Offshore Windparks - Delay

 $H_{sig} \longrightarrow \leq 2,0 \text{ m} \text{ (workability criteria)}$

In practice use specific statistics to establish WDT (e.g. 20 years average)

Offer: 1,5 mo estimated net execution time with 25% WDT in June/July — 2,0 mo gross ex ante

Buoy: June/July 0% — 1,5 mo gross ex post required

Delay, responsibility client: November start execution

1,5 m net execution time with 70% WDT -----> 5 mo gross ex ante (same statistical base as above) 1,5 m net execution time with 75% WDT -----> 6 mo gross ex post required

Question: Under contract payment of 5 - 2,0 = 3,0 mo WDT extra? 5 - 1,5 = 3,5 mo WDT extra?

German view: Preferred ex ante, base contract rates

statistics, 3,0 mo extra

Note: No concurrency, no dominant cause **---->** contractor must be able and willing to serve in order to be entitled to payment!

Or "International" view:

Damage:6 - 1,5 = 4,5 mo ? (parallel with German VOB/B §6.6 resp. BGB 249ff)Additional cost:6 - 2,0 = 4 mo (VOB/B §4.1.4)

The 0,5 month hypothetically saved WDT could be seen as extra margin -> arguably to be paid in case of gross negligence by client or similar

Problems:

- Cost norms may be variable, dependent on season, indexing etc. (W+T, extra personnel, hardship, consumptions)
- Additional cost due to impacts on other commitments (secondary d/d on other projects, mob/demob, missed opportunities in the market -> Hadley v Baxendale
- Extra paid month on year base -> what is cost on company level ? Norms?
 Overpayment? Employment of personnel&equipment on company level?
- Same on headoffice overheads

Disruption issues remain as discussed before in parallel:

German view: Again preferred ex ante, base contract rates

Execution window belongs to basis of pricing, hence Client should bear consequences of shifted period on the actual cost of executing the works. Base for adjustment base estimate.

International view:

Establish loss and expense due to new execution window. I.e. increased cost, reduced net and gross productivity

Quantification: Measured mile method

Problems:

- Sufficient undisturbed data
- Documentation and plausibility of planned production -> base estimate





 $\sum \Delta V_i = 0$ same volume, only JV internal shift of volumes

 $\sum \Delta T_i = 0$ still additional cost for client possible