

Ivar Aasen development project


Link to Ivar Aasen presentation film

## Human Factors involvement

- HF in FEED engineering
- HF in Detailed Engineering
- HF in construction follow-up and commissioning


## Where is HF involved

- Control Suite design on- and offshore
- HTCC
- HMI Design
- HMI philosophy and specifications
- Alarm management
- Wayfinding, emergency lightning and signs
- Local control panels
- Working environment reviews


## HF in the engineering organization

|  | Det norske | SMOE | Aker |
| :--- | :---: | :---: | :---: |
| FEED | $1(20 \%)$ |  | 1 |
| Detailed design | 1 (Shared on- and offshore) | 1,5 |  |

## Gjennomføring (ISO-11064)

| Fase | Time | Duration | DG |  |
| :--- | :--- | :---: | :---: | :---: |
| Fase A | Clearifications | Sept 12-May 13 |  | DG1 |
| Fase B | Function- and task analysis and <br> conceptual design | June 13-Dec 13 | $6-9$ months | DG2 |
| Fase C | Detailed design | Jan 14-May 14 | $4-6$ months | DG3 |
| Fase D | Construction and temporary <br> handover | Juni 14-Dec 14 | $6-7$ months |  |
| Fase E | Operational testing and feedback <br> -Training process technicians in <br> simulator <br> - Commisioning | Jan 15-Aug 16 | 22 months | DG4 |
| Fase F | Final handover to Operation | Aug 16 - Oct 16 | $2-3$ months |  |



## Human Factors in design



## Success factors control centre design

- Early establishment of integrated control suite design team
- Control Suite Design Coordinator
- Some personell needs to be common for the on- and offshore suites when designing for shared control
- Allign project plan and the timeline for development of gouverning documentation
- Defined ownership for HF scope in contracts

