

Safety Corner

What is GAMAB?

The British ALARP principle (*As Low As Reasonably Practicable*) classifies safety risks into three regions: an unacceptable region, a tolerable region and a negligible region; and demands that risks, if not in the negligible region, shall be reduced to a reasonably practicable level within the tolerable region. While the ALARP principle assumes that there is a “*someone*” who knows where to draw the magic lines separating the three regions and this “*someone*” knows whether a risk reduction measure is “reasonably practicable” to introduce, who this “*someone*” is often leads to heated debates between regulators, operators, general public, and special interest groups.

Another common risk tolerability principle is the French GAMAB (*globalement au moins aussi bon*), or GAME (*globalement au moins équivalent*), both meaning “globally at least as good.” GAMAB avoids labelling who that “*someone*” is by requiring that the total risks inherent in any modification must not exceed the total risks inherent in the existing systems. Similarly, the total risks of any new systems shall not be higher than those of existing systems with comparable performance characteristics and operating conditions. The consideration of “total risk” gives room for sensible risk trade-offs: a system is acceptable to implement even if the risk of one of individual aspects may indeed be increased but so long as it is overcompensated for by an improvement elsewhere.

GAMAB supports rational decision-making by putting the focus on the totality of the situation and offers a clear baseline that is not open to interpretation like the subjective requirements in the ALARP principle. Furthermore, GAMAB does not require decision-makers to prove the cost-effectiveness of a safety system as in the case of ALARP; this gives freedom to decision-makers to implement a truly risk-based safety system.

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