

TPAC Schedule Recovery

TPAC Schedule Recovery is a decision support tool for dealing with events that would otherwise cause schedule disruption.

Capabilities

TPAC Schedule Recovery effectively deals with commonly occurring problems including:

- ➔ Delays
- ➔ Unservicable aircraft
- ➔ Connections
- ➔ Airport problems

TPAC Schedule Recovery investigates, presents and categorises solutions using one or more of the following changes:

- ➔ Cancel flight
- ➔ Add flight
- ➔ Divert flight
- ➔ Swap aircraft

TPAC Schedule Recovery finds a range of solutions which are categorised and ranked in terms of:

- ➔ Passenger impact
- ➔ Schedule impact
- ➔ Cost
- ➔ Crew impact

Architecture

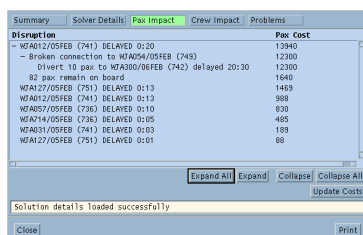
TPAC Schedule Recovery consists of three modules:

The **Problem Manager** identifies and categorises problems and presents options to the operator.

The **Solver** takes a problem and generates a range of potential solutions based on the preferences and limitations set by the operator.

The **Solution Manager** ranks the solution in terms of effect on passengers, schedule and crew and allows the operator to interact, refine and finally choose the best solution.

TPAC Schedule Recovery is available within a number of Operations Control systems and can also be supplied as a component for integration within others.



Performance

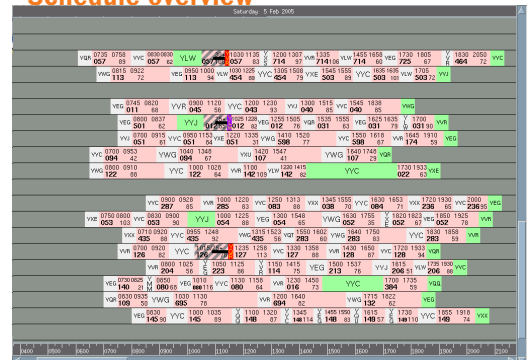
The optimiser is very fast and reliable. On a large – 200+ aircraft – fleet solutions are obtained within minutes.

Benefits

Field trials have identified the following benefits:

- ➔ The operator is quickly advised of all the potential, practical solutions
- ➔ The implications of each solution are fully described
- ➔ Decisions are more consistent and accurate
- ➔ More time is available to make decisions and consult with other departments
- ➔ Options can be shared between departments

Schedule overview



Solution manager

Solution	Total Cost	Pax Mins	Delays >15	Crew	Cancel's	Changes	Proben	Cost
Solution - 1	18019	17989	1	0	0	10		30
Solution - 2	28811	18781	1	0	0	31		10030
Solution - 3	30019	19959	2	0	0	31		10060
Solution - 4	33991	33901	3	0	0	12		90
Solution - 5	34654	34564	3	0	0	14		90