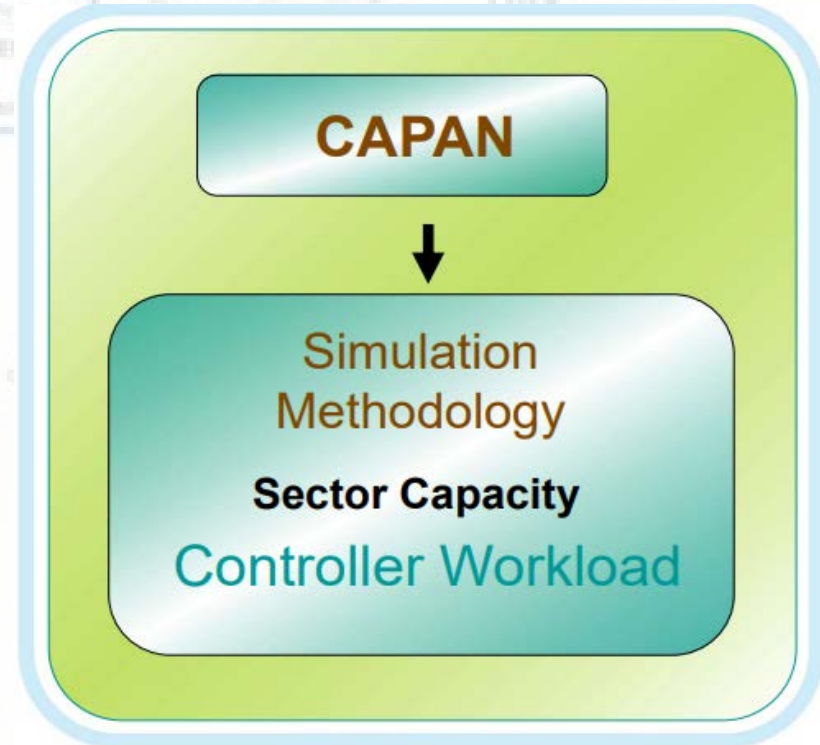


# Capacity Analysis and Declaration Methodologies

Simulation engine and mathematical models to measure workload with high precision and define capacity.

Capacity for ATM System is its ability to provide ANS to a certain volume of air traffic, in line with the targeted high level of safety and without imposing significant operational, economic or environmental penalties under normal circumstances.



# Fast-Time Simulation – Duration and Occurrences

- Routine Task
- Level Change Monitoring Task
- Conflict Monitoring Task



# Fast-time Simulation in ATM

Events  
at  
Sector

Tasks

Actions

Workload

# CAPAN

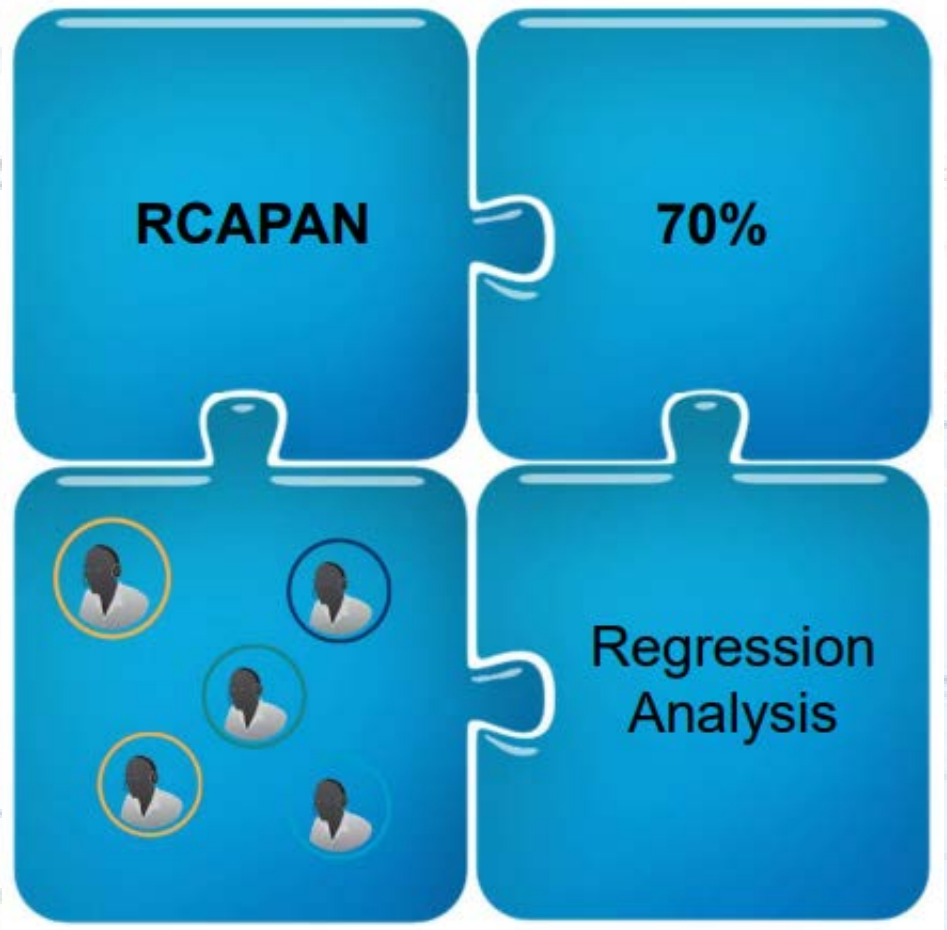
70% is the reference workload threshold to establish average sector capacity ( 70% of available time)

Regression is the mathematical technique to derive capacity figures

ATCOs – simulation is validated step-by-step with a team of current ATCOs

TMA and ACC only

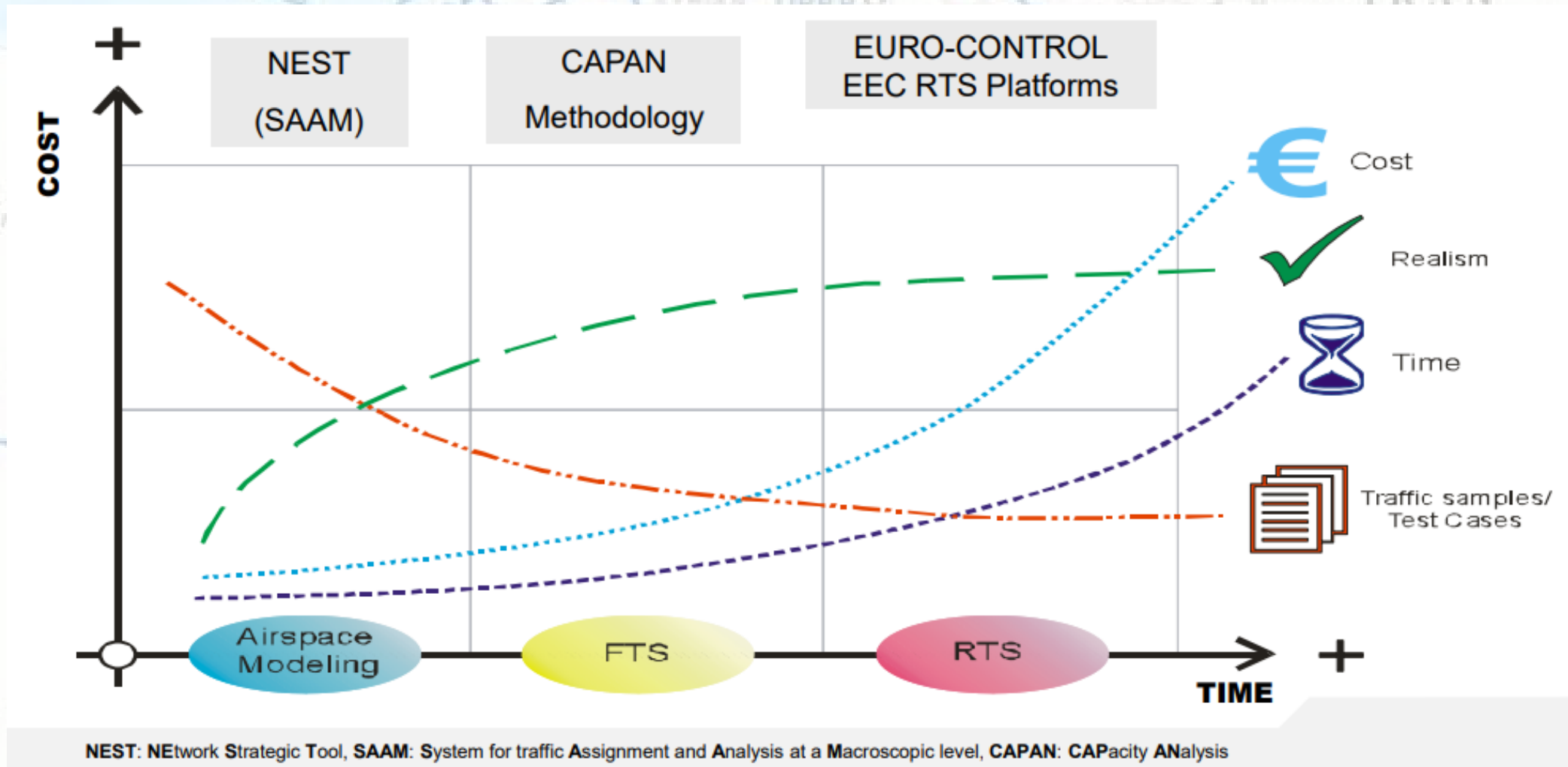
Airport Capacity use PIATA-neo tool



## Support Tools

- NEVAC Network Evaluation & Visualisation of ACC Capacity
- SAAM System for traffic assignment and analysis at a macroscopic level
- NEVAC and SAAM incorporated in EUROCONTROL NEST Network Strategic Tool
- CAMACA Commonly Agreed Methodology for Airport airside Capacity Assignment
- PIATA Performance Indicators Analysis Tool for Airports
- PICAP Programa de Investigacion de Capacidad de Pista
- GASEL Generic ATM Simulator Engine & Library
- TAAM Total Airspace and Airport Modeller
- SIMMOD Airport and Airspace Delay Simulation Model
- NORVASE Normativa Validacion Sectores
- STANLY the Statistic and Analysis Programme

# Overview Cost and Time of Simulation Capability





**Thank you**