third, run a live review cycle: publish forecasts, review exceptions each week and check whether the proposed actions protect the service outcome. Expand to more segments only when the first decision loop works reliably.

- Days 1-30: agree scope, data definitions, baseline and owners.
- Days 31-60: test scenarios and validate operational ratios.
- Days 61-90: operate the review cycle and measure decision quality.

What this means for clients

Le Chene can join forecasting, operational design and workforce planning so predicted demand turns into a better passenger and employee experience.

Further reading

EUROCONTROL, Forecast Update 2026-2032

EUROCONTROL, Forecasting methodology and updates

lechene.net | enquiry@lechene.co