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Proposal of a New SI Base Unit for Value. An Hedonic Estimation of the Physical Purchasing Power (PhPP) of Money. STEIVAN DEFILLA, Technology, Environment and Energy Policy Division, SECO, Berne — Hitherto, the purchasing power of money, i.e. its transaction value, has been measured in terms of inflation index numbers and consumer baskets. Consumer baskets are variable phenomena and their use as measurement units for value confuses the measuring with the measurand. We propose an invariant numeraire, or value unit, based on the market value of a Planck energy (1956 MJ). Planck units form a natural system of units independent of any civilization. The hedonic estimation of the PhPP of a currency differentiates energy by product as well as by thermodynamic quality (exergy). Following SI rules, we propose to name the value unit walras (Wal) in honour of the economist Leon Walras (1834 - 1910). One Wal can also be interpreted as the minimum cost of physiological life of a reference person during one year. The study uses official disaggregated Swiss Producer and Consumer Price Index data and estimates the PhPP of the Swiss franc in 2003.

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