

## Chapter Six:

### *Safety Recommendations on Existing or Inherited systems.*

Today's replacement value of the existing or inherited system should be considered, together with its likely remaining life expectancy. This may influence any actions taken and what type of recommendation should be made first.

The system has to be safe in use and for this to be effective, it must also be reasonably reliable! To achieve customer satisfaction all works and subsequent investment by the owner may need to be justified and last adequately

Investing large amounts of money, on a system that would have a short life expectancy could be criticized and if the system was to fail elsewhere shortly after, additional works may be difficult for the owner to accept.

Repairs, modifications and works on an existing installation, will affect the performance of any re-used or existing items. This effect has been known to be negative as well as positive, and the likelihood of this may need to be addressed or reported accordingly.

Recommendations concerning risk of injury or damage from the system toward users and bystanders are to be made formally to the owner or their agent for any and all safety considerations regardless of severity. They should be listed and presented separately in order of priority, dealing with the most serious first.

Typically, individual areas of concern may be identified as a **HAZARD** and each hazard may have more than one remedy or mitigating solution. Unfortunately, resolving a single hazard could create or increase the seriousness of another, so all consequential scenario should be taken into account before instructing the 1<sup>st</sup> work. There will need to be adequate recommendations made in line with the reduction of each.

Each area of consideration or Hazard should be prioritised so as to allow financial consideration on the part of the owner to focus on the bigger issues first. Hazards should be prioritized in order of effectiveness, suitability then cost.

Safety recommendations must be made as a priority over all other recommendations unless reliability has a bearing on safety itself. The onus remains with the owner/users to ensure that the system is safe for use at all times.

Signage and user training are two more areas of consideration that may need addressing, on each system visit or review, together with user manuals and back-up support services both on site and remotely.

Ongoing servicing agreements are a requirement for all systems and the manufacturers' recommendations for frequency and replacement of components are to be considered uniquely to each system and will depend upon variable factors. The type and value of any agreement is often subject to design, condition, level of use, potential for abuse and environmental effects.

**Recommendations structuring (subject to risk matrix score)**

**Order of repair or enhancement recommendations importance.**

- |                 |                    |   |
|-----------------|--------------------|---|
| 1 <sup>st</sup> | <b>Reliability</b> | Without reliability, every aspect of the whole system is at risk  |
| 2 <sup>nd</sup> | <b>Safety</b>      | All in order of priority and risk   |
| 3 <sup>rd</sup> | <b>Security</b>    | Security & Safety often contradict each other and a balance needs to be made to satisfy the higher priority |
| 4 <sup>th</sup> | <b>Convenience</b> | Improved user convenience creates happier customers   |
| 5 <sup>th</sup> | <b>Upgrade</b>     | New functionality improves the performance & features across numerous aspects of the system                 |
| 6 <sup>th</sup> | <b>Cosmetics</b>   | A good looking system adds value  |

**Other good questions to consider in regard to any work carried out on the system:**

Is the work worth doing, or should an alternative option be considered?

What is the estimated remaining reliable life expectancy of the system, before and after the proposed work?

What are the consequences of the work and should anything else be done or considered?

When the work is successfully finished, will it affect the servicing, maintenance, running costs, or current contract terms?

What else would or could improve the system, or its function and should this be considered before instructing any proposed work?

All work, modifications, additions or up-grades **should not** make the installation less safe than before, unless a greater safety need is agreed!