

## Outstanding Insights.

Jeppesen Concert allows for quantification, monitoring and detailed analytics of a multitude of different metrics across your crew management process. Quantify and track your fatigue risk or any other metric you can calculate from the sequence of activities in your crew schedules.

The measurement and analysis can be done at any point in your process; on a scenario, published pairings, published rosters, and of course, on rosters flown. Highlights include:

- Detect trends early-on (positive or negative)
- Compare the different parts of your operation; fleets, bases, ranks etc.
- Compare planning "states"; E.g. predicted fatigue risk in planned versus rosters flown
- Complete drill-down from a holistic view covering years of data, down to individual flights as they were planned or flown
- Benchmark standard SPIs with other operators

# Extraordinary Exploration.

Concert is built on leading tools for data exploration enabling you to quickly examine large quantities of data, even several years of flight assignments for your entire operation. You can filter down your results on many attributes such as fleet, rank, base, flight number or time interval to quickly compare and identify any trend.

#### Automatic Alerts.

Concert will automatically notify you over email when pre-defined thresholds are passed. You can for example choose to be notified via email when the normalised fatigue risk for the 737 captains from the LHR base exceeds 70, or when productivity drops below 4h50m.

# Configure. And Figure Out.

Analysis is iterative. When answering one question you often end up with one or two new ones. Concert allows for easy creation and configuration of views into your data with an open data model so that you can, for example, create a new view over the correlation between short connection times and crew-induced flight delays.

## The Leading Science. And Not.

Jeppesen Concert is based on the leading fatigue model; the Boeing Alertness Model (BAM). However, Concert is fully model-agnostic, so switching over to another model is easy to do, should the need arise.

# Complete Connectivity.

Jeppesen Concert only requires a recurrent snapshot from your process measuring points on a simple CSV format. Conversion adapters are available for the most commonly used crew management solutions.

### Optimal Operation.

No need for new hardware, engaging in operating systems or bothering your IT personnel. Concert runs on the Amazon Virtual Private Cloud and is accessed via any standard web browser. The data is de-identified, transferred and stored using leading tools and principles for data security.

## Free Trial. Free Test Period,

Start with a free demo on your own data. Continue with a free trial period using Concert yourself before entering into a paid subscription. Contact us at <a href="mailto:frm@jeppesen.com">frm@jeppesen.com</a> and we will have you up and running in no time. Welcome to new and deeper insights - in *concert* with your operation.



# Jeppesen Concert FAQ

#### What is Concert used for?

Concert is an important component in any airline's Fatigue Risk Management System (FRMS). Concert is used for monitoring the performance of your planning processes, evaluating pairing scenarios and roster scenarios as well as tracking actual rosters flown. With Concert it is possible to quantify, show and prove fatigue risk control to the organisation, as well as to a regulator.

Our crew planning solution is not exporting the Alertness Data Standard Format which is required for upload into Concert. How can we connect? You will need to either: a) convert an existing export with the help of a script (Jeppesen can assist, and it might be that your existing format is already supported), or b) you will need to contact your solution vendor asking them to create an export. The format is a simple CSV and Jeppesen will assist with the specification.

#### We have doubts uploading rosters over internet as they contain personal data. Can you explain more about data integrity and security?

Concert does not require any personal data. You can keep your own secret key to your employees and there is no need for sharing any names or real ID numbers. The data you upload is securely transferred over SSH and securely stored and protected using state-of-art principles and tools.

# I understand that BAM delivers a large set of metrics that can be used inside Concert. Which metrics are available?

Please find more information here.

# If I wanted to track metrics of my own definition, how would that be done?

Jeppesen Concert uses **Qlik Sense** for the visualisation and data exploration. Qlik comes with a script language that you can use together with the data model to construct your own measures. You can also create your own apps, sheets and widgets around any metrics, should you need any others not provided by default in Concert.

#### How is data uploaded?

You will either a) upload directly from the Concert page in your web browser by pointing out a file, or b) configure your crew solution or data warehouse to automatically upload over the Concert REST API.

# Can Concert also store, visualise and make data available for analysis that has been collected from crew in a fatigue data collection?

Yes. The Alertness Data Standard Format (ADSF) is built for storing collected data that includes sleep/ wake history (sleep diaries as derived from manual entry and/or actigraphy) as well as assessments on KSS, SP or with PVT.

# Can fatigue reports also be stored and accessed for statistics?

Yes. Concert supports the same simple clear text format that is produced by CrewAlert Pro.

If I would like to dive deep into analysis and calculate correlation coefficients and perform advanced statistics - will Concert allow for this? Concert is for quantification, monitoring, exploration and lighter analysis. It is not a statistical package like SPSS. However, Concert allows for fast and easy export into such tools, including Excel.

I use CrewAlert Pro for deeper analysis on individual rosters like a fatigue report, incident or accident. Can Concert export to CrewAlert?

Yes. You can run Concert on an iPad or iPhone in Safari and when you drill down to the lowest level, looking at just one sequence of flying (pairing or roster), you just need to tap a link to export into CrewAlert.

#### How do you charge for Concert?

Concert is a subscription service, including operation, maintenance, support and upgrades as well as the fee for using BAM. The fee is relative to airline size using the number of aircrafts. Extra Qlik Access passes (above one) are charged for in addition.

We already use BAM with our crew optimizers and track overall fatigue risk ourselves with built-in reports and Excel. What extras will Concert bring? Concert will reduce workload, add automatic alerts, mobile access, more detailed yet simpler analysis of your information, including over longer periods and integration with CrewAlert Pro.

Coping with large volumes of data, can Concert be used by a regulator to provide oversight of several operators, even a full region?

Yes.

