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Strengthening Radiation Protection of Workers –Twenty Years of Progress
and the Way Forward**

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The use of Conversion Coefficients (CC) in the calibration of radiation monitoring instruments

In the Philippines, radiation monitoring instruments (RMI) used in measuring ambient dose equivalent $H(10)$ and personal dose equivalent $H_p(10)$ are expressed in various units, namely Sievert (Sv) and Roentgen (R). The Philippine Nuclear Research Institute –Radiation Protection Services Section (PNRI-RPSS) adopted conversion coefficients (CC) in the calibration of RMI by converting units from mR to μSv through improved calculations from the reference exposure rates in the PNRI-Secondary Standards Dosimetry Laboratory (PNRI-SSDL). From measurements in PNRI-SSDL, reference exposure rates were derived from converting measured air kerma in Gray (Gy) to $H(10)$ in Sv. Improved calculations for reference exposure rates paved the way to more accurate RMI response since values are not overestimated/underestimated. PNRI-RPSS now includes CC in reporting RMI calibration results to help customers relate measurements to levels of radiation hazards in their facility by comparing measured levels to regulatory limits and ensure occupational exposures are within safety limits.

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