



Safety in Design

Next Steps

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EEA Safety in Design Guide

Objectives

Assist electricity businesses to develop processes which:

- Provide designs that are safe
- Document design decisions
- Continuously improve the safety of designs
- Meet statutory obligations

Targeted to operational and maintenance workers, construction managers, project managers, safety professionals, executives, designers and engineers.



Safety in Design Guide

- Part A: An introduction
- Part B: A general overview of SiD
- Part C: SiD Framework
- Part D: Lifting Performance in SiD
- Part E: Supporting Information (Appendices)



Safety in Design Guide

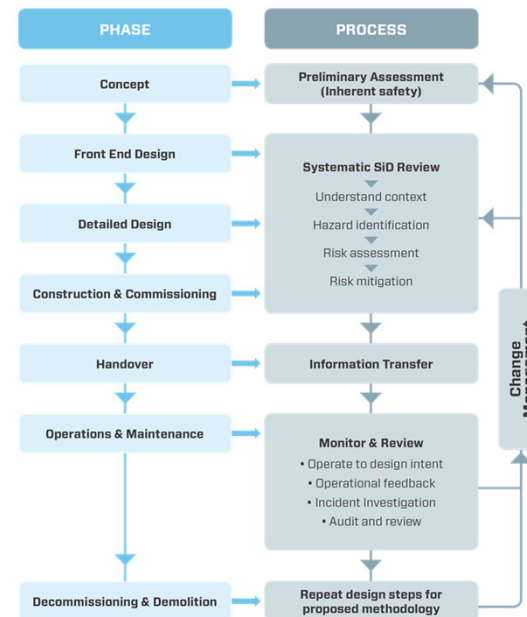
Consultation Draft

HEALTH + SAFETY
ASSET MANAGEMENT
PROF DEVELOPMENT



SiD Framework - Process

- Preliminary Assessment
- Systematic Review
- Information Transfer
- Monitor and Review
- Change Management
- Decommissioning and Demolition



SiD - Tools

Routine Tools

- Inherent Safety Assessment
- Field Checklist
- Hazard Identification Review (HAZID)
- HAZID Guidewords
- Risk Registers

Specialist Tools

- Hazard and operability study
- Safety Integrity level review
- Failure modes and effects analysis
- CHAIR study
- Bow tie Review
- Human factors review



SiD - Enablers

- Leadership
- Awareness and Capability
- Design Standards
- Assurance

Activity	Board	Executive Leaders	Technical (engineering and safety)	Project Managers
Routinely ask for progress/performance/inclusion of SiD	Green	Green		
Hold the executive accountable for maintaining their obligations	Green			
Ensure adequate funding and support is available for SiD requirements	Green	Green		
Incorporate adequate technical approval into business case approval processes		Green	Green	
Clearly define SiD obligations for outsourced providers			Green	Green
Provide adequate resources to undertake SiD			Green	Green
Establish KPIs and objectives for SiD		Green	Green	
Ensure assurance programmes (audits etc.) include SiD	Green	Green	Green	
Maintain training and capability of teams for SiD			Green	
Approve design changes based on SiD requirements		Green	Green	Green



Running a Successful Safety in Design Review Session

Design Sections
(Nodes)

Attendees

Facilitation

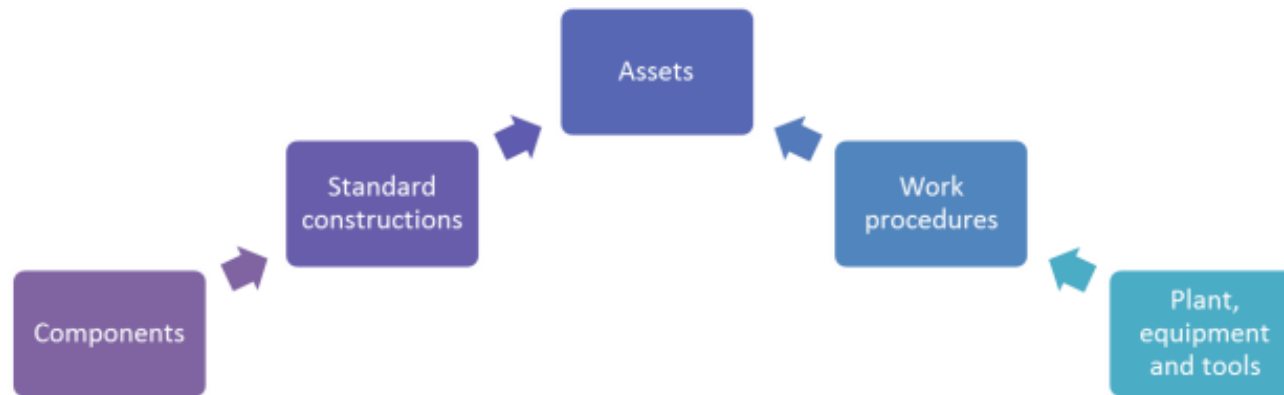
Information availability

Clear Terms of Reference

Time Use



Some different SiD focuses



Chain of Safety in Design



Lifting Performance

Implementation Questions

- 1) Who should be the **overall owner** of the SiD process ?
- 2) Who should **lead the development** of the SiD process ?
- 3) Who should be the **custodian** of the SiD process ?
- 4) How should **effectiveness** of SiD be measured ?
- 5) What are the **linkages** with other processes ?
- 6) What **structural boundaries** does it cross ?
- 7) Who will have **authority** over critical decisions about safety in design ?



Next Steps...

- Demand for Training in SiD (see later presentation)
- Support industry and information sharing
- Develop and share further case studies
- Evolution of guide (5 yearly review)



Practical Primers - SiD Difficulties ...

- Internal supply chain – Often different departments in an organisation develop project concepts from those that deliver them. Getting SiD considered early at the concept design stage may need change management
- People in AM organisations usually have multiple things to juggle at the same time. Ensuring the people with the right skill sets are involved in SiD review sessions when we all have day to day things to do requires effective administrative and people skills.
- Ensuring appropriate SiD documentation is created and filed requires effective administration



Practical Primers - SiD Difficulties ...

- Defining what changes in organisational processes need to be made and aligning the people in the organisation with those changes requires good change management
- How to cope with variations in project size requires effective collaboration often across contractual boundaries eg
 - That service pillar that seems to get driven into so we'll fit it below ground
 - Aligning organisation with approved material selections
 - Considering phase checking and identification at the planning stage of a job (rather than at commissioning time)



Questions, Comments and feedback?



Group Sharing & Discussion

Implementation Questions

- 1) Has your organisation attempted to implement a Safety in Design process?
- 2) If so, what have you found the practical implementation difficulties to be?
- 3) Can you describe some of your Safety in Design successes?
- 4) If you have had implementation difficulties, what would those difficulties be?
- 5) Where is your organisation's Safety in Design leadership coming from?

