



Safeguarding Well Integrity Post Transfer of Operatorship

An industry PoV from Wipro

How a MADD industry model for data could help assure Well integrity

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Merger, Acquisitions, Divestments and Decommissioning Activity

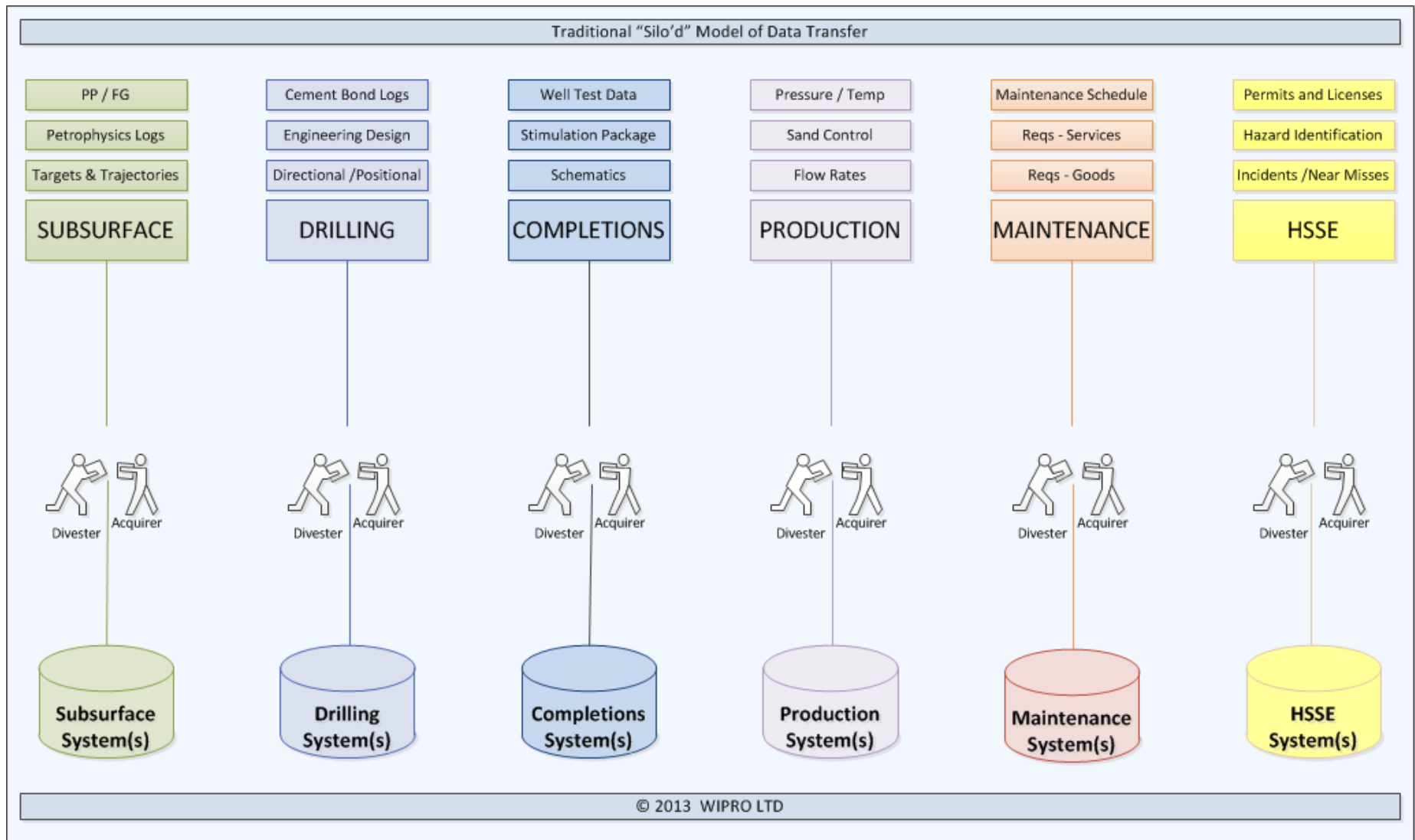
MADD = Mergers, Acquisitions, Divestments and Decommissioning

- >4 transactions / day in 2012, total value ~\$402 billion
(Ernst & Young's "Global Oil & Gas Transactions review 2012")
- Total plan to sell \$20bn over 2013 – 2015
- Shell announce \$15bn divestment programme for FY2015
- BP stated they would sell \$10bn over the next 2 years
- Global decommissioning scale – >5,000 offshore structures globally, countless onshore structures
- Over 2,500,000 wells have been drilled, on and offshore, **US only**
- North Sea decommissioning spend – ~\$9bn over the next 5 years
- Gulf of Mexico decommissioning spend – ~\$1.5bn in 2012

Traditional “Silo” Transfer

- Function team to function team
 - Drilling to Drilling
 - Maintenance to Maintenance
 - Production to Production
 - etc
- Emphasis is on the transfer of data, as an end in itself – both parties focus on the mechanics of transfer
- Any aggregation or correlation of data relationships is left to new operator

Traditional "Silo" Transfer



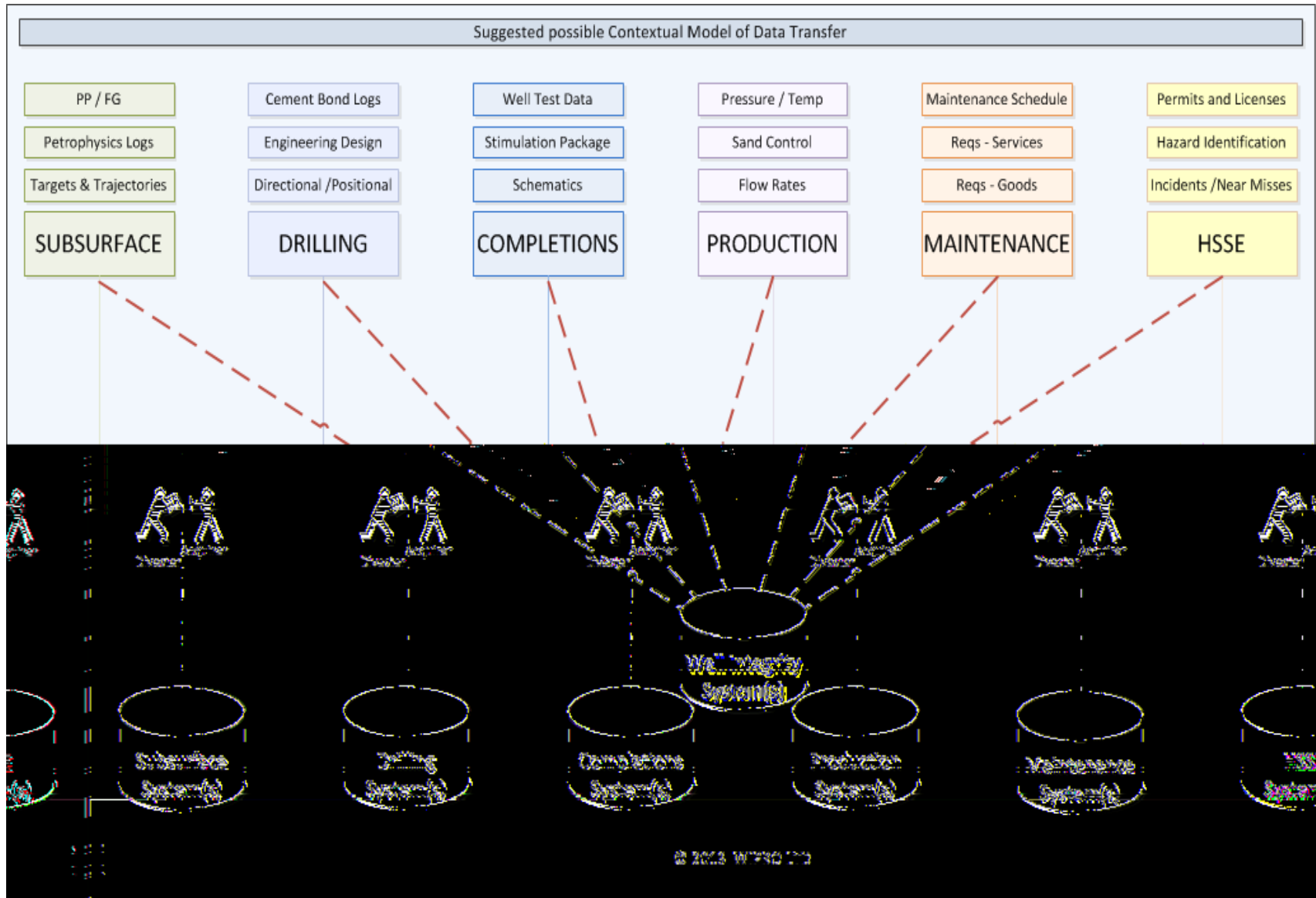
Example of the Risk

- Completions Schematics & Requisition orders
- “Traditionally” these 2 data items will be extracted, transferred and uploaded independently of each other – no concern for the possible relationship
- What if the Requisition Order shows down hole equipment being purchased, but the schematics do not reflect it’s installation?
- Is it there and the diagram is out of date, or is it lying in stores as a wasted investment, was it installed and subsequently removed? How compromised is your view of the well’s integrity?
- The risk is that no-one will even notice, as the Drilling data stream sees only the Completions Schematic, while the Maintenance data stream sees only the Requisition Order. Both believe their data reflects reality.
- Where is the validation of key Well Integrity data?

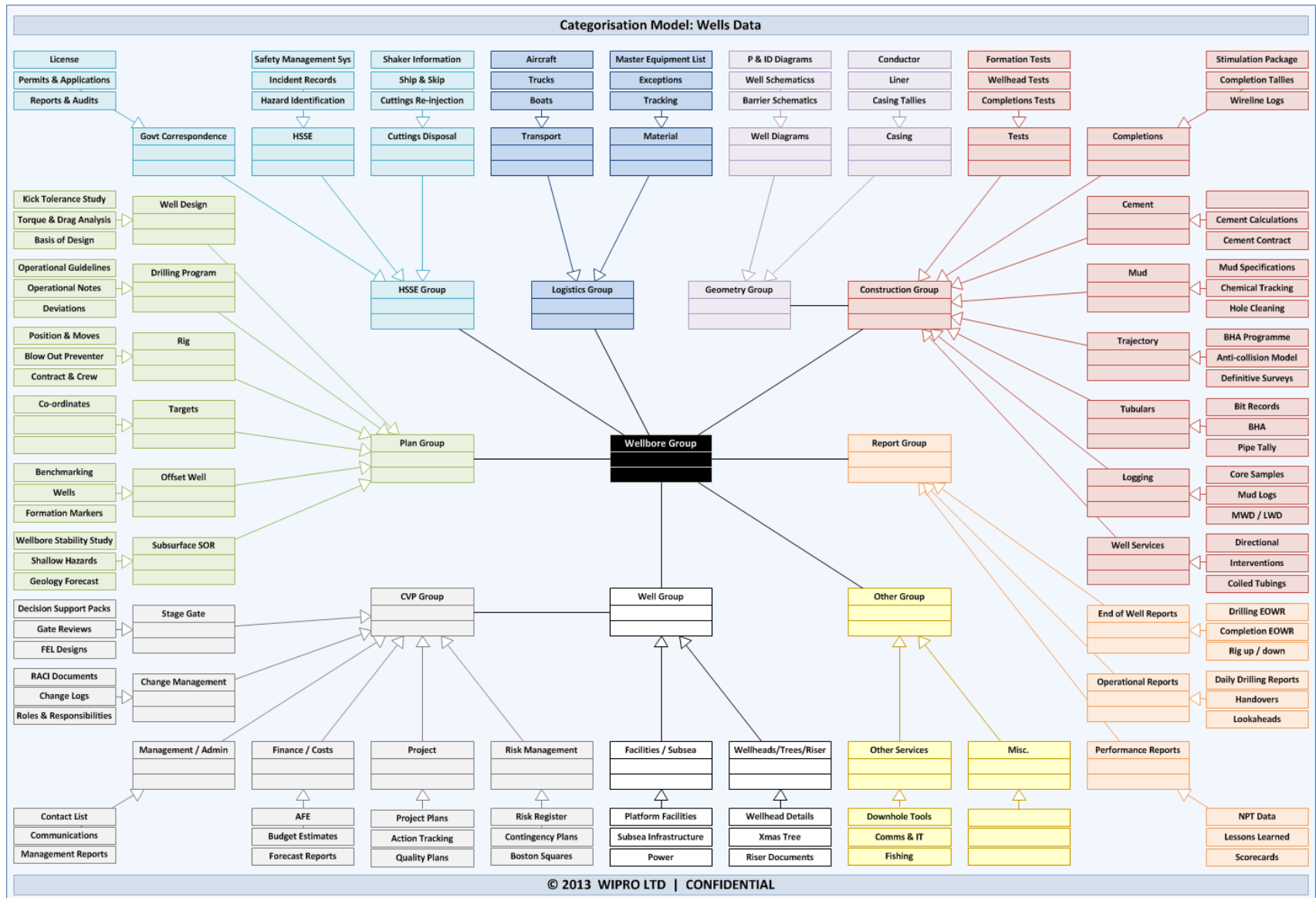
Suggested Contextual Model

- Business outcome driven data transfer
 - Well Integrity Data
 - Permitting and Compliance Data
 - Key Performance Indicator Data
 - etc
- The transfer of data is only a means to an end in itself – both parties focus on the validation of well conditions
- Any aggregation or correlation of data relationships is built into the model

Suggested Contextual Model



Suggested Contextual Model



Recommendations

- Establish Standard Definitions, Processes and Scope
- Establish how Data Relationships are mapped
- Establish which system has “priority” in case of conflict
- Define how much data is relevant for each well
 - Abandoned wells
 - “Working” and “Final” well designs
 - Historic activity (tests, maintenance, etc)

- Create checklist of Requirements
- Don't forget physical storage
- Plan early

- Talk together – a strong, industry wide consensus on this is the best way, the most cost effective way, to tackle the challenge and mitigate the risk

You may be next!

- You could return to your desks and find that you are part of an Acquisition or Divestment
- If your asset stays with you for its entire lifecycle, never divested, never merging with another operator, you still have to face P&A – Decommissioning cost
- Undertake a pre-emptive assessment of your systems, in advance of MADD announcements
- Talk to your peers in other operators, a common solution is the best solution in this case

