TOTAL ATM WORKSHOP

"SHIFTING ATM"

A MAKC PRODUCTION

EUROCONTROL


SHIFTING ATM

About us

- Flemming: Greenlander
- Robin: European of English descent
- Combined age 100+
- Strong family lives
- Helicopter pilot
- Lawyer
- Hiker
- Ironman

experience

- 50 years @ 5 ACCs
- 25 years executive management of multicultural unit
- Operational background + holistic business view
  - ATCO + supervisor
  - Senior management roles:
    *Capacity**
    *Resource**
    *Airspace + network**
    *Performance**
    *Customer relationship**
    *MAKC - new business unit**


only 4 spokes on the wheel

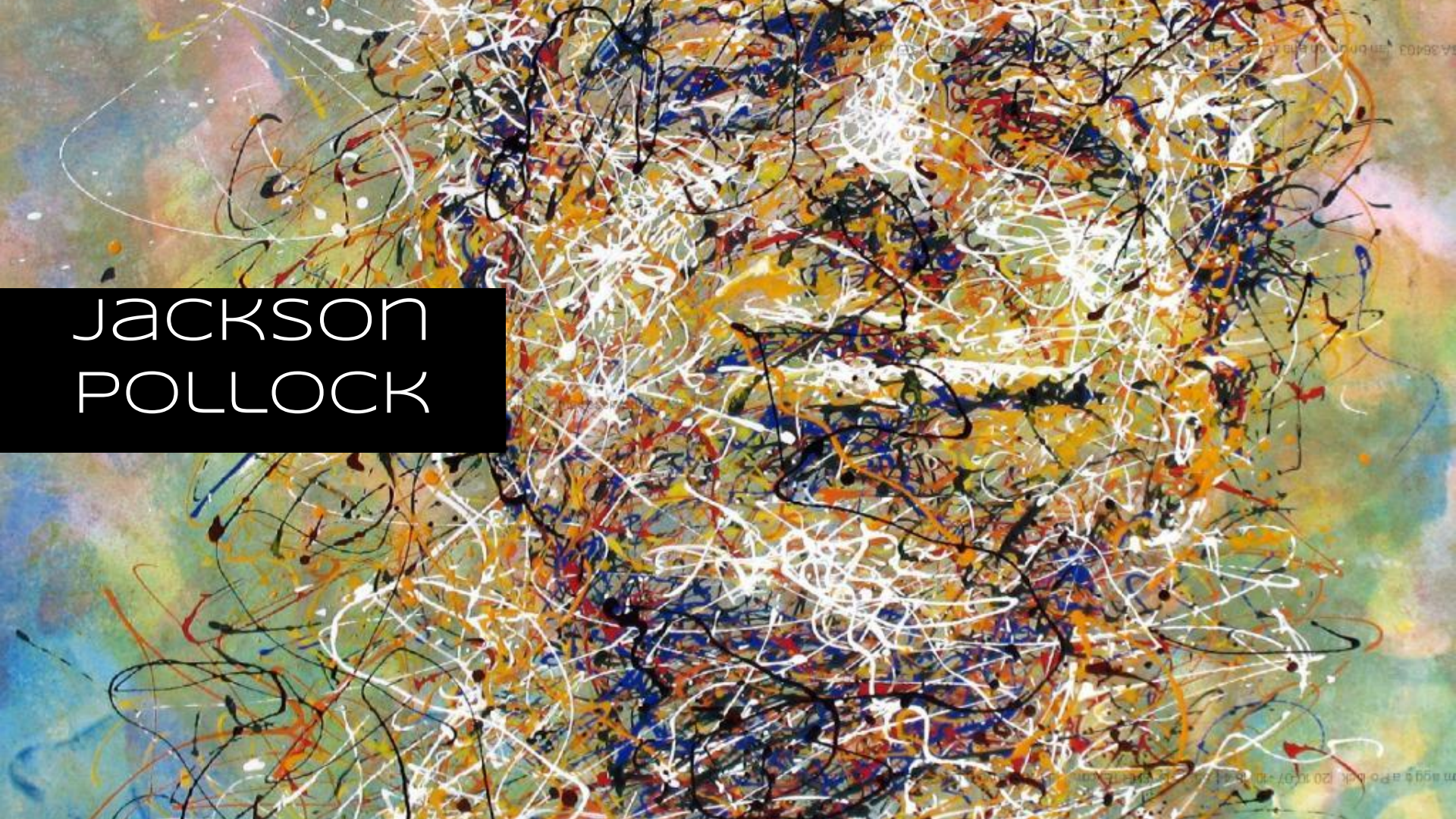

safety
GREEN LIGHT


environment


capacity
Mike Boehmer


cost-efficiency
BCE ECB EZB EKT EKP 2002
100
100
100 EURO


INTERDEPENDENCY


JACKSON
POLLOCK


JUST
POLLOCKS


8 TOTAL ATM
Core Service
areas


customer orientation
culture & communication
environment
staff resourcing
safety
resilience
capacity
cost efficiency


know your customer

service first, safety always

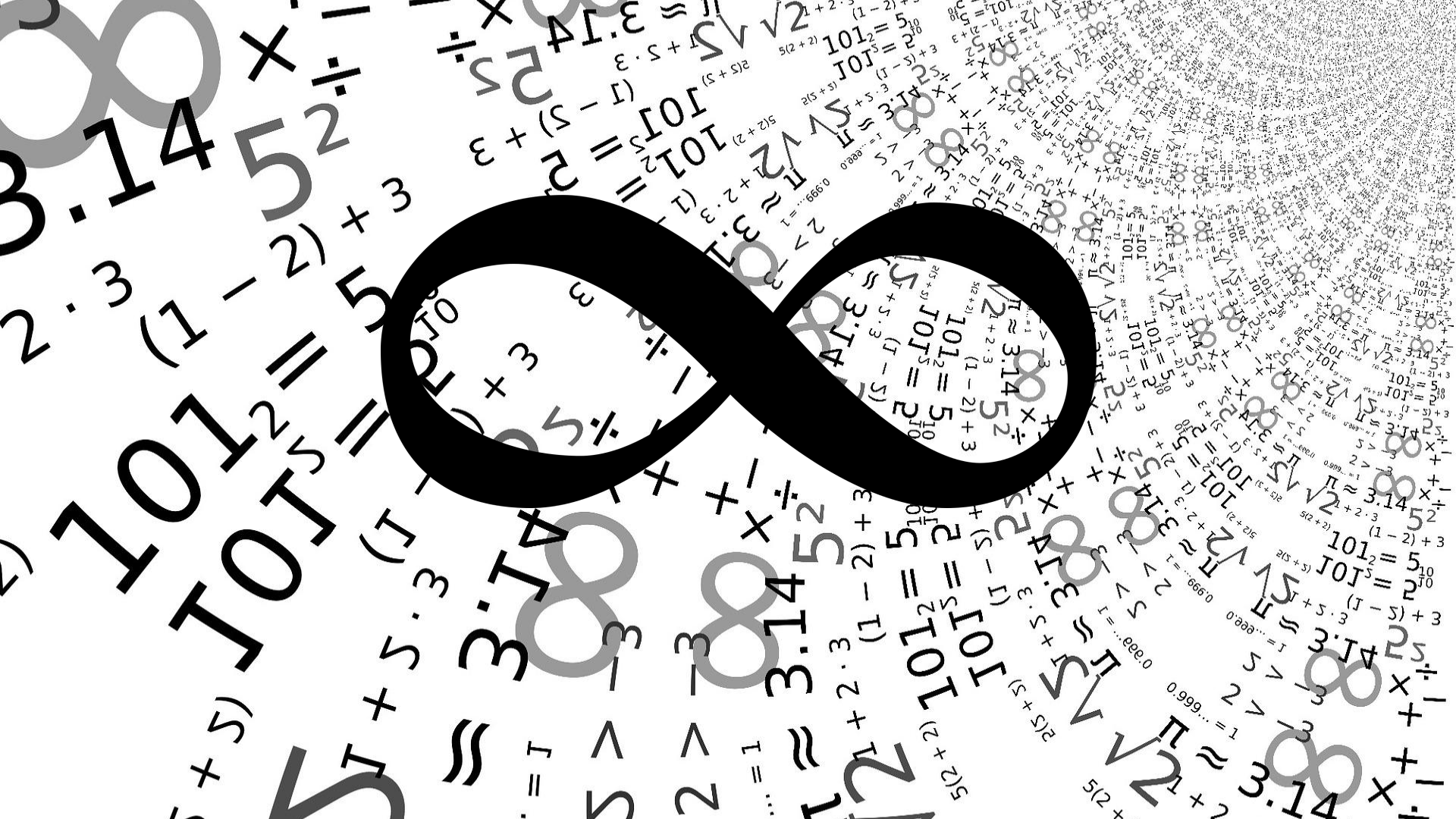
culture


DELIVER

Balance


crisis


50%
OF 80%
staff resourcing



Supply vs Demand


forecast


Backcast

THE DNA


Human Factors


structure

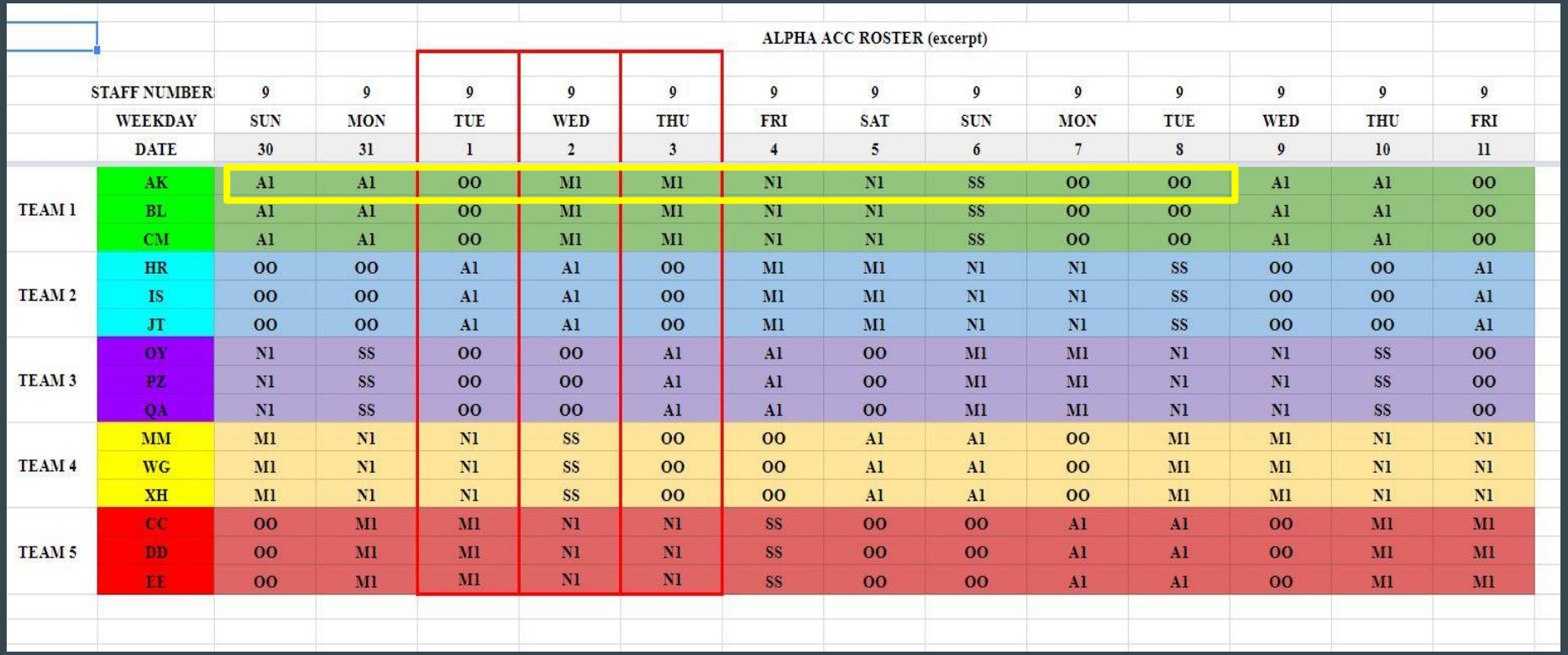

FLEXIBLE


PEOPLE
POWER
PLANNING
TOOLS


break

ALPHA ACC

STANDARD 6-4 ROSTER WITH 5-TEAM'S

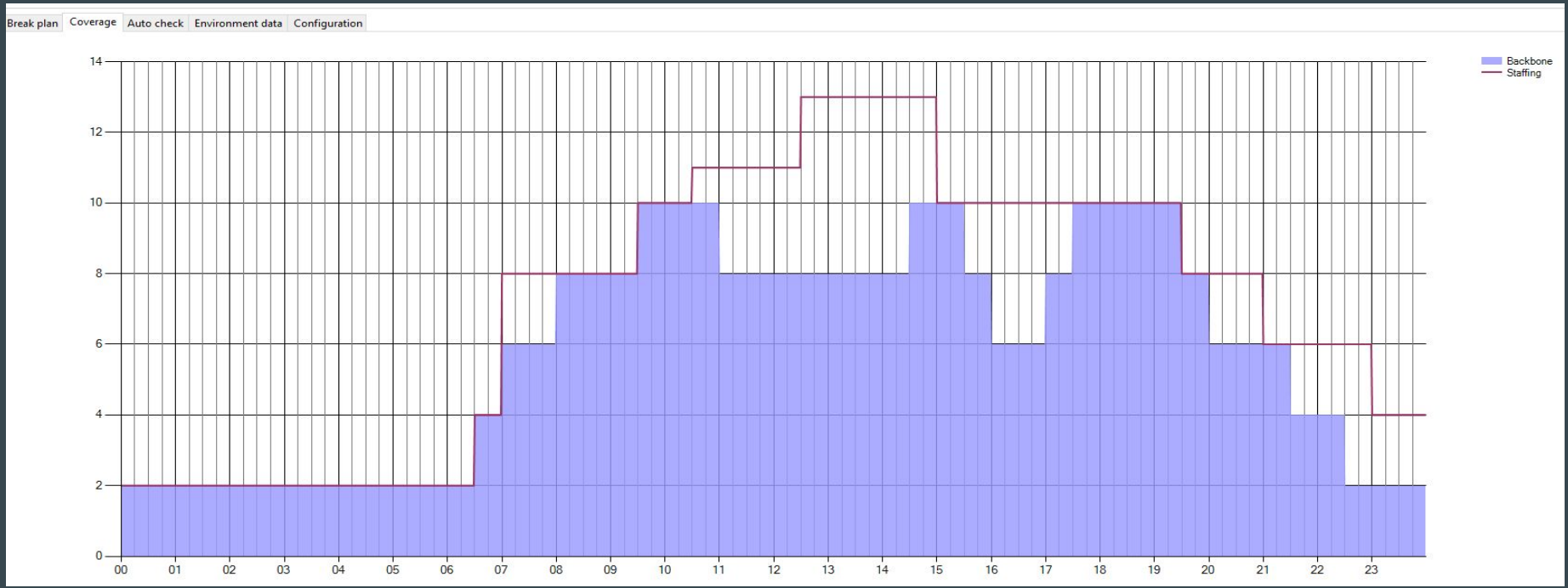


ALPHA ACC ROSTER (excerpt)

	STAFF NUMBER	9	9	9	9	9	9	9	9	9	9	9	9	9
	WEEKDAY	SUN	MON	TUE	WED	THU	FRI	SAT	SUN	MON	TUE	WED	THU	FRI
	DATE	30	31	1	2	3	4	5	6	7	8	9	10	11
TEAM 1	AK	A1	A1	OO	M1	M1	N1	N1	SS	OO	OO	A1	A1	OO
	BL	A1	A1	OO	M1	M1	N1	N1	SS	OO	OO	A1	A1	OO
	CM	A1	A1	OO	M1	M1	N1	N1	SS	OO	OO	A1	A1	OO
TEAM 2	HR	OO	OO	A1	A1	OO	M1	M1	N1	N1	SS	OO	OO	A1
	IS	OO	OO	A1	A1	OO	M1	M1	N1	N1	SS	OO	OO	A1
	JT	OO	OO	A1	A1	OO	M1	M1	N1	N1	SS	OO	OO	A1
TEAM 3	OY	N1	SS	OO	OO	A1	A1	OO	M1	M1	N1	N1	SS	OO
	PZ	N1	SS	OO	OO	A1	A1	OO	M1	M1	N1	N1	SS	OO
	QA	N1	SS	OO	OO	A1	A1	OO	M1	M1	N1	N1	SS	OO
TEAM 4	MM	M1	N1	N1	SS	OO	OO	A1	A1	OO	M1	M1	N1	N1
	WG	M1	N1	N1	SS	OO	OO	A1	A1	OO	M1	M1	N1	N1
	XH	M1	N1	N1	SS	OO	OO	A1	A1	OO	M1	M1	N1	N1
TEAM 5	CC	OO	M1	M1	N1	N1	SS	OO	OO	A1	A1	OO	M1	M1
	DD	OO	M1	M1	N1	N1	SS	OO	OO	A1	A1	OO	M1	M1
	EE	OO	M1	M1	N1	N1	SS	OO	OO	A1	A1	OO	M1	M1

Capacity/SOT Definition - Peak Days

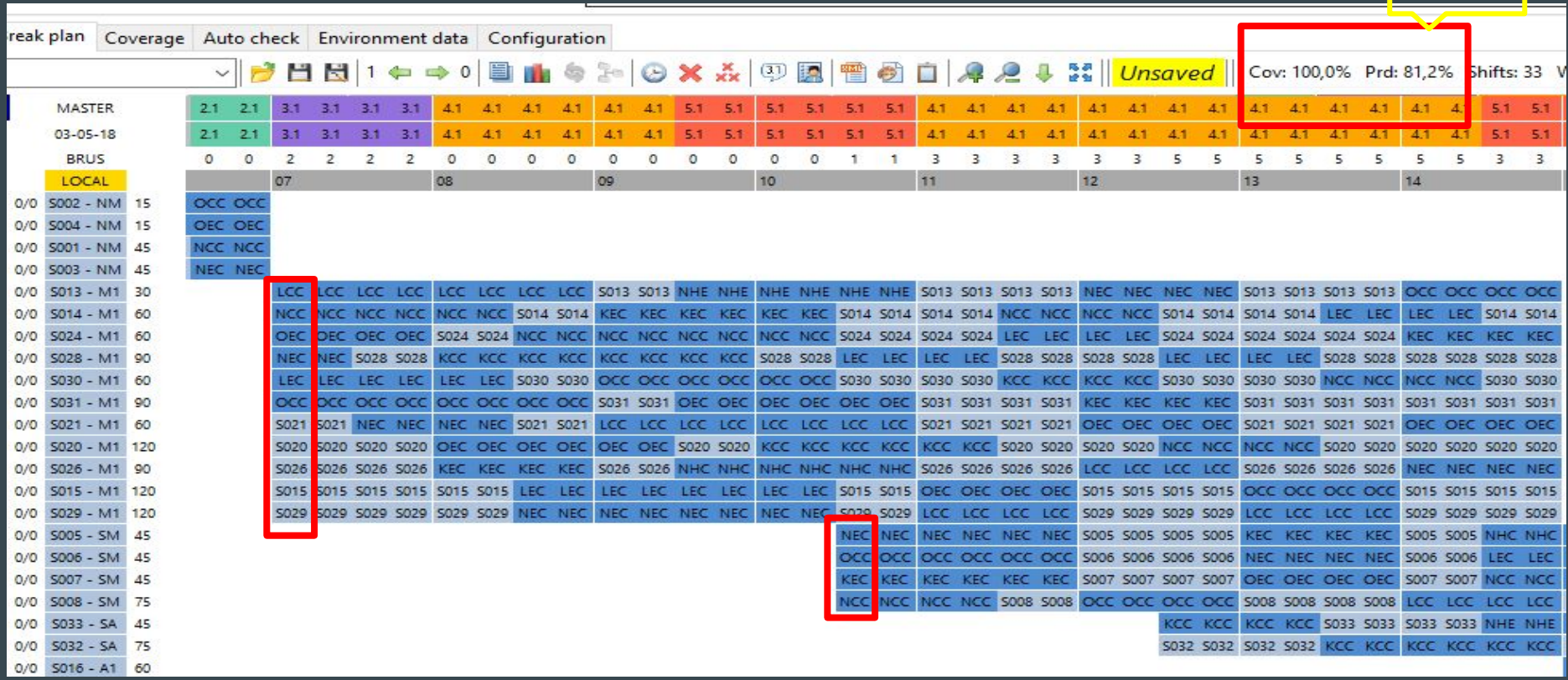
Driven by 'Busiest Normal Day'; e.g. **Thursday** 03/05 in our example. SOT represents acceptable delay target.



Structural Efficiency (By Best Day)

Alpha Teams

81,2%



Team size

eleven afternoons

eleven mornings

	STAFF NUMBERS	30	25	25	26	26
	WEEKDAY	SUN	MON	TUE	WED	THU
	DATE	30	31	1	2	3
TEAM 1	AK	A1	A1	OO	M1	M1
	BL	A1	A1	OO	M1	M1
	CM	A1	A1	OO	M1	M1
	DN	A1	A1	OO	M1	M1
	EO	A1	A1	OO	M1	M1
	FP	A1	A1	OO	M1	M1
	IE	A1	A1	OO	M1	M1
	SI	A1	A1	OO	M1	M1
	AG	A1	A1	OO	M1	M1
	AH	A1	A1	OO	M1	M1
	GQ	A1	A1	OO	M1	M1

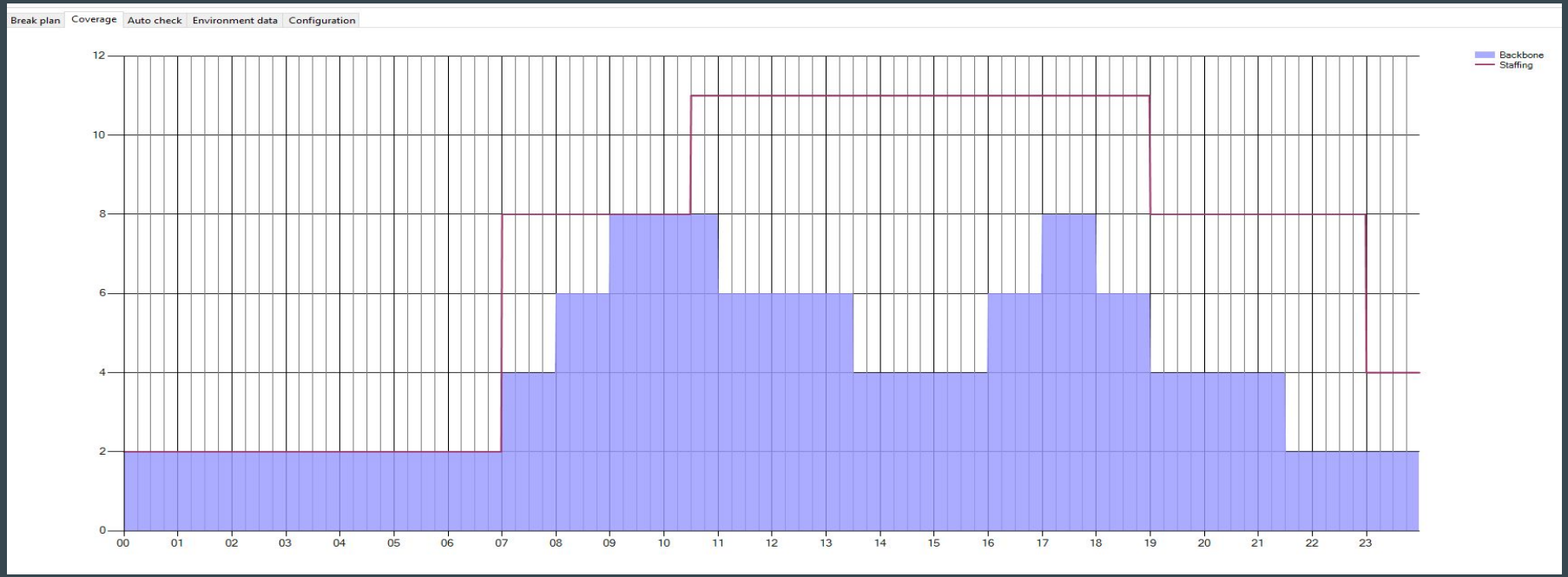
Team size and roster balancing

Four nights; four morning swings

	STAFF NUMBERS	30	25	25	26	26
	WEEKDAY	SUN	MON	TUE	WED	THU
	DATE	30	31	1	2	3
	DF	M1	SM	SM	SS	OO
	DG	*M1*	*SM*	*SM*	*SS*	*OO*
TEAM 5	CC	OO	M1	M1	N1	N1
	DD	OO	M1	M1	N1	N1
	EE	OO	M1	M1	N1	N1
	FF	OO	M1	M1	N1	N1
	GG	OO	M1	M1	SM	SM
	HH	OO	M1	M1	SM	SM
	MF	OO	M1	M1	TRG	TRG
	JN	OO	M1	M1	LEAVE	LEAVE
	II	OO	M1	M1	LEAVE	LEAVE
	EA	OO	M1	M1	SM	SM
	EB	OO	M1	M1	SM	SM

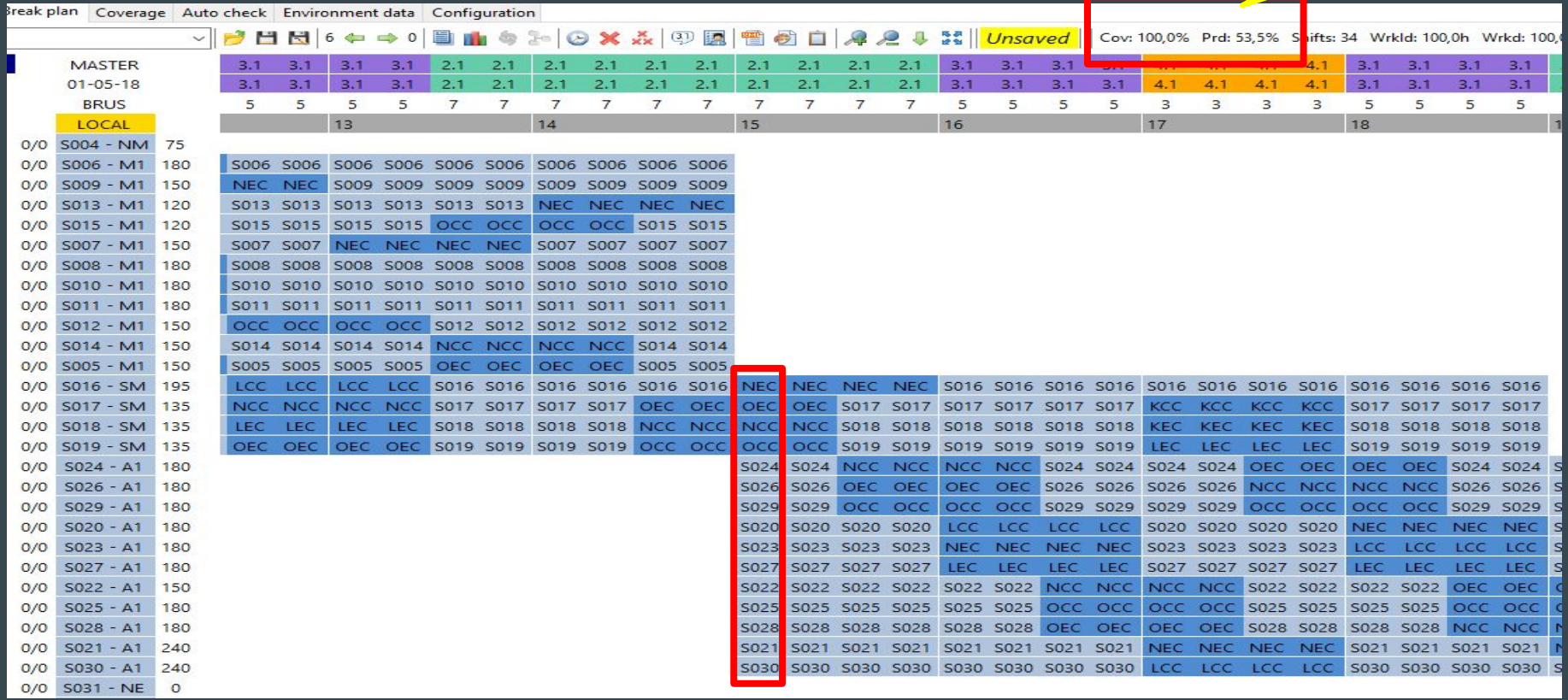
Capacity/SOT definition
Off-peak days

e.g. **Tuesday** 01/05 in our example. SOT represents demand.

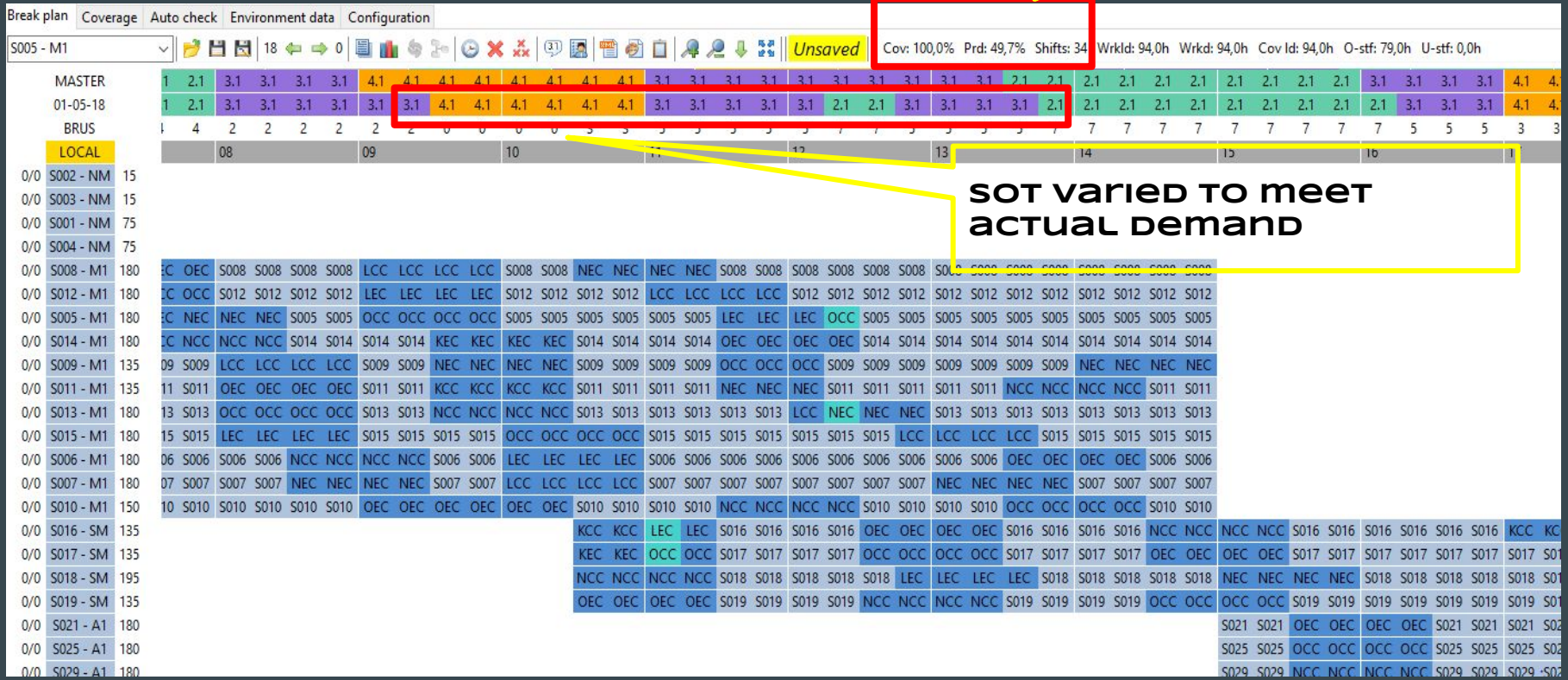


Structural Efficiency (By Cycle)

53,5%



Operational efficiency (executed SOT)




break

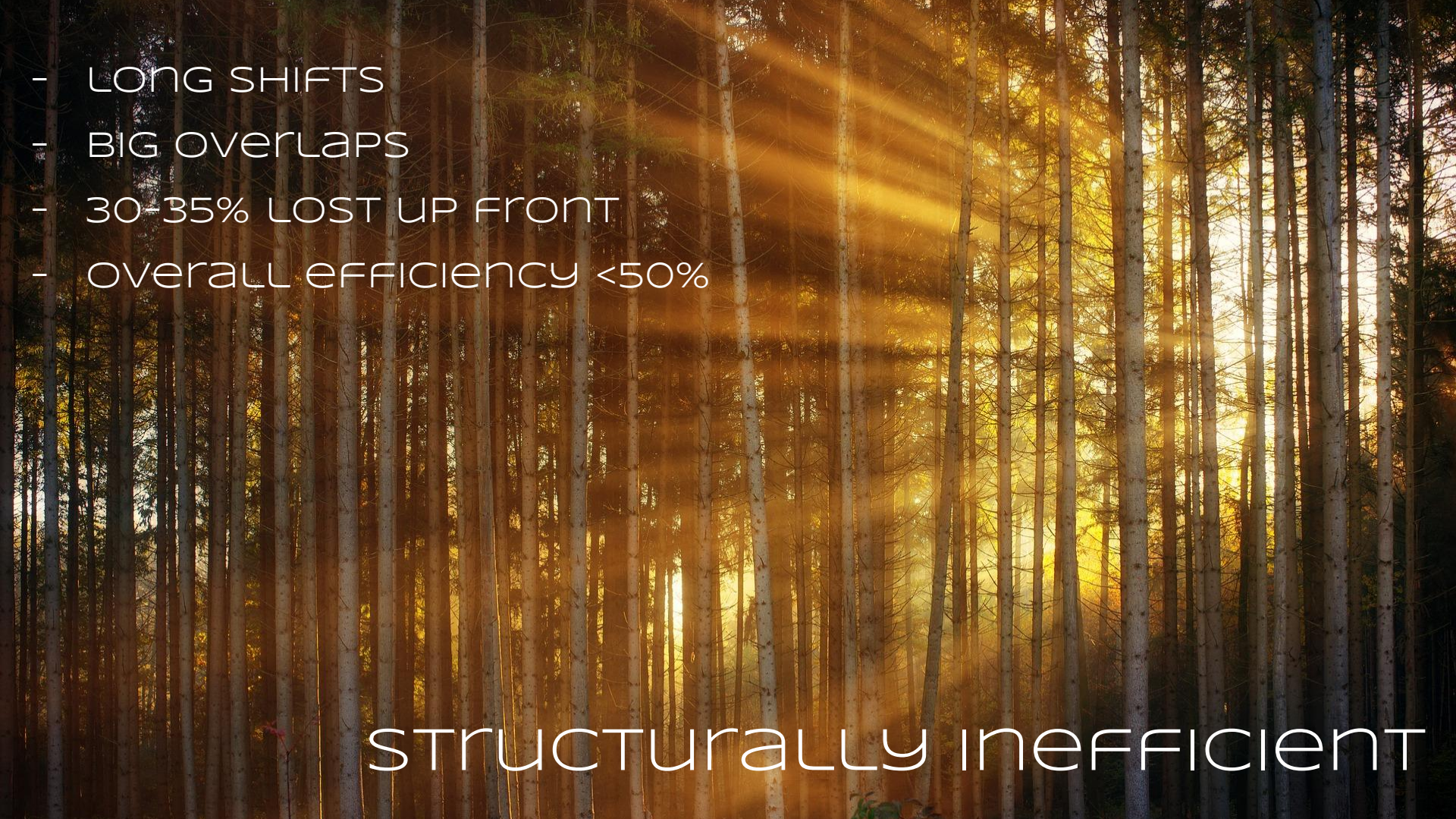

50% TO
80%

OLD

- Fixed structure
- Structurally inefficient
- Best practices not respected

Fixed structure

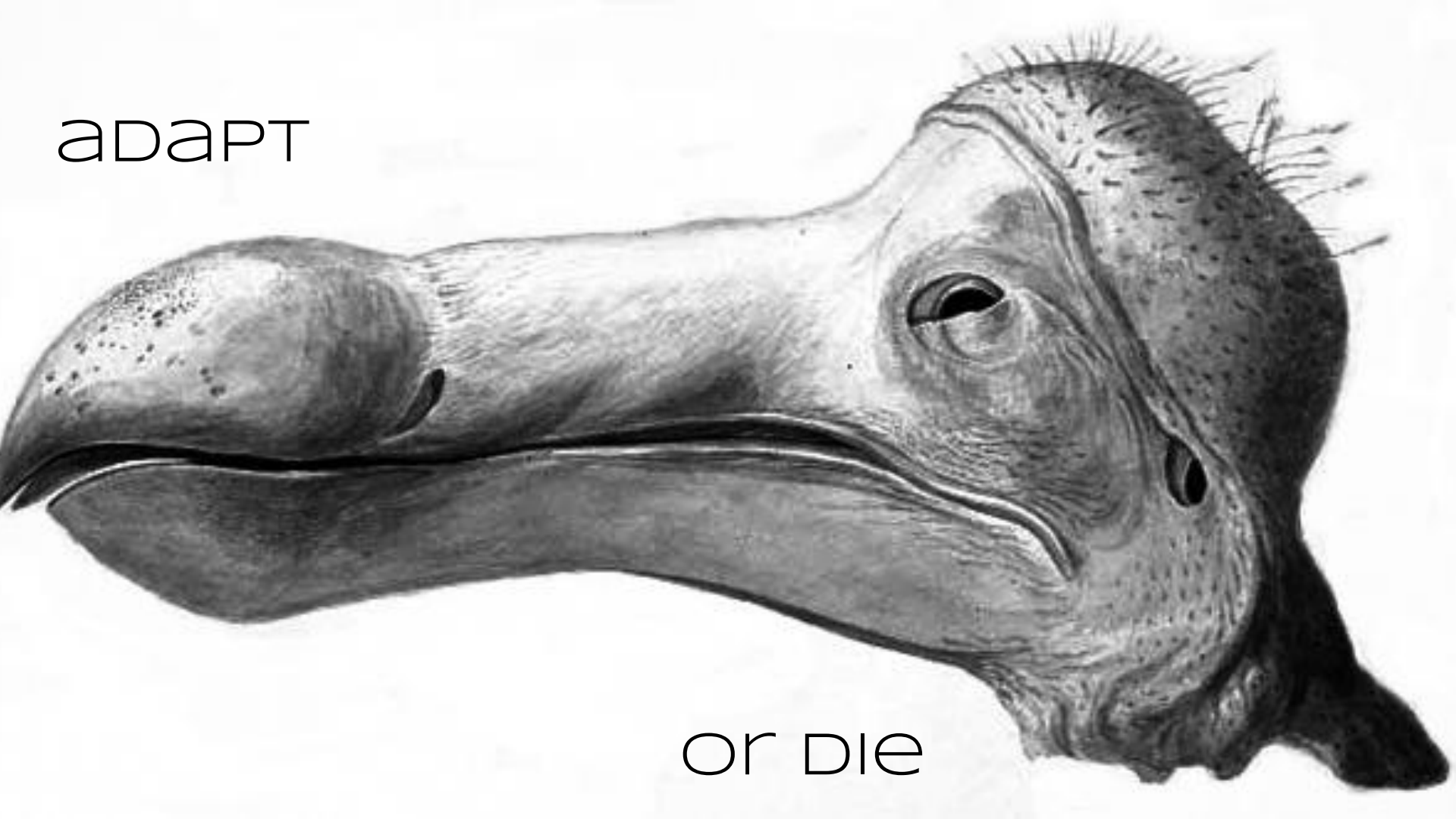
- 4/2 backward rotation
- 8 shifts (only)
- Strict allocation
- Decentralised leave planning


- Long shifts
- Big overlaps
- 30-35% lost up front
- Overall efficiency <50%
Structurally inefficient

Best Practices not respected

- Backward rotation
- M/N on same day
- 10 hour shifts
- 10 hours between shifts

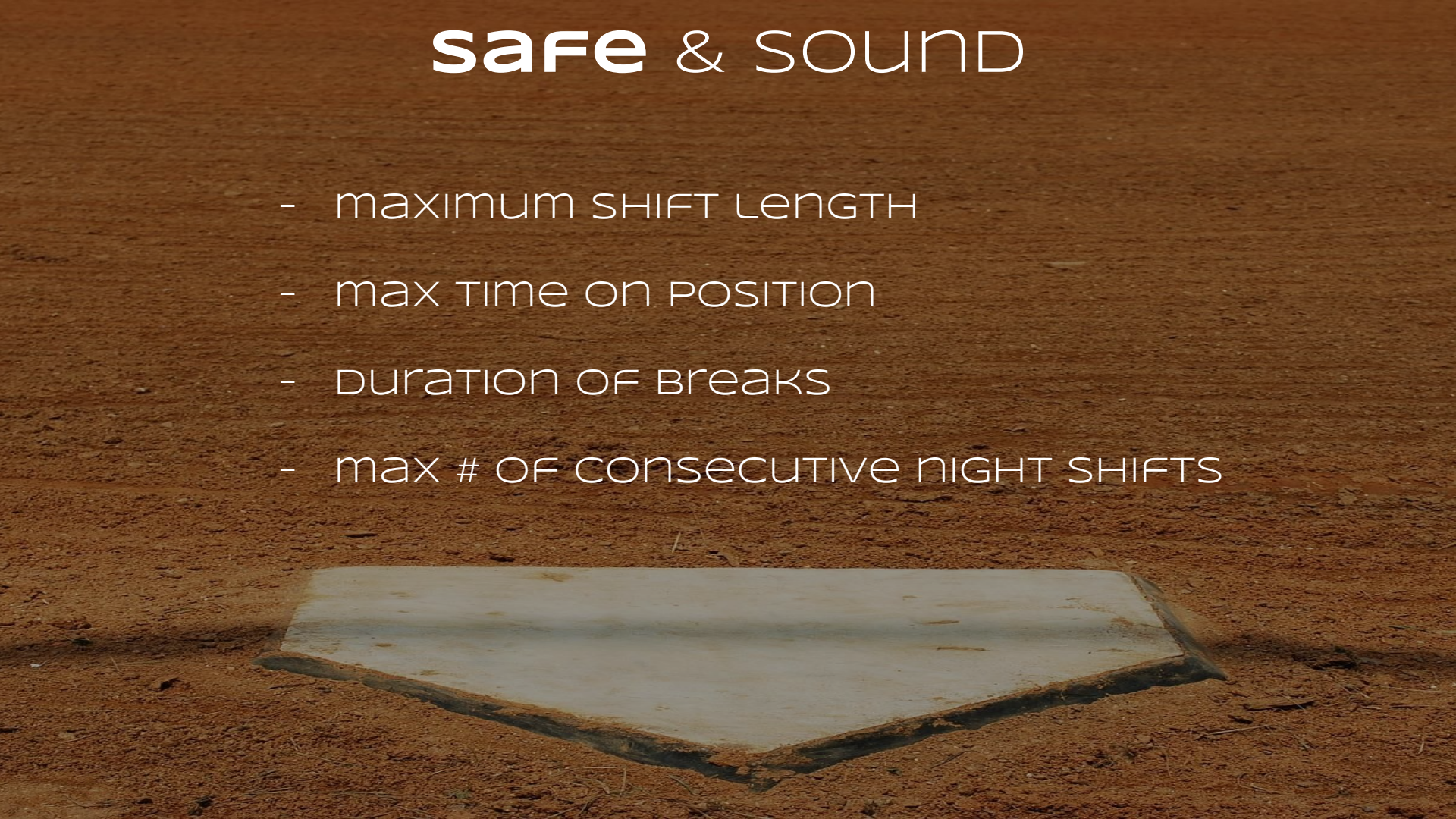
adapt



or die

safe & sound

- maximum shift length
- max time on position
- duration of breaks
- max # of consecutive night shifts



safe & **sound**

- forward rotation is healthier
- night shifts should finish as early as possible
- early shifts should not start too early
- early/night hours worked should be compensated immediately (shorter shift)
- min. 24 hours off after night shift (preferably 48 hours)
- min. 12 hours between shifts
- age amenities (50+)
- max. # of consecutive shifts
- staff influence on the roster

BUILD

- create a healthy, flexible and efficient demand based roster

- trade structural inefficiency for less working days/better working conditions

new

'Piece of the pie' for the company

- very strict leave planning
  - 2 weeks off June-September
- staggered shifts
  - every half hour
  - structural efficiency >94%
- 12 hours between shifts
- shift length 7:30 hours
- flex-duties
- stand-by duties
- compulsory overtime

'Piece of the pie' for staff

- reduction of 30 working days p.a.

TOOLS

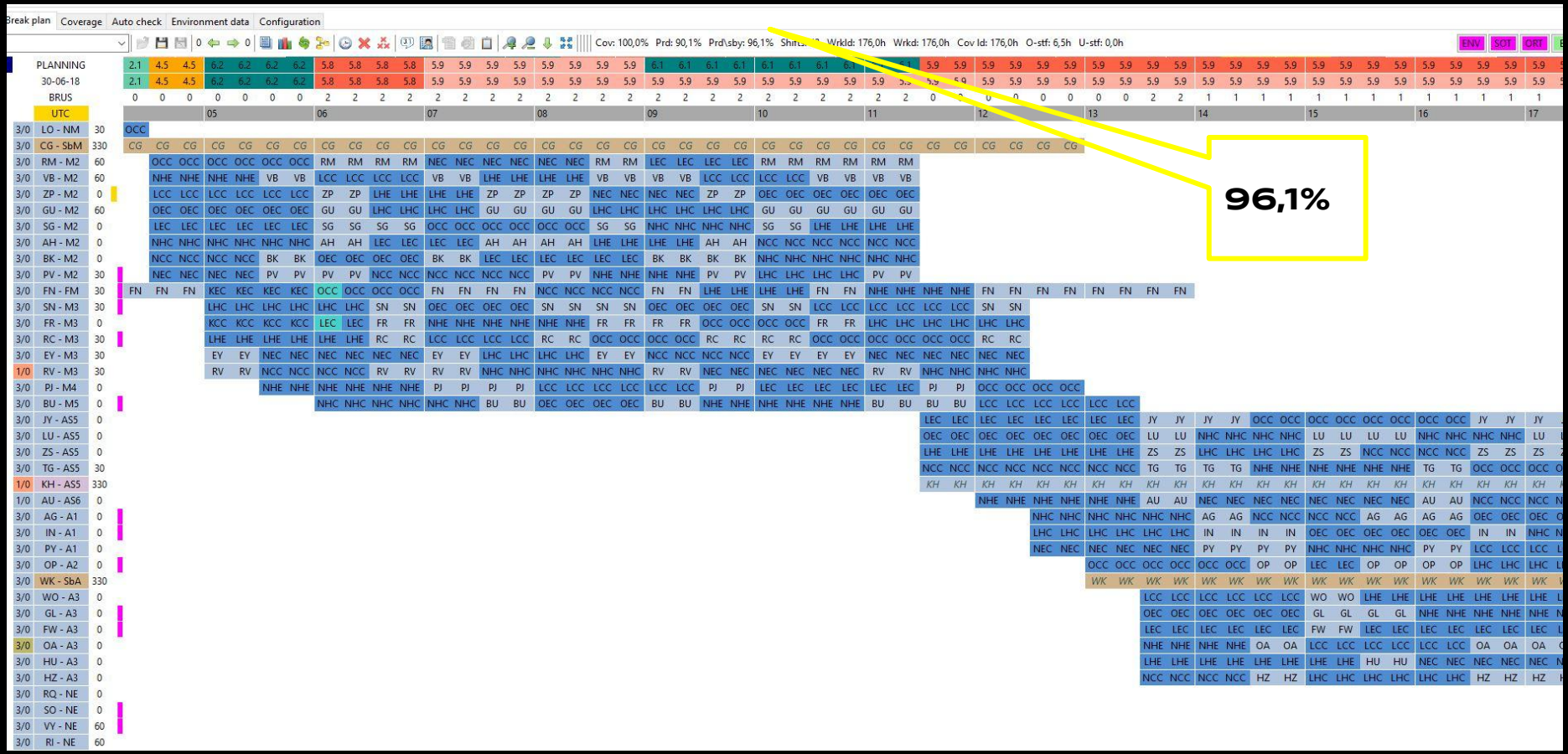
- OPS ROSTER TOOL
- POSITION PLANNER
- LONG TERM PLANNING
- PREFERENCE TOOL
- PREPLANNER
- SIGN-IN/SIGN-OUT
- SWAP TOOL
- MEDICAL PLANNER
- EBRIEF TOOL
- CONTROLLER COCKPIT

check

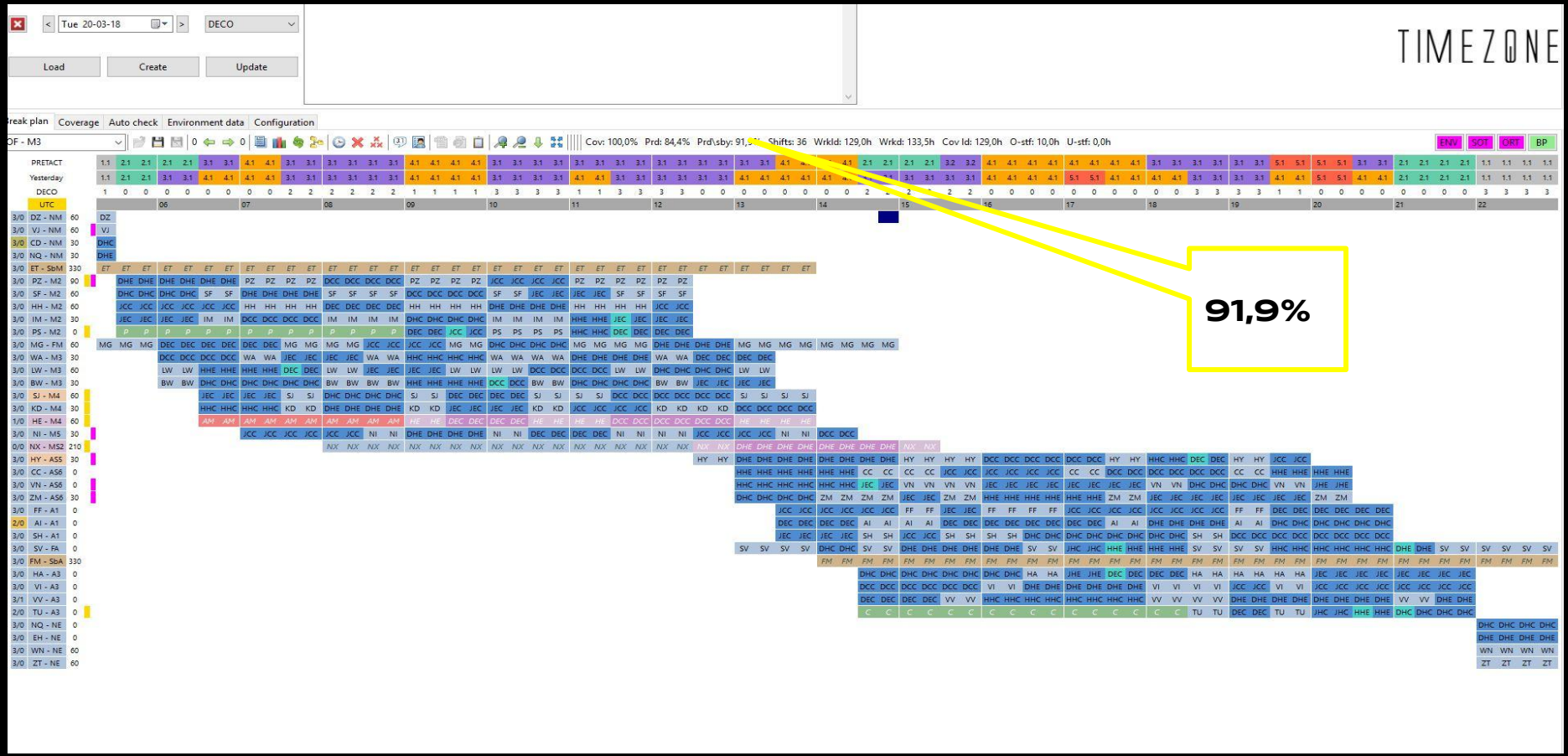
- ✓ forward rotation is healthier
- ✓ max. # of consecutive shifts
- ✓ maximum shift length
- ✓ min. 12 hours between shifts
- ✓ max time on position
- ✓ duration of breaks
- ✓ early/night hours worked should be compensated immediately (shorter shift)
- ✓ min. 24 hours off after night shift
- ✓ staff influence on the roster

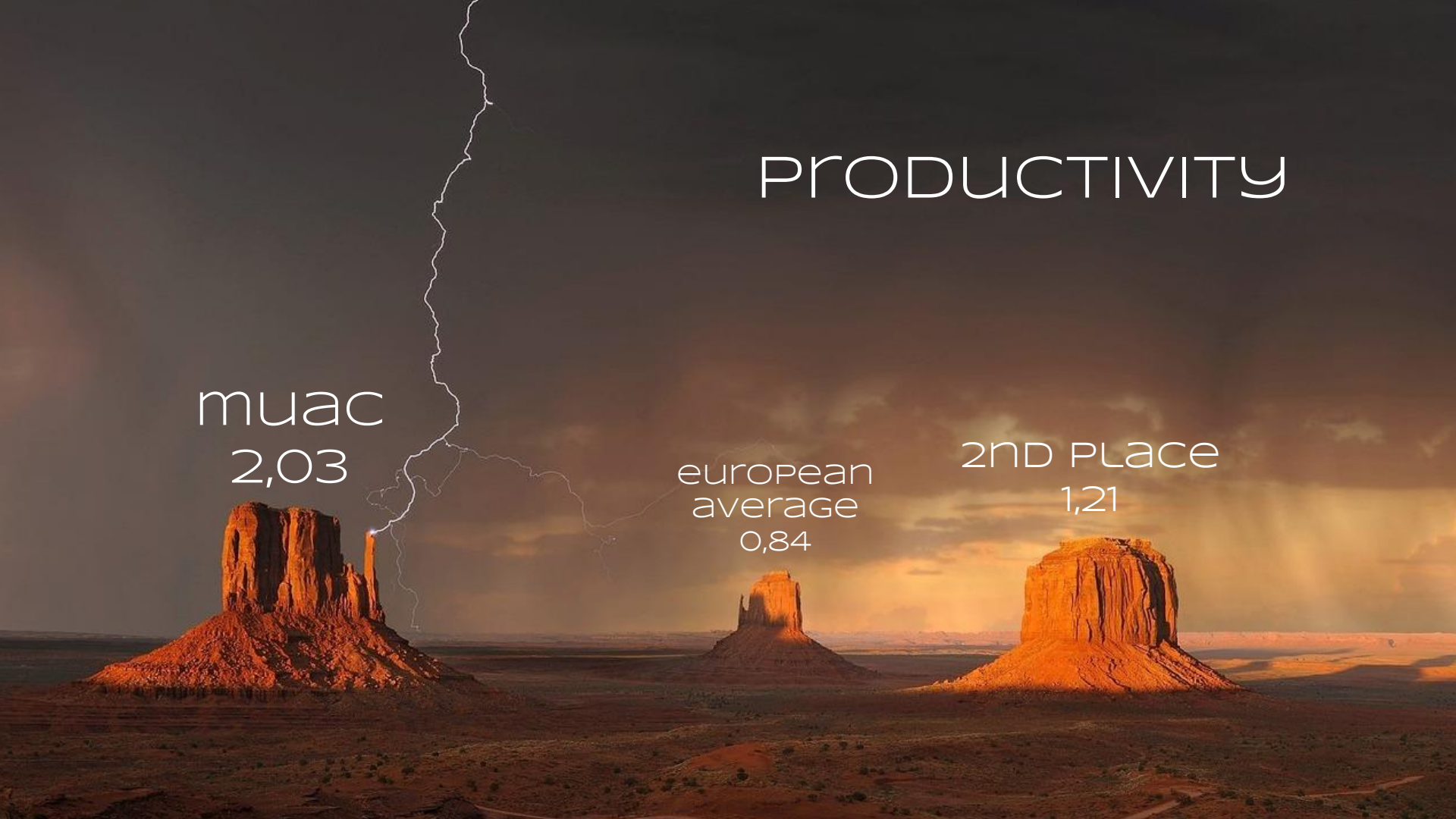
- ❏ night shifts should finish as early as possible
- ❏ early shifts should not start too early
- ❏ age amenities (50+)

STRUCTURAL EFFICIENCY (REAL EXAMPLE)



OPERATIONAL EFFICIENCY (REAL EXAMPLE)




PRODUCTIVITY
MUAC
2,03
EUROPEAN
AVERAGE
0,84
2ND PLACE
1,21


break

The voyage


CARTA MARINA ET DESCRIPTIO SEPTEMTRIONALIVM TERRARVM AC MIRABILIVM RERVM IN EIS CONTENTARVM


THE GRASS IS GREENER


Preparing for the voyage


'ALL ABOARD'

The Voyage

arriving at 'the promised land'


Life in 'the promised land'

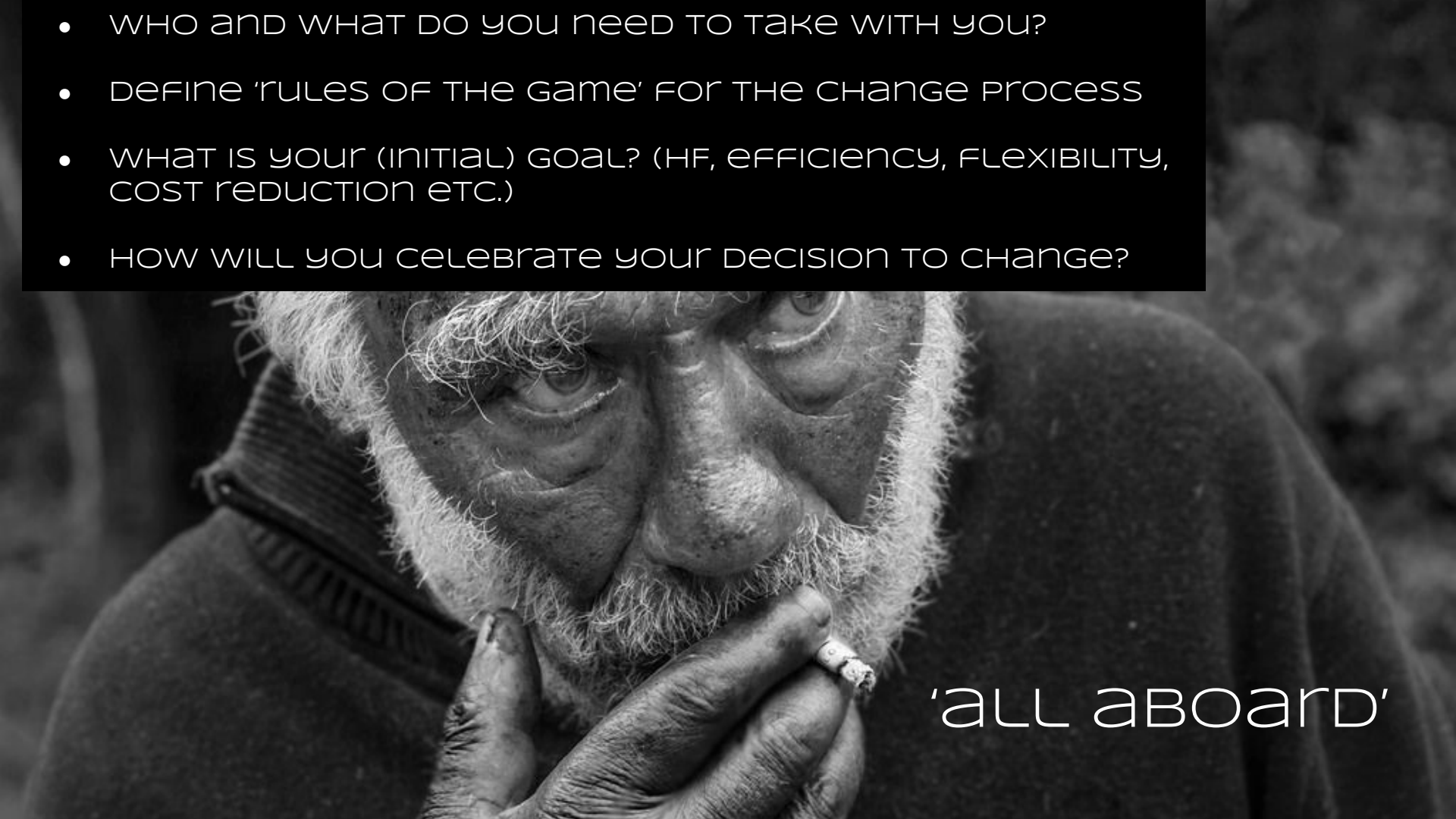
The grass is greener

- Why do you need to change?
- Are there outside factors requiring the change (financial, social etc.)?
- Can you continue without changing?

Preparing for the voyage

- Who wants the change?
- Can you clearly define what you want?
- Are you restricted in your search options (financially, socially etc.?
- Who is going to drive/steer the change process?

- Who and what do you need to take with you?
- Define 'rules of the game' for the change process
- What is your (initial) goal? (HF, efficiency, flexibility, cost reduction etc.)
- How will you celebrate your decision to change?



'all aboard'

The voyage

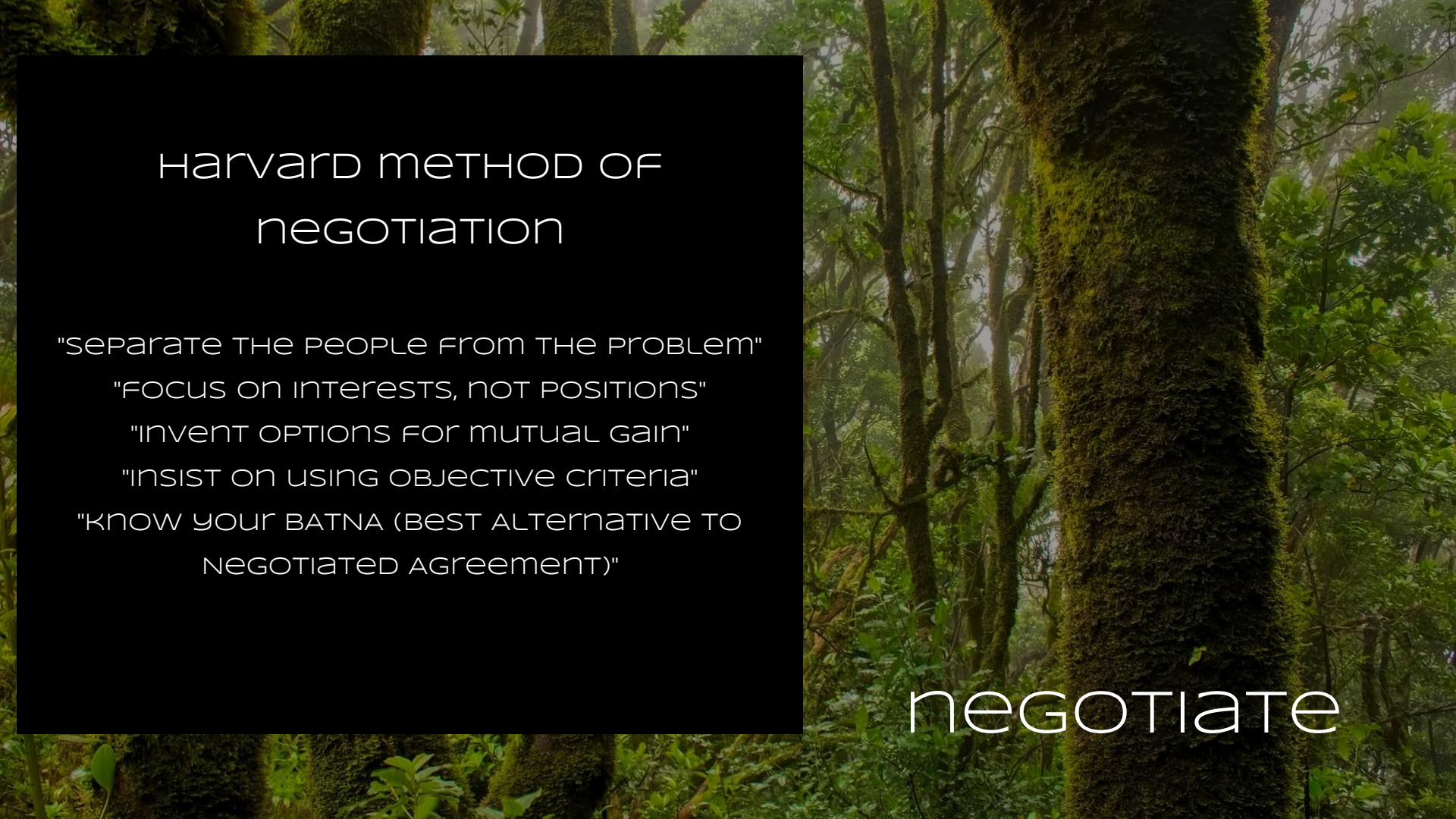
- Who leads (takes over) when the going gets tough?
- What is the worst 'storm' you could experience (social conflict, industrial action)?
- Can you change the plan while going?

- Is your solution acceptable (to you and your partners)?
- How will you celebrate your success?
- Describe your agreement (as you see it)
- Can you implement immediately (new tools, new processes)?

arriving at 'the promised land'

- Does the new situation solve your 'old problems'?
- De you need further change in the (near) future?
- Did you 'burn' anybody on the way?

Life in 'the promised land'



Harvard method of negotiation

"Separate the people from the problem"
"Focus on interests, not positions"
"Invent options for mutual gain"
"Insist on using objective criteria"
"Know your BATNA (best alternative to negotiated agreement)"

negotiate