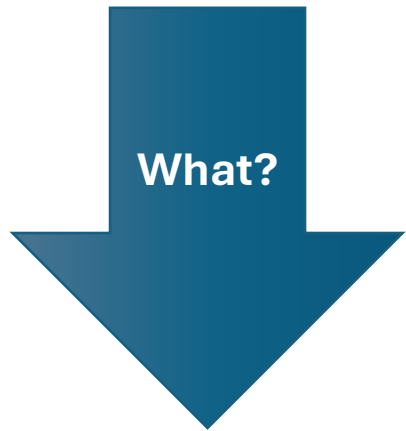


Modernisation – BS 5655-11



Codes and standards



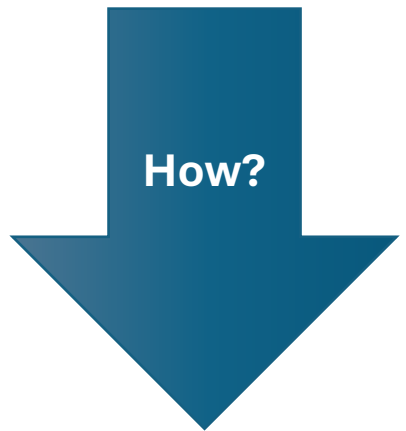
EN 81-80
Safety

EN 81-82
Accessibility

TS 81-83
Vandalism



BS 8899
Fire & evacuation



BS 5655-11
Code of practice
for the undertaking of modifications to existing lifts



Released in 2005 both standards
needed to be updated:

Under revision

BRITISH STANDARD

Lifts and service lifts —

Part 12: Code of practice for the
undertaking of modifications to
existing hydraulic lifts

BS 5655-12:
2005

BRITISH STANDARD

Lifts and service lifts —

Part 11: Code of practice for the
undertaking of modifications to
existing electric lifts

BS 5655-11:
2005

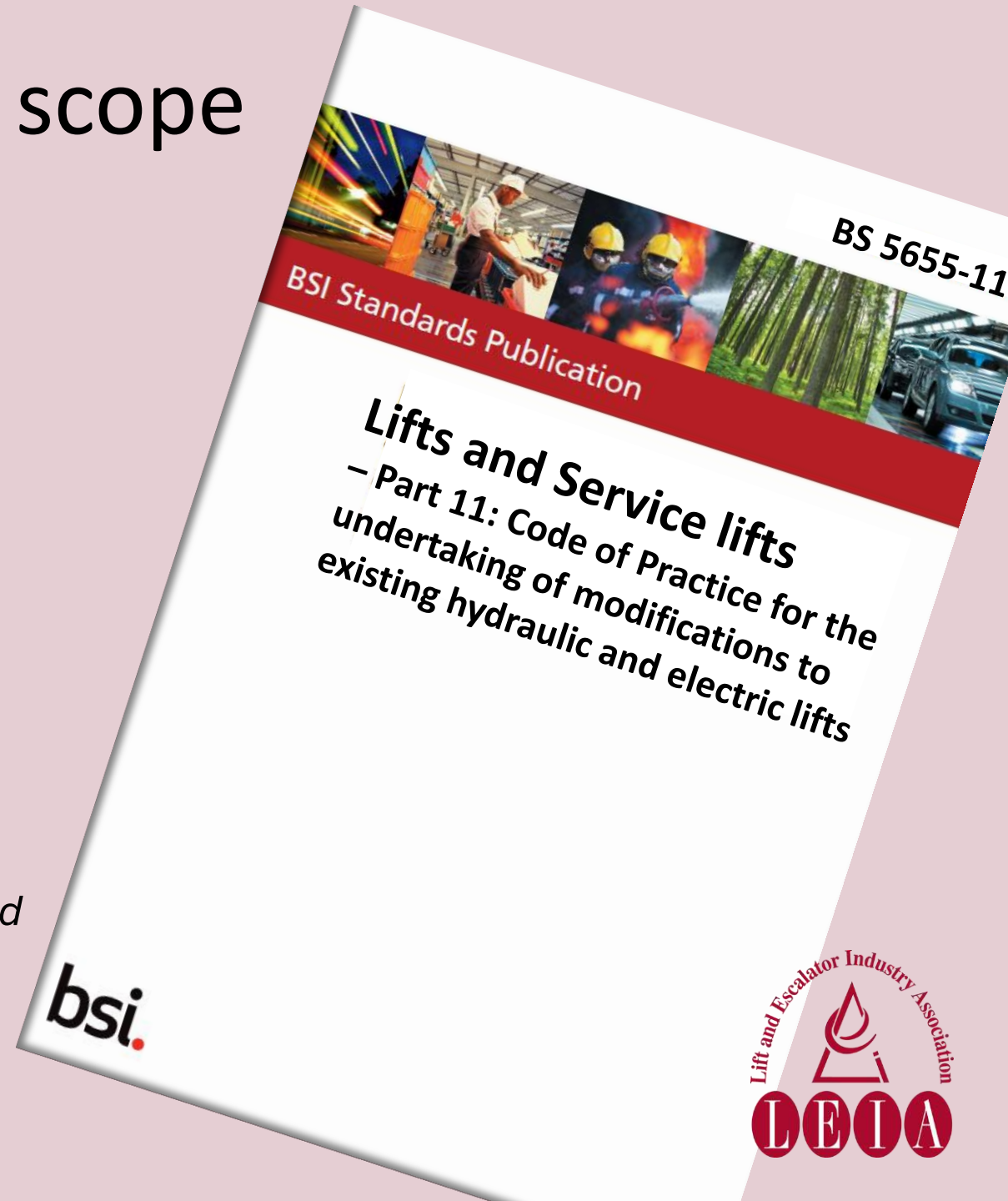


Intended scope

Modification to an existing lift

➤ Does not apply to a new lift
definition follows earlier European guidance

- *Lifts installed in new buildings;*
- *Lifts installed in existing buildings;*
- *Lifts installed in existing wells in replacement of existing lifts, including when the existing guide rails and their fixings or the fixings alone are retained.*



Intended scope

“Change, alteration, upgrading, of a lift, or part of a lift”

The replacement or addition of one or more components e.g.

- machine brake
- door operator
- rupture valve
- buffers

Changes to the equipment characteristics

- no. of floors/length of travel
- rated load
- speed

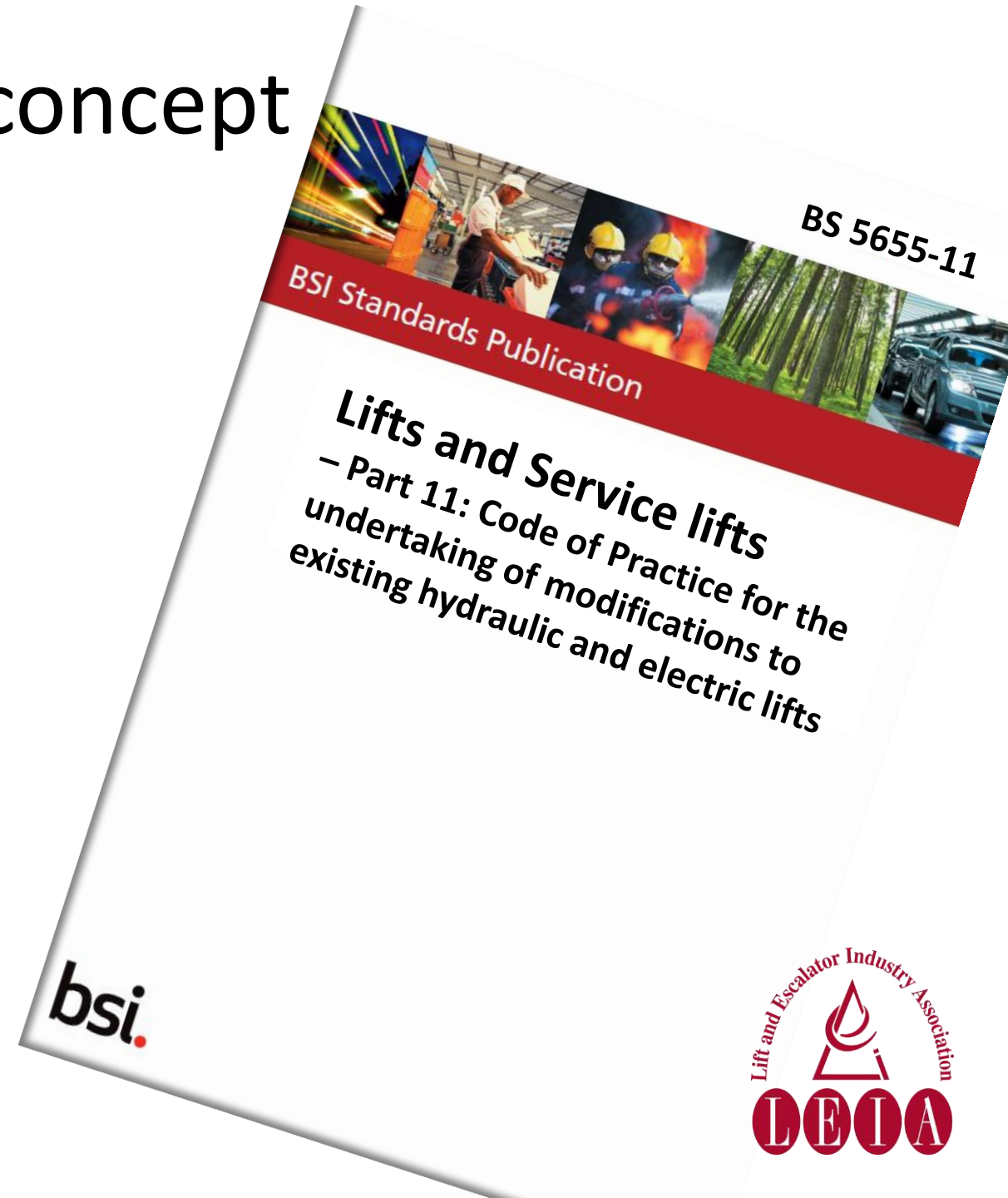
Component replacement if not identical or not foreseen by manufacturer

Intended concept

Principles to be applied include

- Upgrading and owner survey
- Documentation
- Risk Assessment
- Training and Competence
- General procedure
- Testing and verification

Specific recommendations for many modifications e.g. change of mass and new parts added/replaced





Site survey

Carried out with BS EN 81-80 Annex A to give:

- the owner clear guidance on the risks associated with their equipment;
- highlights the items of most concern;
- priority in which they should be addressed

BS EN 81-80 **cannot** address consequential changes

It is imperative that with **any modification to any lift of any age** the existing level of safety should be retained as a minimum

Under no circumstance should the lift be **'less safe'** after modifications have been made

For lifts placed on the market from July 1999 the lift must continue to conform to the level of safety defined in the Lift Regulations (EHSRs)



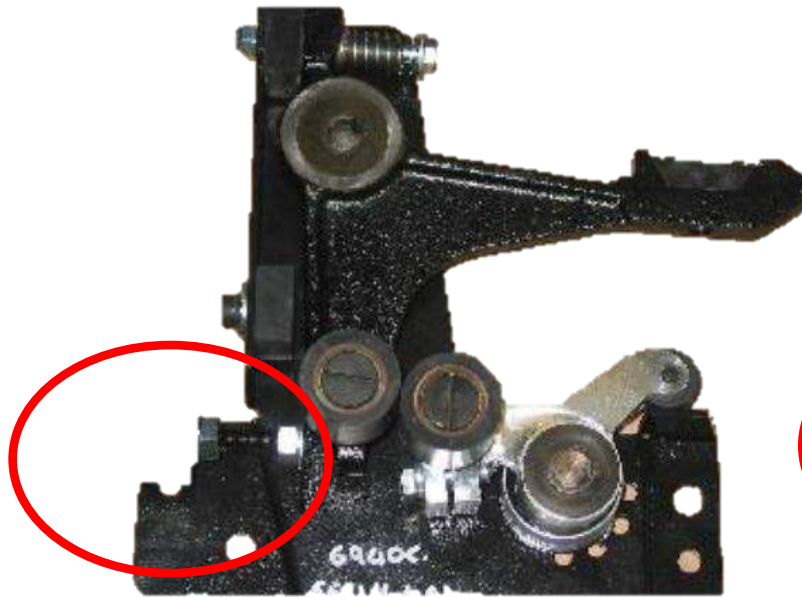
Risk Assessment must address all the potential hazards and hazardous situations that might be encountered when modifying lift e.g.:

- Compatibility of components
- Interfacing old technology with new
- Changes to characteristics (speed, load, travel)

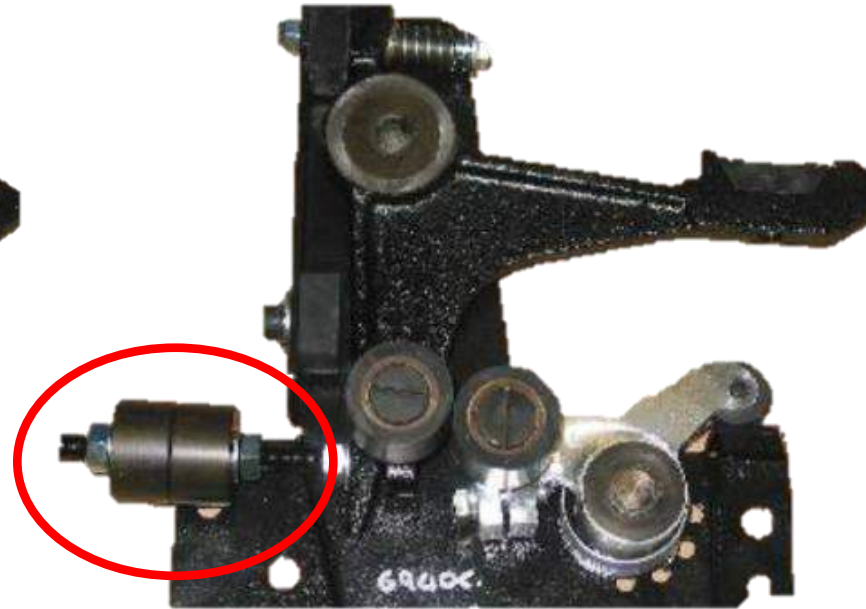
Risk assessment and method statement are built using BS 7255 and internal working processes and procedures.



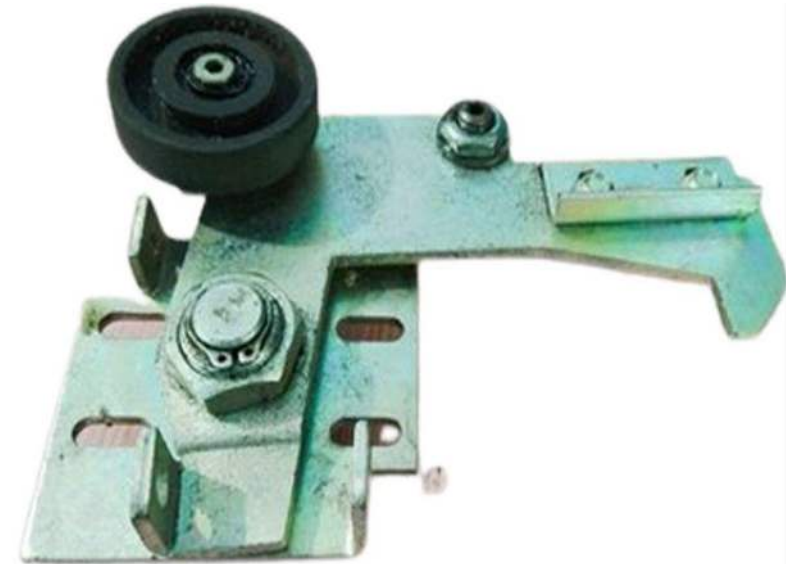
What would you consider as identical replacement?



- Part XYZ123 replaced by Part XYZ123 – **Identical replacement**



- Part XYZ123 replaced by Part XYZ999 – **OEM direct replacement**



- Part XYZ123 replaced by Part XXYZ123B – **Non-identical replacement**



CE-marked lifts?

Many improvements affect empty car and cwt masses –

Traction implications?

Safety components?

Modification of non-traditional suspension means?

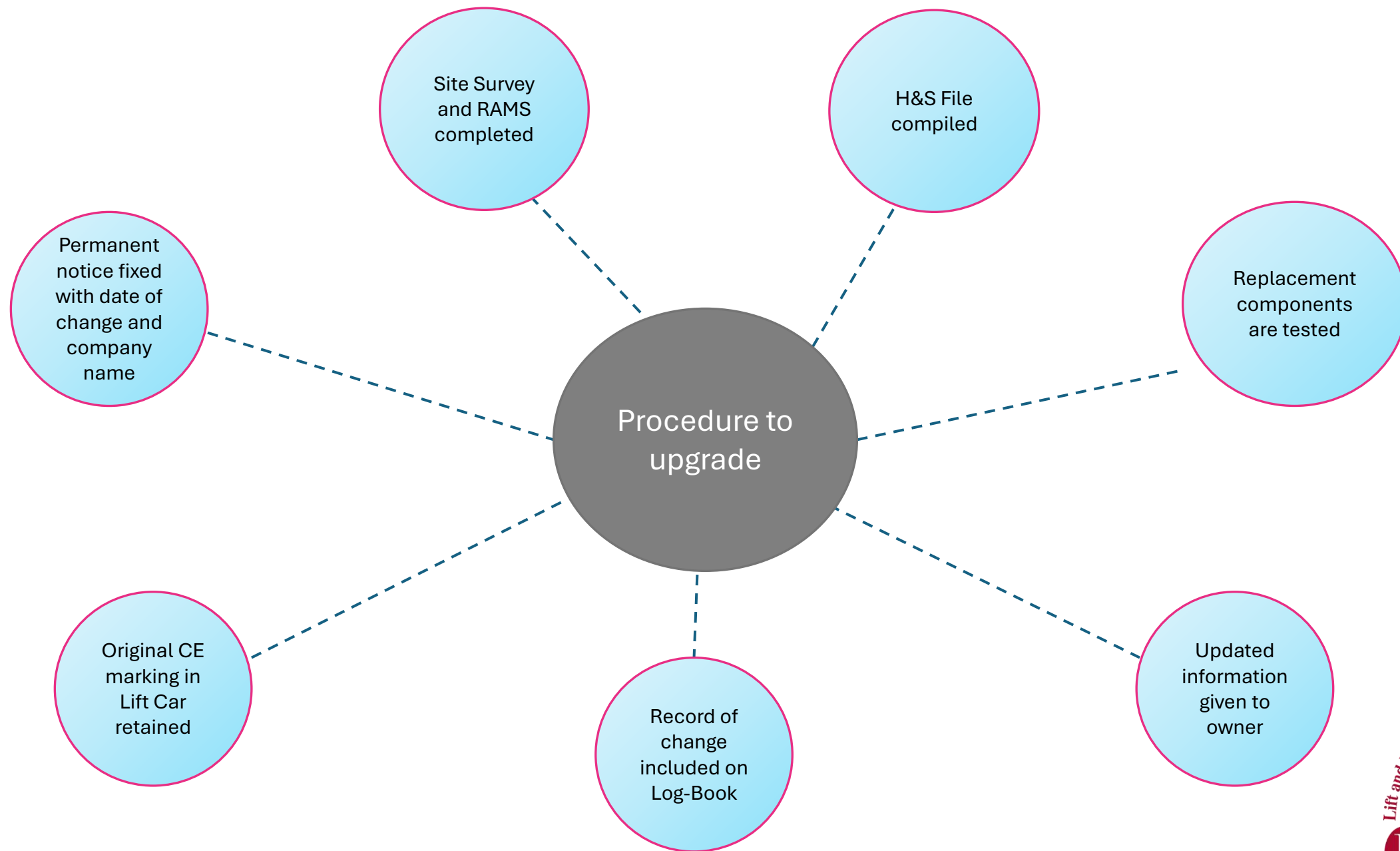
UCMP – changed controller?

EHSRs still being met?

Testing and verification

Use British Standards for reporting test of new lifts:

- new parts to current standards
- to manufacturer's instructions
- consequential changes (at least to standard to which installed)
- according to Risk Assessment – what might have been affected?



Lifting Operations and Lift Equipment Regulations (LOLER)

Regulation 9(3)(a)(iv) and paragraph 307(b) of the ACoP are understood to require a thorough examination after modernisation.

A thorough examination is also required **following exceptional circumstances** - liable to jeopardise the safety of lifting equipment, which may include:

- damage or failure
- being out of use for long periods
- major changes, which are likely to affect the equipment's integrity (e.g., modifications, or replacement / repair of critical parts)





Consider overall carbon footprint

- Energy efficiency
- Re-cycle of equipment
- Production
- Maintenance/Lifecycle



Reduce Waste



Recycle



Conserve Energy



Build Green
Buildings



Use Sustainable
Resources

Thank you for listening

