

Exposure to Fatigue

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Managing occupational alertness makes good business sense

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- ✓ How brave/cautious/responsible are you?
 - ✓ How can we get balance?
 - ✓ The envelope of concern



SETTINGS LEVELS OF RISK APPETITE

Examples of measures used to assess risk

Model output measures :

Samn- Perelli (fatigue)
Karolinska (sleepiness)
Other scales of fatigue
Sleep reservoir
Nicholson curve

When Measured:

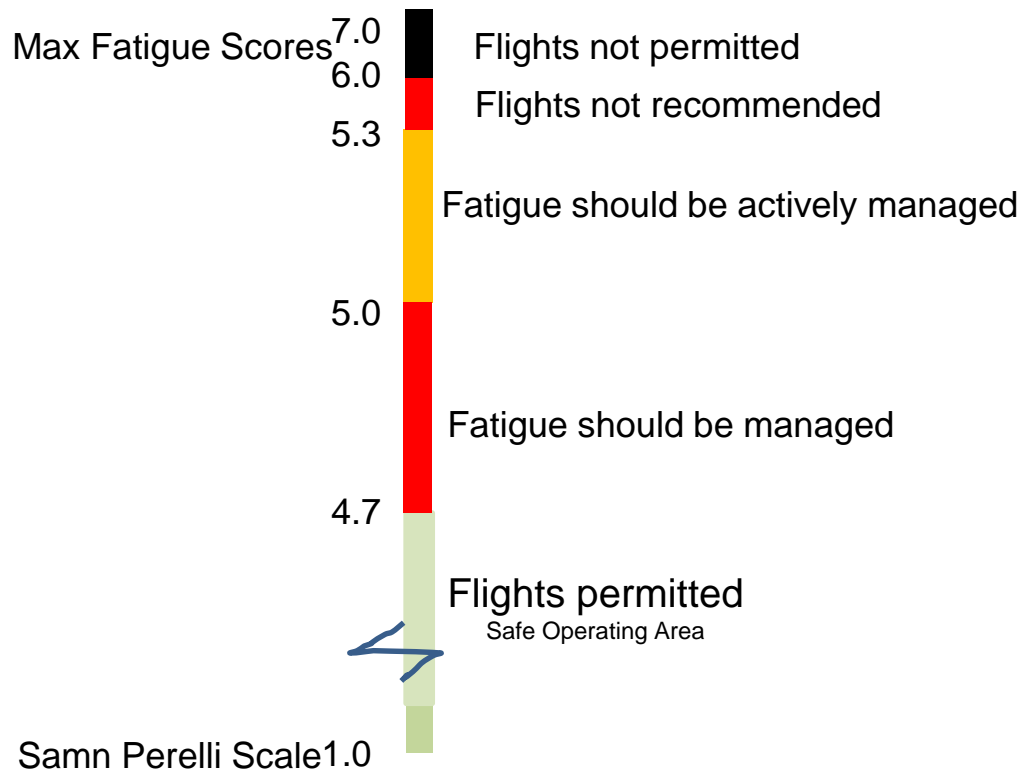
Top of descent
Peak value
Spot measures



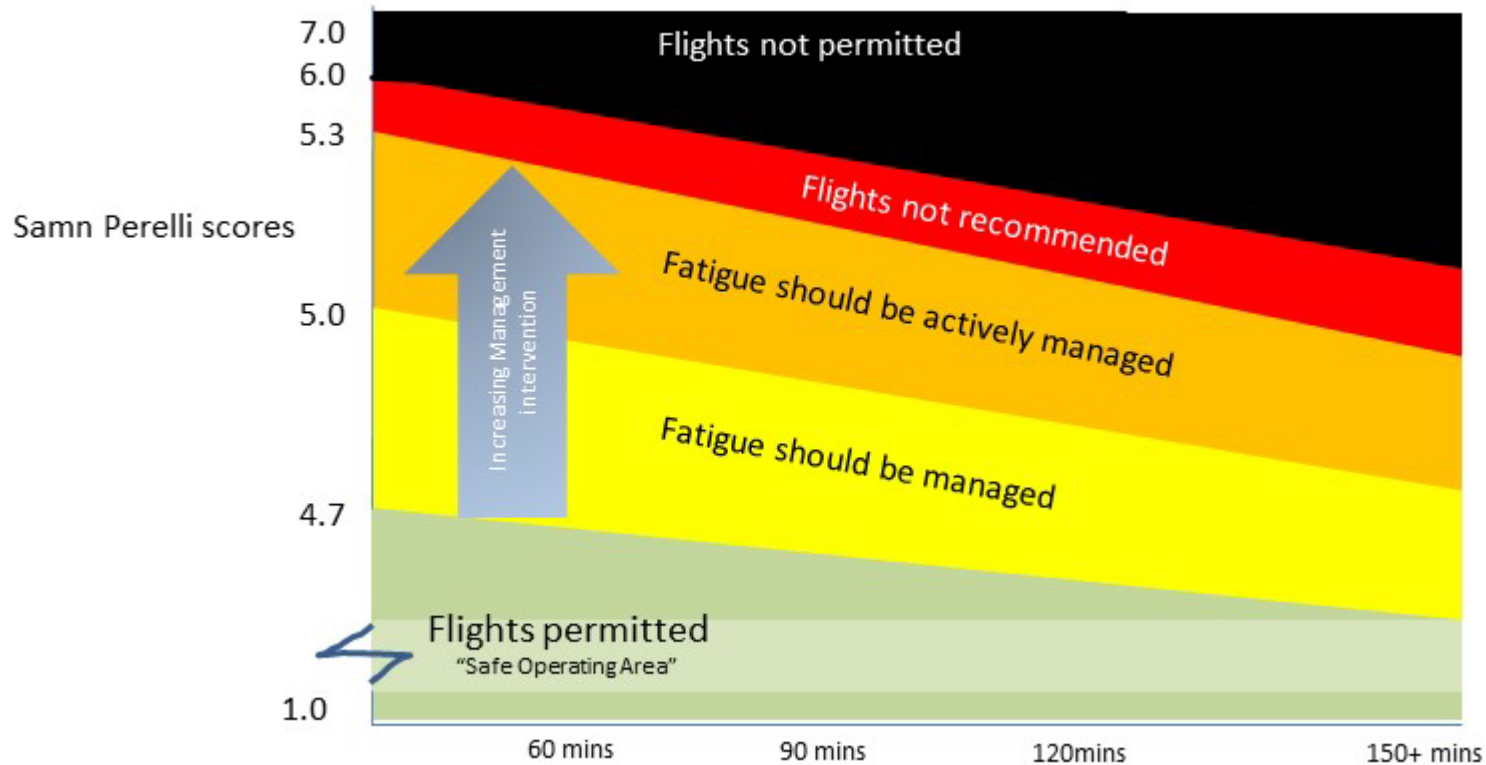
Levels set

- In the use of models large differences in levels chosen as 'allowed'
- For SAFE we advise that at around SP 5.0 Fatigue risk management should be used
- Airlines report that they choose levels between 4.7 and 5.5
- Spot levels may not be the only issue

Managing the envelope of concern



Managing the envelope of concern



Example of exposure hazard

Pilot 1 says in an email....

“Duties are two sectors ex-
and back.



We sometimes do four sectors but I
didn't get any on this roster.

Other than on Monday the 1st, on all
the flights in that week I was a
training captain.

By the end of the week my trainee,
who'd only worked four days with
me, said he was exhausted and
didn't know how I was still going.”



Example of exposure hazard

