

Property protection principles for high rise buildings

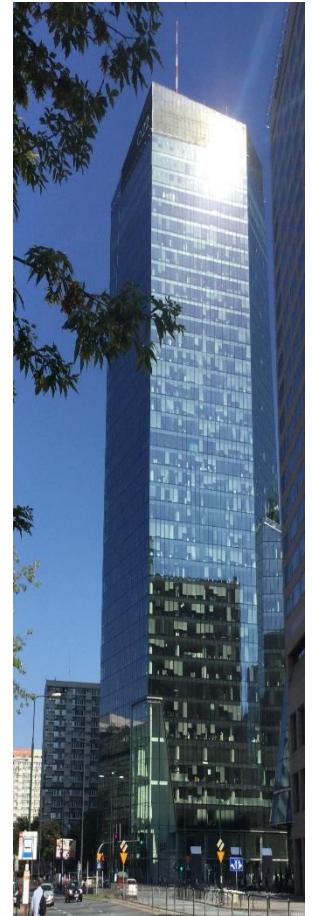
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Objectives

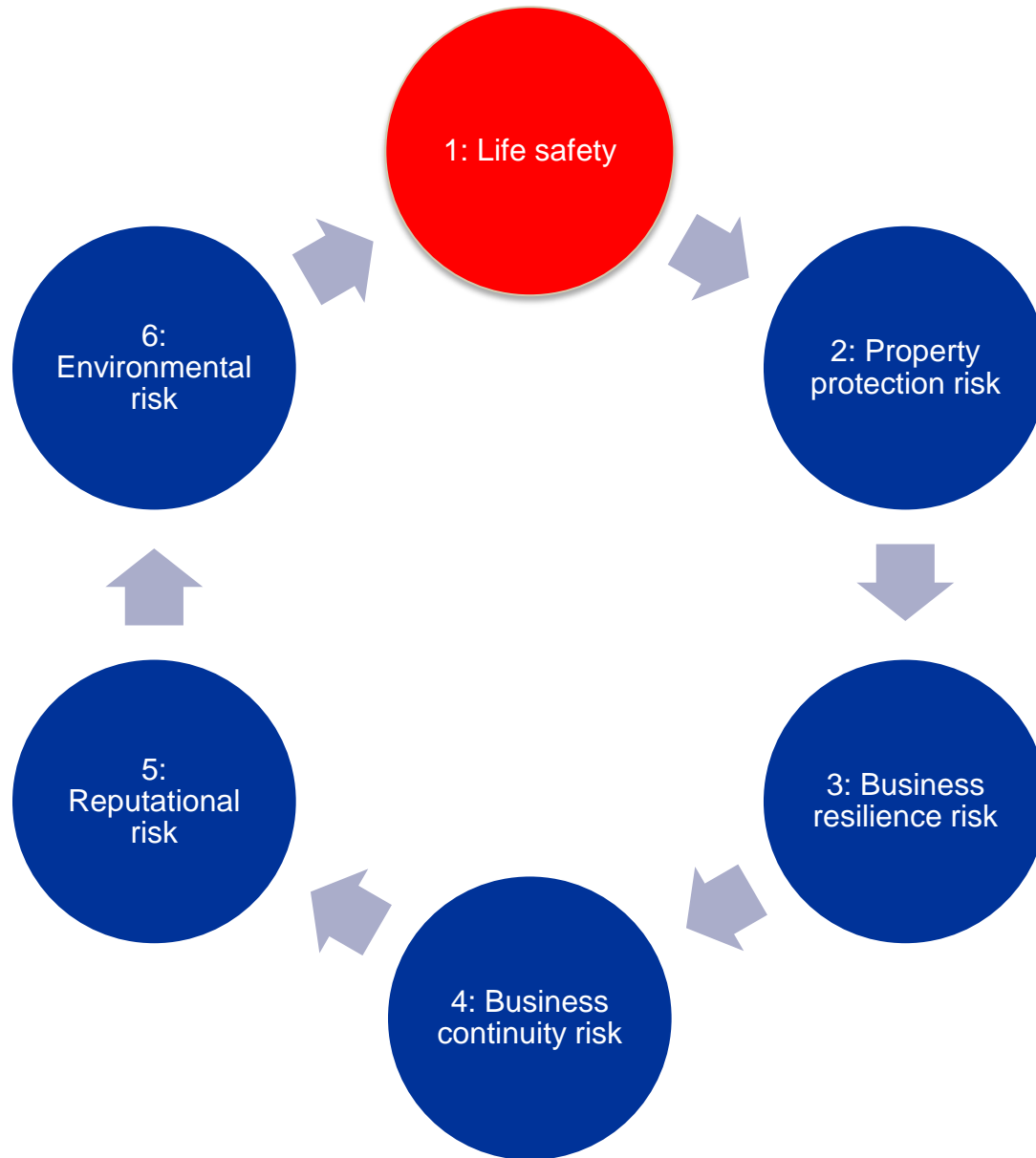
- High rise buildings
 - The challenges
 - Building construction
- Methodologies for assessing active fire protection systems
 - Existing systems
 - Proposed installations
- Our three stage approach for existing systems
 - Is it in service?
 - Will it work?
 - Is it designed right?
- Zurich Recognized Solutions
 - Discuss the concept overview
- Zurich Acceptance Criteria
 - Common issues
 - Our stance



High rise buildings

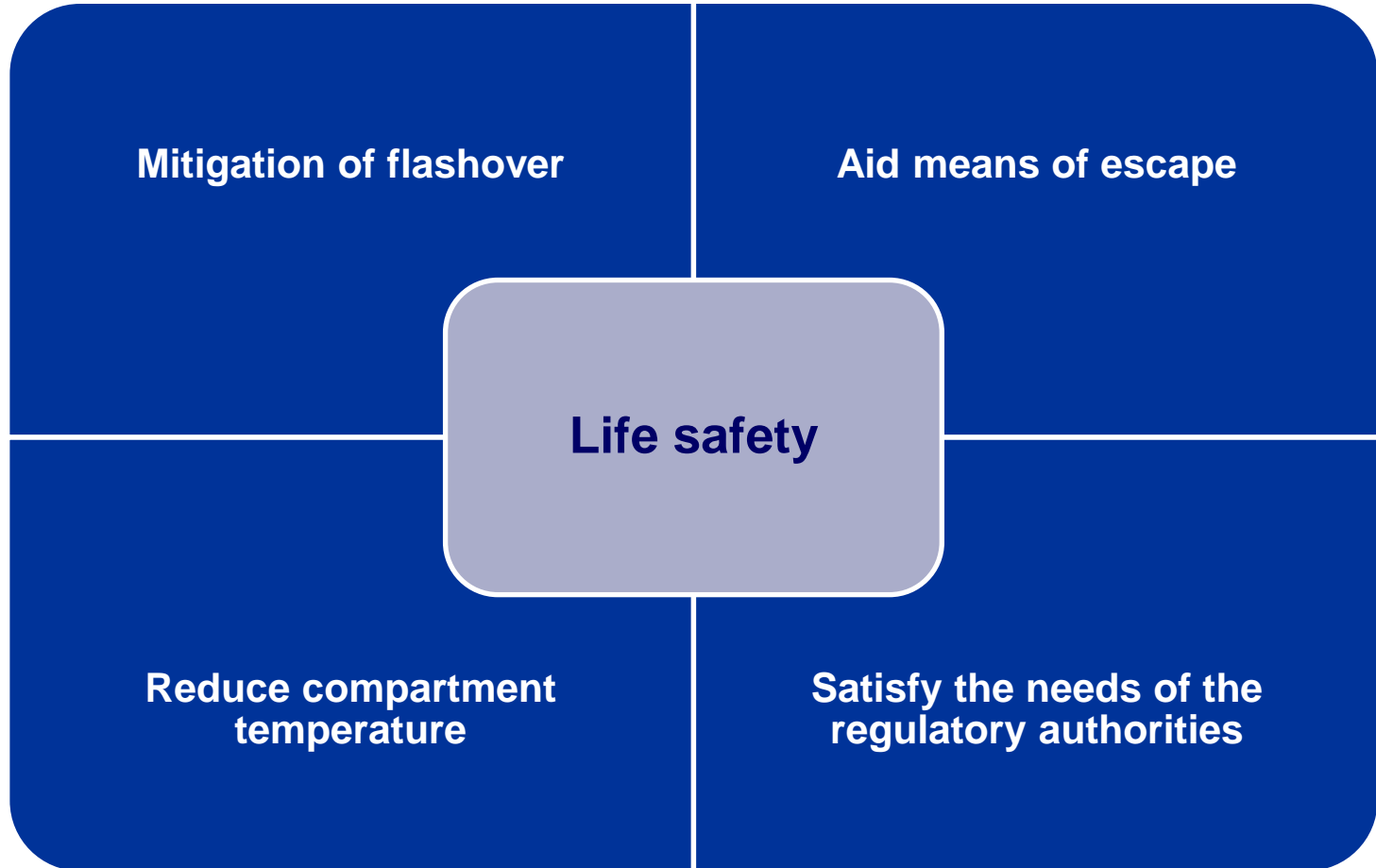
- Buildings are primarily designed to satisfy national Building Regulations, which are aimed at ensuring the safety of occupants and making sure there are suitable means of escape.
- More innovative tall buildings are being erected in the UK using more sustainable construction methods and having improved energy performance.
- Fire risks may be increasing with the use of combustible modern construction materials and methods.
- Fire engineered solutions, which use active fire suppression systems to reduce internal compartmentation, can also increase the risk as they rely on the active systems to always be in service and to operate exactly as planned if the emergency occurs – experience demonstrates this is not always the case.
- High rise buildings, which have a large number of individual tenants, are far more likely to have building alterations and refurbishment works taking place at any given time.



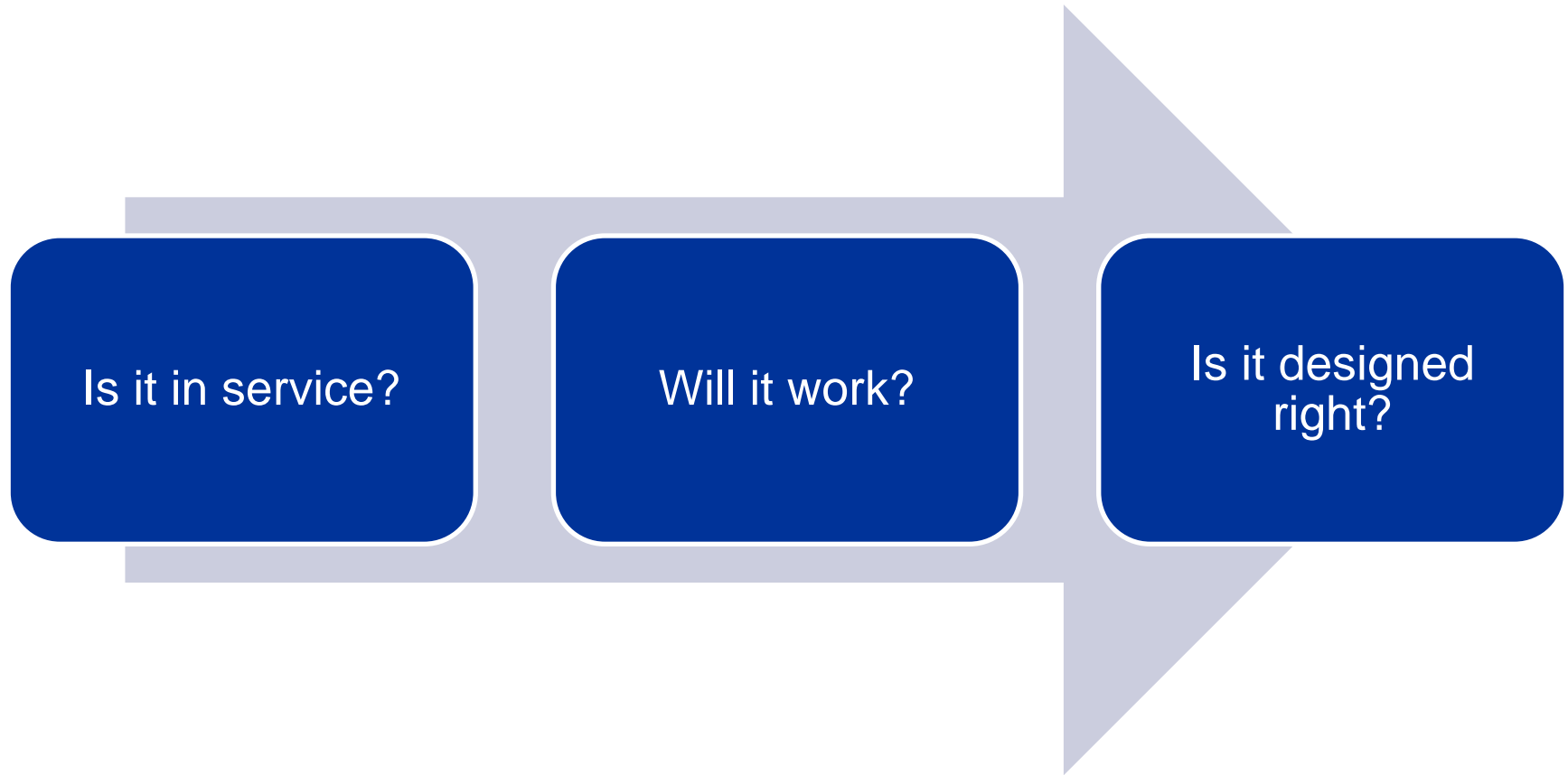


Water mist

- Primary objectives:



- Our basic approach to fire protection systems:



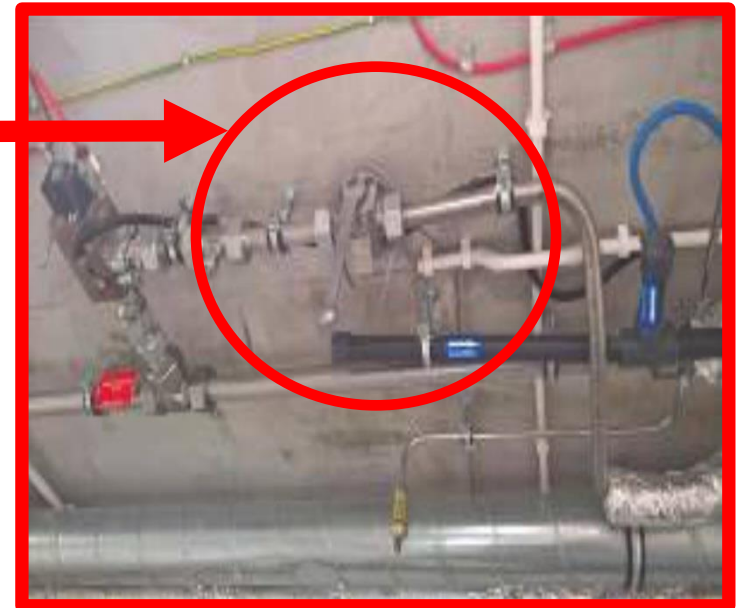
Our approach

Is it in service?

Will it work?

Is it designed right?

- Valves open?
- Power at pump?
- Impairments?
- Solenoid fitted?
- Water in tank?
- Town main water supply available?





Our approach

Is it in service?

Will it work?

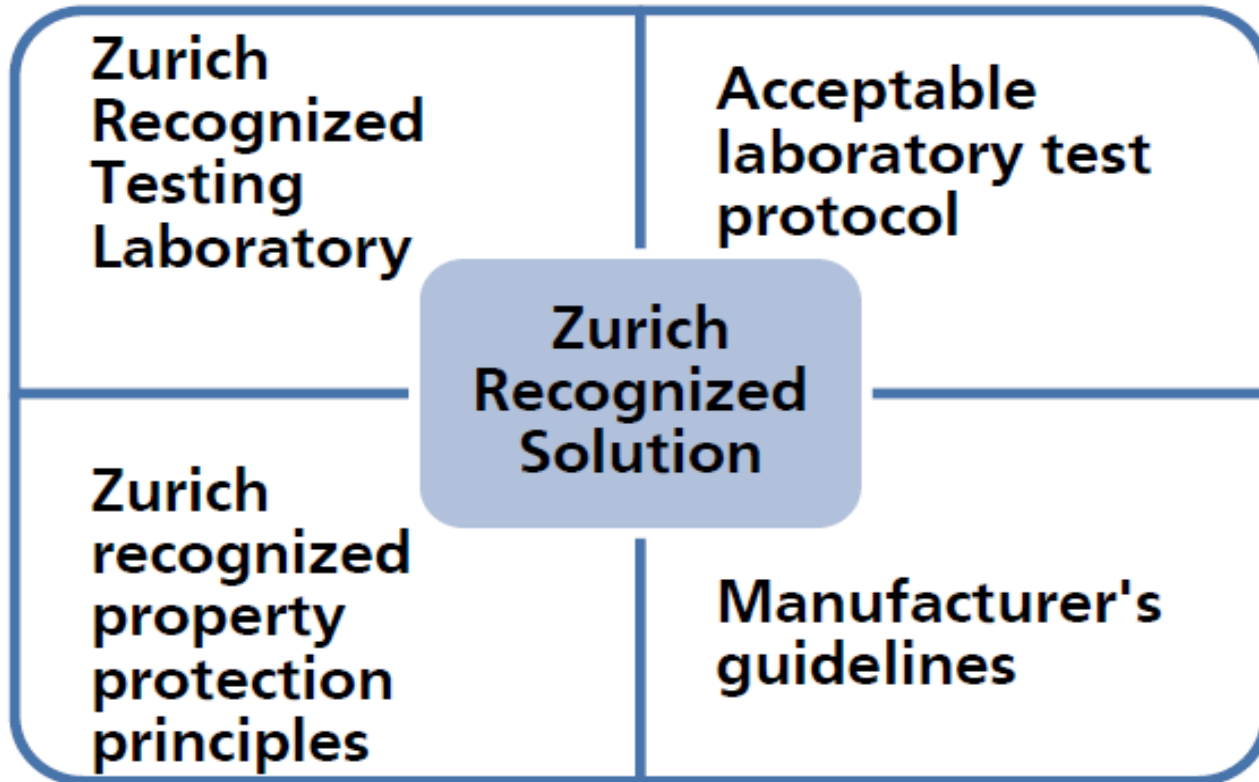
Is it designed
right?


- Service and maintenance
- Weekly testing
- Pumps achieving rated duty
- Dry systems trip tested
- Pre action systems mechanical and electrical elements tested together
- Deluge systems tested
- Cause and effect matrix tested?

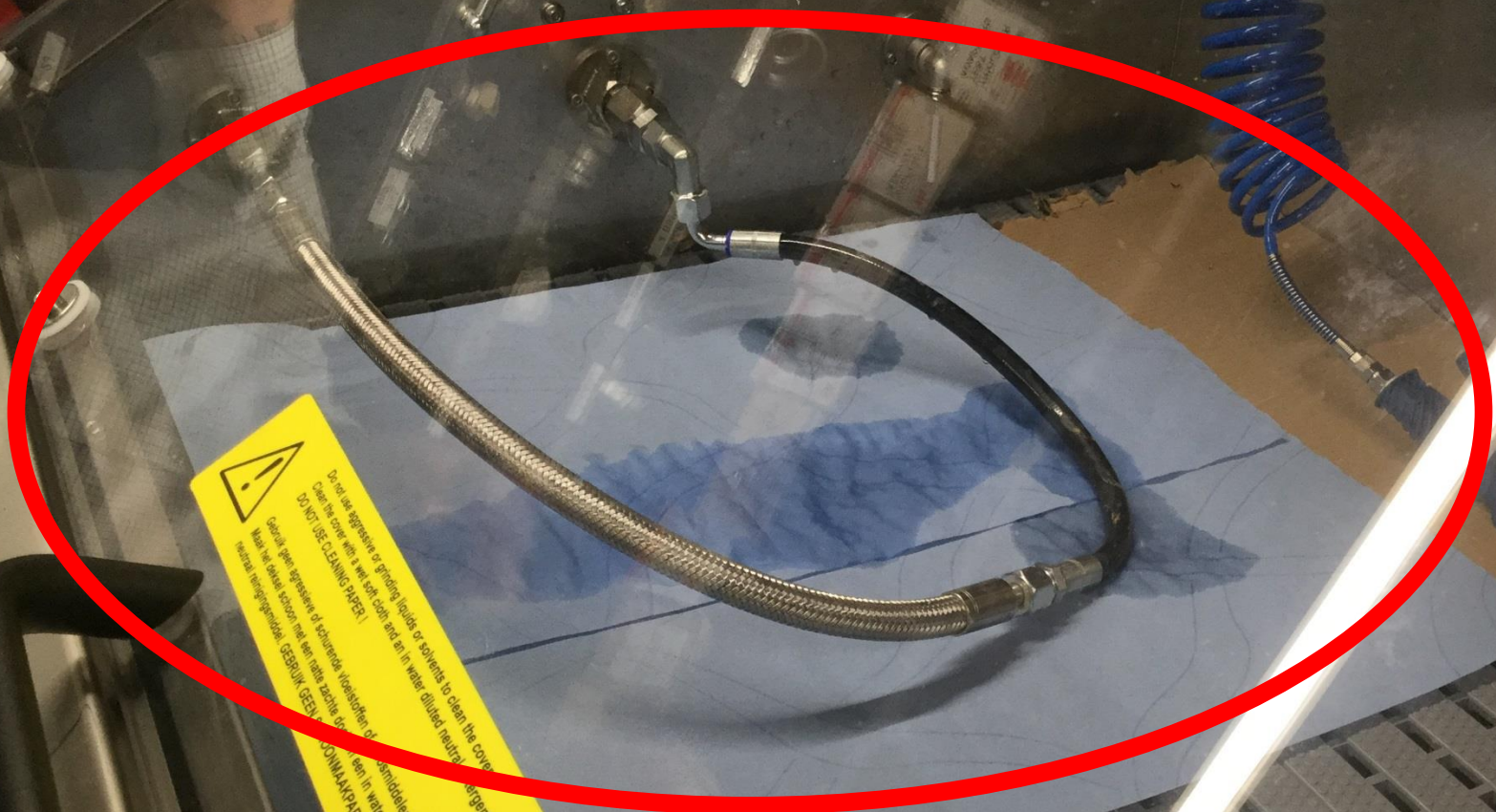




Our approach

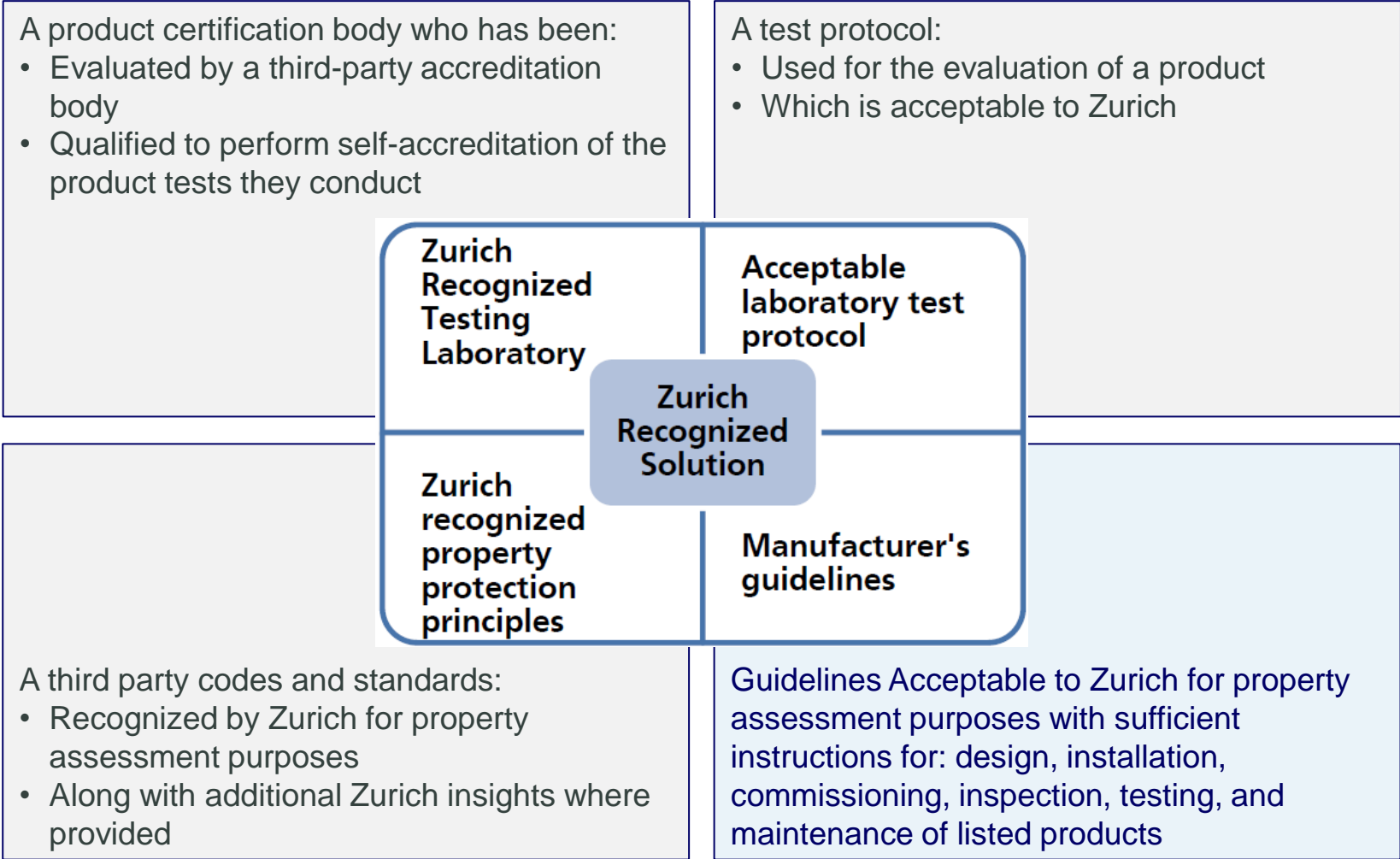



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VOOR NIET GEbruIK VAN REINIGINGSPAPIER!



Listed technology

The terms approved, certified, and listed are used interchangeably



Key issues:

- Some premises might have multiple authorities having jurisdiction (AHJs), who might be concerned with life safety, property protection, business continuity, heritage preservation, and environmental protection. Some AHJs might impose additional requirements beyond the British Standard.

Key issues:

Components

Test data

Water
supplies

Objectives

Dry / pre
action
systems

Project
management

Cause and
effect matrix

Certification

Fundamentals
of water mist

Value
engineering

AHJ's

Competency

We support and encourage our customers to exceed life safety codes and standards



Understanding the objective

Protection coverage to be 100%

Use of a property protection code or standard

Property protection system

Designed and proven for both life safety and property protection

Includes special requirements for high rise buildings e.g. water supply durations, electrical supplies to pumps

Consultation with the insurer

Our position

Zurich guidance:

**For property risk assessment purposes
use LPC Rules for Automatic Sprinkler
Installations Incorporating BS EN 12845
and Technical Bulletins**

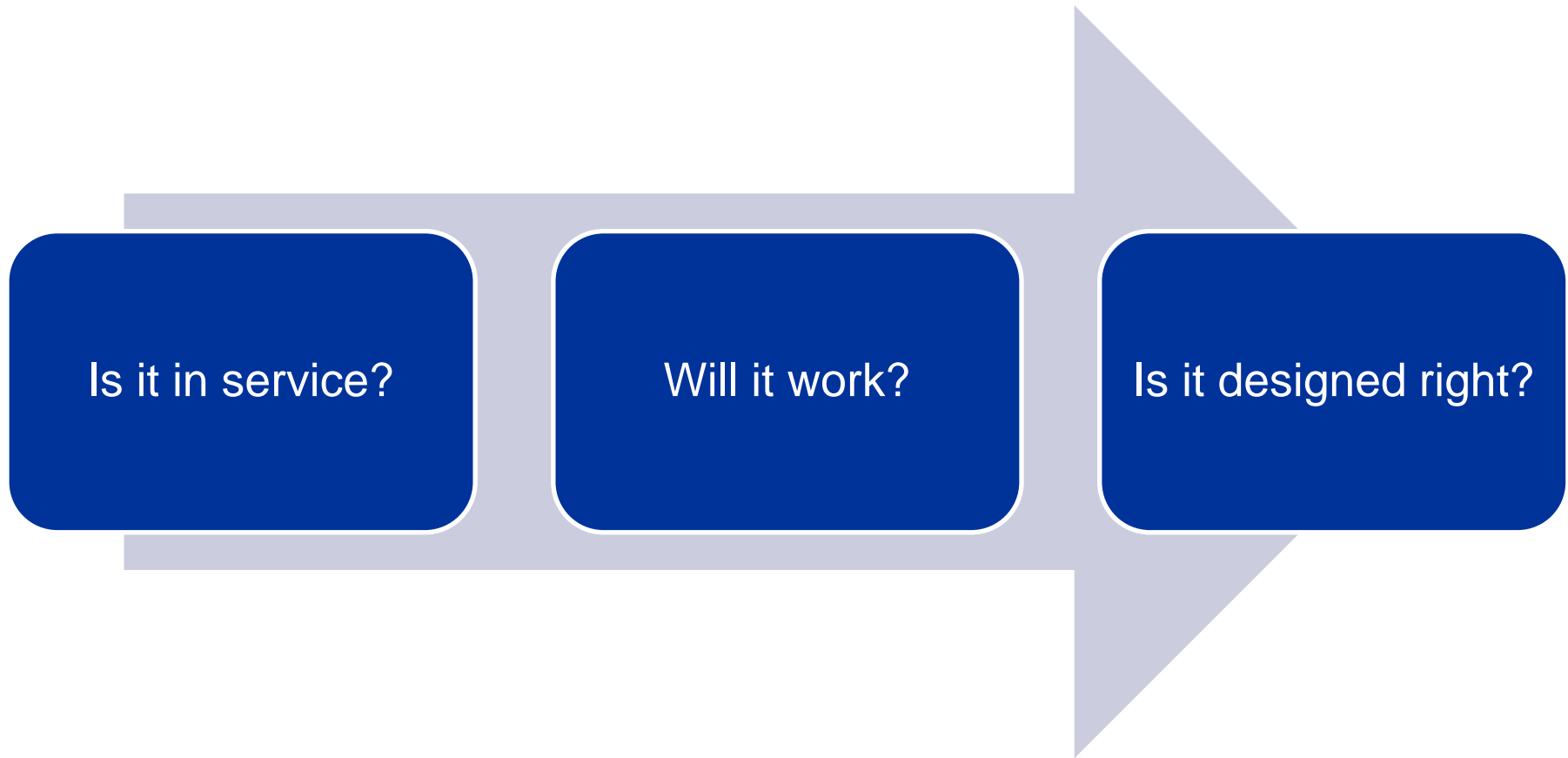
**Is it in service ? Will it work ? Is it
designed right?**

Zurich guidance

**Use Zurich Recognised Solutions
Methodology**

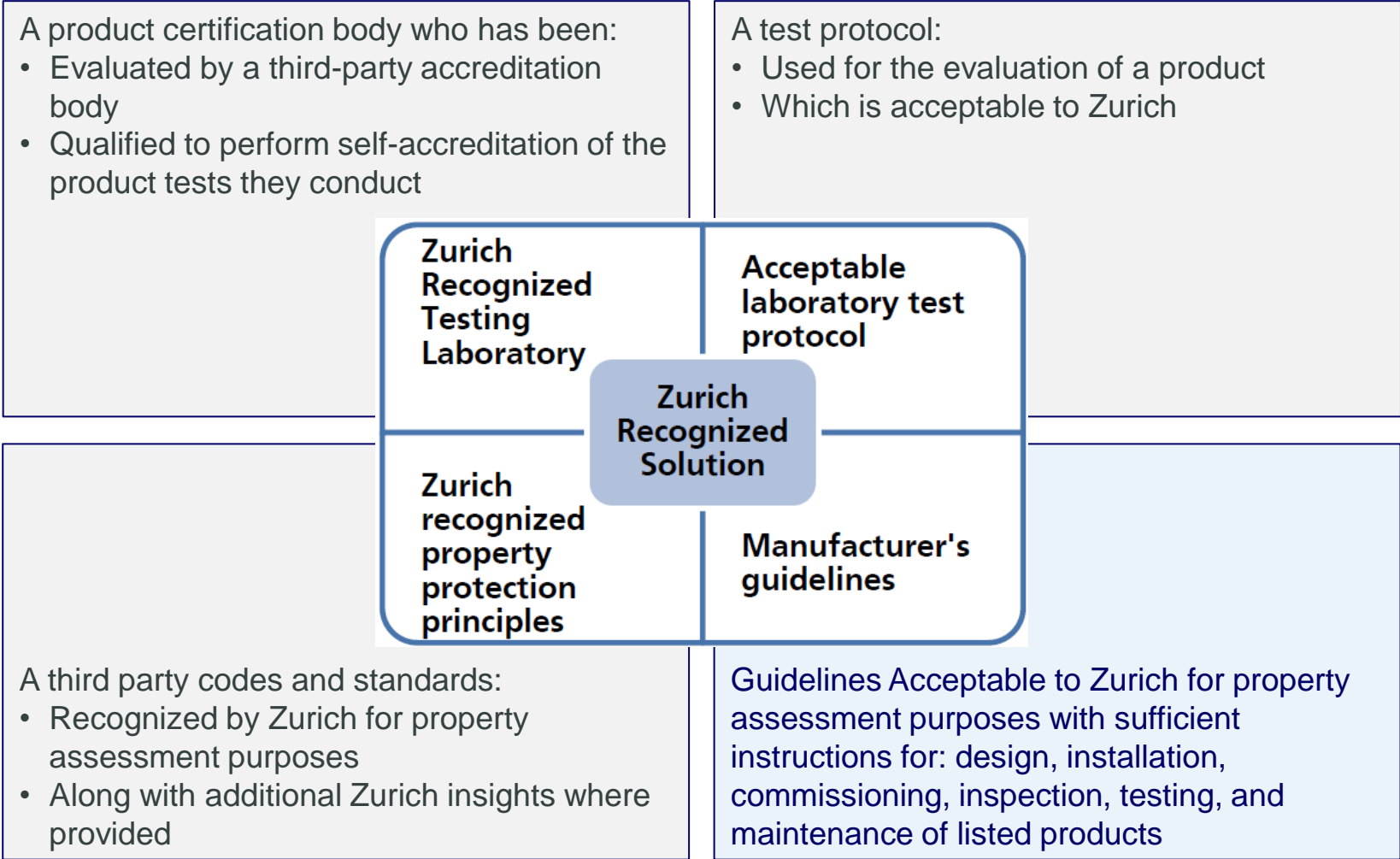
**Use BS8489 / BS8458 to satisfy the 'life
safety' needs of the regulatory authorities**

- A reminder of our three stage approach



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Any questions?

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