



LOPA & SIL Assessment with

LOPA (Layer of Protection Analysis) is a semi-quantitative methodology used to assess the adequacy of safeguards.

LOPA is particularly useful for further analysis of scenarios of concern identified in the HAZOP.

SIL (Safety Integrity Level) is the degree of confidence in a given safeguard. This applies only to Safety Instrumented Functions (SIFs) and a SIL allocation for SIFs is a requirement of EN 61511.

Per EN 61511, a SIL assessment must be carried out for all Safety Instrumented Functions i.e. all instrumented loops called up as safeguards or recommendations in the HAZOP or similar exercise.

LOPA is just one way of carrying out a SIL assessment.

At Fleming Professional, we minimise under and over-specification and we ensure that the key risks of the process are addressed.

- **Certified Functional Safety Expert (CFSE) qualified chairperson (www.cfse.org)**
- **Management of information flow from HAZOP through SIL assessment**
- **Effective SIL allocation and avoidance of overspecification**
- **Software packages for LOPA & SIL – PHA-Pro 7[®] and HAZOP Manager[®]**
- **Database of standard LOPA and SIL assessment values derived from literature and recognised sources**
- **Use of HSE derived risk targets to ensure consistency with HAZOP and avoid overspecification**
- **Top quality documentation**

14 Penrose Wharf, Cork.
Tel: + 353 (0) 21-4910165
Mobile: + 353 (0) 87-2869023 e-mail: info@flemingprofessional.com

www.flemingprofessional.com

© 2008 Fleming Professional Services Ltd. All rights reserved.