

# Does Your Company Fall Under COMAH ?

Or Offshore Installations (Safety Case) Regulations?

## Have you reviewed the Human Factors Delivery Guide, with reference to COMAH-critical communications?

The General Duty under COMAH requires that every operator must take all measures necessary to prevent major accidents and limit their consequences for human health and the environment. Where reliance

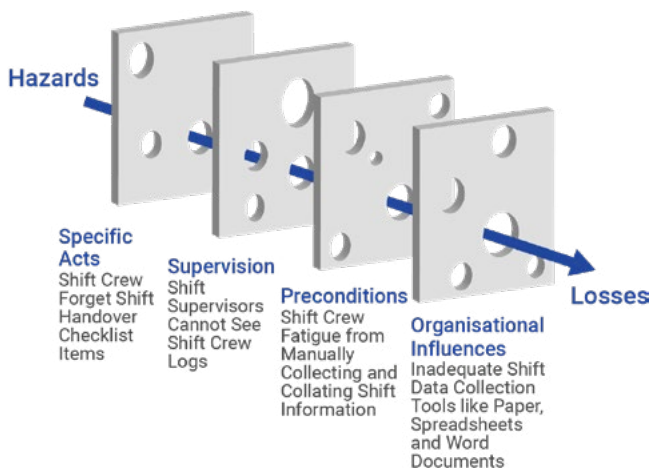
is placed on people as part of those necessary measures, human factors and human reliability should be addressed with the same rigour as technical and engineering measures.



To ensure compliance, the Health and Safety Executive (HSE) has recruited several human factors inspectors across the UK. The latest COMAH regulations now cover more facilities, such as storage areas and distilleries, and many existing sites are years behind with their shift handover procedures.

Many organisations are still using scattered data collection methods to record and manage safety-critical human operations management procedures. These disconnected forms tend to grow rapidly, creating a management nightmare. These methods also isolate field workers from what is happening in the control room, and vice versa:

- Paper
- Spreadsheets
- Word Processor Documents
- Scattered Databases
- Email
- Whiteboards
- Inconsistent Verbal Meetings
- Phone Calls / Radio
- Text / Instant Messages
- Multiple MES Applications



According to the Human Factors Delivery Guide, effective shift handovers should incorporate the following elements:

- Meaningful preparation by out-going personnel
- An exchange of key information between out-going and in-coming personnel
- A cross-check of information by in-coming personnel, as they assume responsibility



Shocking industrial disasters have highlighted the risks that appear during inadequate human operations management procedures. For example, investigations have found that poor shift handover was a contributory factor in devastating industrial accidents, such as:

- DuPont LaPorte Toxic Chemical Leak (2014)
- KiwiRail Train Derailment (2013)
- BP Deepwater Horizon Oil Spill (2010)
- Kleen Energy Natural Gas Explosion (2010)
- BP Texas City Refinery Explosion (2005)
- Buncefield Fire (2005)
- Esso Longford Gas Explosion (1998)
- Continental Express Aircraft Crash (1991)
- Occidental Piper Alpha Explosion (1988)
- Sellafield Beach Incident (1983)

The Human Factors Delivery Guide recommends that COMAH operators should develop and implement arrangements to ensure accurate, reliable communication of COMAH-critical information during shift handovers.

The operator plans for work to be completed in a single shift whenever possible.

j5 Work Instructions allows operations teams to plan, record, manage, view and complete any work tasks in a consistent and efficient way with a web browser and mobile device.



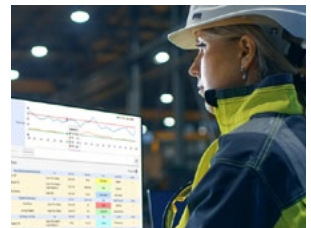
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Standard j5 Shift Handover reports and automatically collated data mean less time is spent preparing routine reports and recapturing data. Checklists, electronic sign off and workflows ensure a structured j5 Shift Handover process which can be adapted easily using j5 IndustraForm® Templates.



The operator minimises distractions during shift handovers.

j5 Shift Handover acts as a central repository for all relevant operations data, replacing paper, spreadsheets, word documents and other stand-alone databases, allowing operations teams to focus on one streamlined process.



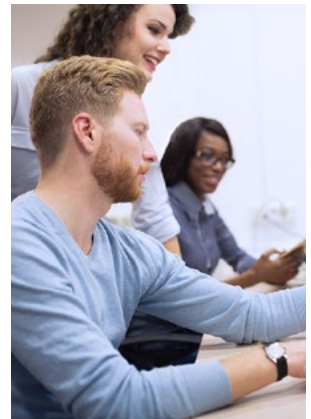
The operator facilitates face-to-face communication.

j5 Shift Handover information is made visible to all personnel on site, and multiple sites, via a simple web browser interface. This consistent and visible data facilitates effective face-to-face communication, due to higher situational awareness.



The operator provides structured, written logs to support verbal communication, with mandatory sections to record COMAH-critical information.

The j5 Operations Logbook ensures consistent formatting, structure and content entry. Automated and efficient data entry reduces employee workload and the risk of human error. Logs are easily shared across departments and operations teams. Personnel can also quickly look for and report on specific operations data. Spreadsheet-like configuration allows a COMAH-critical information section to be added and for data entry in this section to be mandatory.

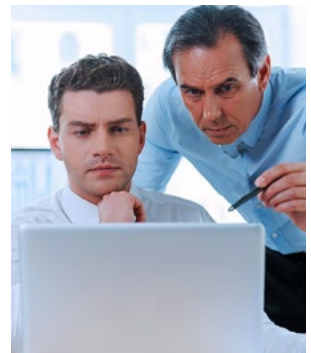


The operator identifies and controls higher-risk shift handovers.

Examples include if maintenance work on critical plant crosses a shift; when safety-systems are overridden; following an individual's lengthy absence from work (holiday, shift-break, illness etc.); between experienced and inexperienced personnel.

j5 Shift Handover makes it easy to locate or highlight critical information that is related to past or current shifts. This can be done using dashboards, reports, multiple views, filters, an inbuilt search engine, email alerts and more.

j5 Shift Handover is a multi-site solution, allowing operations, maintenance, safety and other teams to collaborate and share consistent data across plant areas.





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Our technologies are shaping urban and production ecosystems to become increasingly connected and autonomous — ensuring a scalable, sustainable future.

Hexagon's PPM division empowers its clients to transform unstructured information into a smart digital asset to visualize, build and manage structures and facilities of all complexities, ensuring safe and efficient operation throughout the entire lifecycle.

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