

PS3 (T3.3-0860)**ALARA in focus**Clarice de Freitas Acosta Perez^{1*} and A. Sahyun^{2*}¹ *Centro Tecnológico da Marinha - São Paulo – CTMSP*² *Instituto de Pesquisas Energeticas e Nucleares – IPEN-CNEN/SP***clarice.acosta@marinha.mil.br, adelia.sahyun@gmail.com, asahyun@ipen.br*

By the 1950s the world had already realized the need to protect the people from the harmful effects of ionizing radiation. In 1955 ICRP established an incipient dose limitation system that has since been refined over the years. The development of the fundamental philosophy was completed in the ICRP Publication 26, in 1977, where the three principles of the dose limitation system were established and identified separately. The principles are known as: (a) justification, (b) optimization or (ALARA) As Low As Reasonably Achievable, and (c) dose limitation.

The philosophy contained in Publication 26 was adopted by the IAEA in its Safety Series publication No. 9, 1982 edition, and in Brazil by the National Nuclear Energy Commission in 1988, with the publication of the regulations CNEN-NE-3.01. The three principles remain valid and in the current editions of both documents.

This paper describes the development of the ALARA concept from its origin to the present day, to provide an insight and understanding of its meaning and importance for the new generations of Radiation Protection Supervisors and other professionals who work directly and indirectly in areas that involve the use of ionizing radiation.