“And now we see with eye serene, the very pulse of the machine”

 William Wordsworth

ICNIRP is tasked to consider public health effects, when found and verified, in relation to NIR. Whilst thermal effects are well studied, athermal and resonance effects are now known to affect humans, severity dependant on weight, height, prior trauma and epigenetics, and not yet incorporated into the wider fields of science and medicine

Modelling based on body height, weight etc can not evaluate the effects of metallic implants, whether dental, cochlear, cardiac, stents, all of which act as pick-up antennas and concentrate exogenous signals, depending on metal type and geometry

EXOGENOUS PULSED SIGNALS

All modalities of pulsed signals should be considered as a matter of urgency, in addition to magnetic and electric fields. Harmonics are of special concern, e.g. the 40th harmonic of 50 Hz is 2000 Hz. Endogenous brain waves can be amended due to eddy currents which traverse the dielectrics of skull content. Narrow angles of the body (neck, with brain stem and spinal cord wrist and ankles) are vulnerable. Pulsed signals are of varying amplitude and waveform, with square, sawtooth and spiked waves of high significance.

NEURONS ARE NON-LINEAR CONDUCTORS

Intermodulation and demodulation of pulsed RF signals can take place as neurons are nonlinear conductors – endogenous neural signals will be affected.

MICROTUBULES AND PROTEIN TRAVEL

 Dynein, a molecular motor, with molecular gyroscopes, inside biological macromolecules will be affected and can undergo resonant interactions with external ELF fields and are a possible mechanism for bioeffects. (Binhi 2002) Protein transport along microtubules from soliton waves can be affected, magnetite spin will impart energy to molecular travel in microtubules

NEW POWER LINE TRANSMISSION (PLT) and ETHERNET WIRE - UK

The new communications system is not compliant with UK RSGB levels and is 30 dB over EU standard. Major interference effects have been reported

LINE COMMENTS:

43 ‘direct interaction of fields with the body’. No mention of signal pulsing and pulse rate, both vital to homeostasis

129–139 ‘Tissue conductivities’ bring in tissue dielectrics

* 1. Neurobehavioural – bring in soliton waves and protein transport and folding along microtubules as of high significance

151 Omitted is any reference to pulsed signals

167 Omitted is all reference to harmonics - can be of significance from power line frequencies as in endogenous human brain wave bands

NB Have you considered Geomagnetic highs? Maps of such sites are in UK published by British Geological Survey. Also detailed local area mapping by BGS throws up significant sites . Traversing geomagnetic gradients generates eddy currents in the brain which can have adverse effects, e.g. Road Traffic Accidents, hallucinations, nausea etc. These go back for centuries and are ‘real world’ effects not laboratory experiments