

CENELEC standards for occupational EMF exposure

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FIELDS

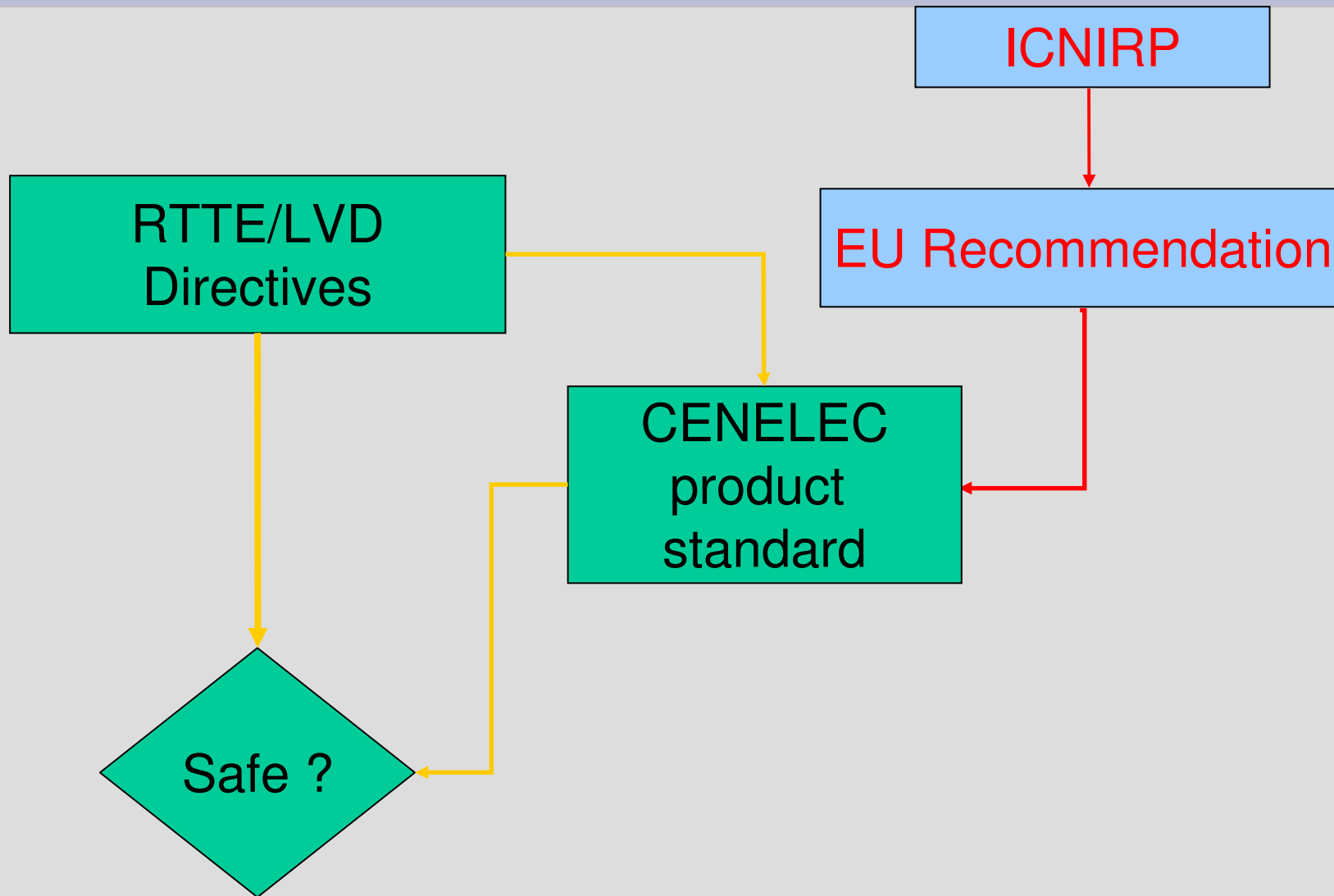
CENELEC, ICNIRP & the Commission

- ICNIRP is the Commission's official advisor on exposure levels
- CENELEC is the official electrotechnical standardisation body of the EU, producing assessment and measurement standards
- Technical Committee 106X deals with "electromagnetic fields in the human environment"

CENELEC product standards

- Product standards are published in the Official Journal of the European Community and listed as *harmonised standards* under the RTTE and LV Directives
- They are used to fulfil the safety requirements of those Directives – a requirement of CE marking
- They refer to the 1999 Recommendation, and hence to ICNIRP public exposure guidelines

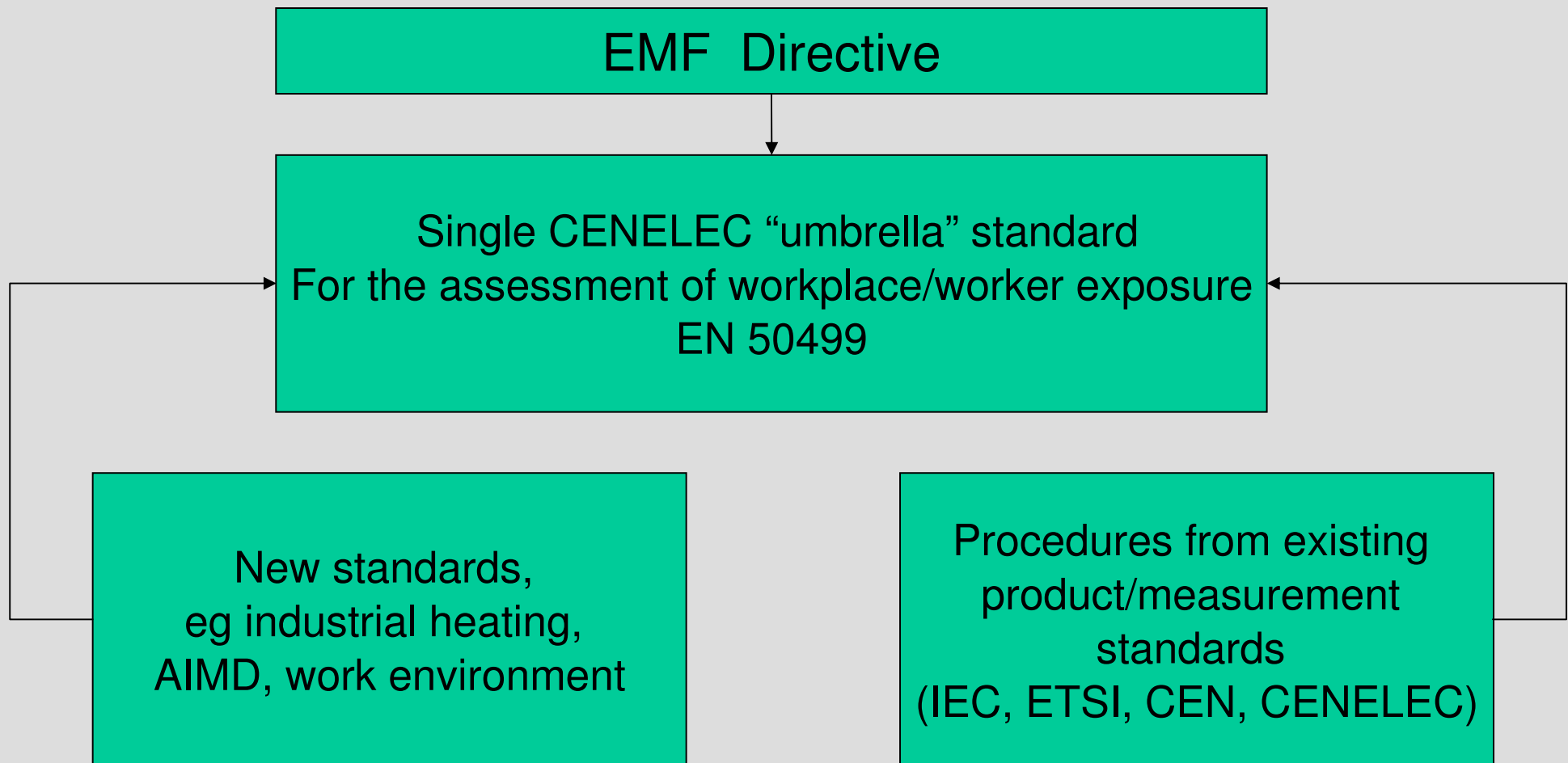
Product standards: CE marking



Commission Mandate M351 requires

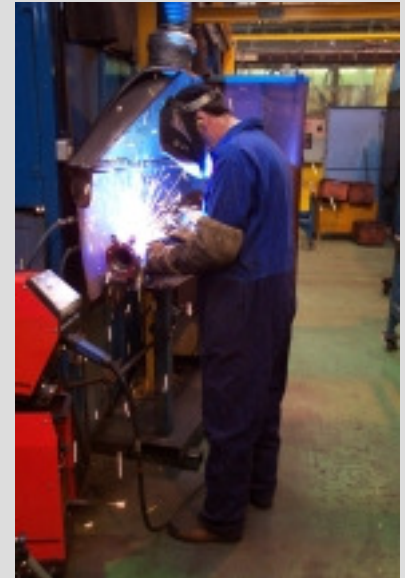
- Proportionality
- Minimal impact on SMEs
- Coherence with existing EMF standards for eg product standards
- Involvement of other European Standards Organisations (ETSI & CEN)

Standardisation and the EMF Directive



New CENELEC occupational EMF standards

- Industrial heating
 - Induction heating
 - Dielectric heating
- Welding
- Trains
- Broadcast
 - High power TV and Radio transmission
 - Studio equipment (radio microphones, video links etc)
- Generic (public and occupational)
- Basic
- Active implanted medical devices



EN50499 Table 1

- Phones etc
- Office equipment
- Computers
- Lighting
- Room heating
- 50 Hz motors
- Household appliances
- Battery-powered devices
- Low kVA transformers
- CE-marked devices assessed using EMF standards
- **Any situation shown to be compliant at public exposure level**



Questions from CENELEC to the Commission

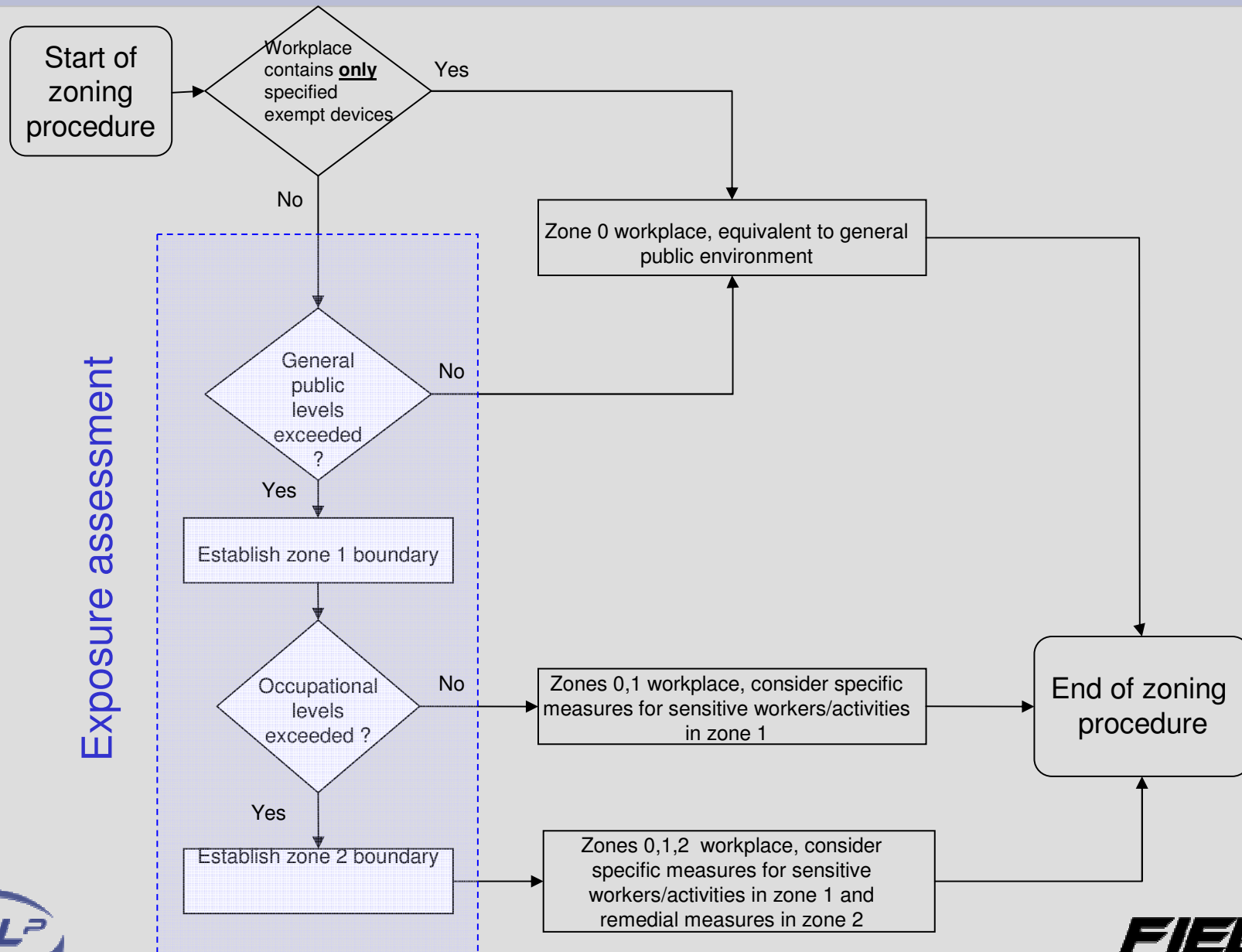
- In its standards produced under Mandate M/351 for the assessment of workplace electromagnetic field exposure of people, should CENELEC specify the shared risk or should it specify the additive approach to uncertainty ?

Questions from CENELEC to the Commission

- Should the public exposure levels of the 1999 European Recommendation be applied to pregnant workers, rather than the occupational levels of the 2004 Directive ?
- CEN, CENELEC and ETSI shall take into account the limit values and action values laid down in Directive 2004/40/EC
- This Directive does not foresee specific limit values for pregnant workers.
- Therefore the only binding occupational limit and action values are those laid down in the Directive

- Of course, under Directive 92/85/EEC.....the employer is obliged to assess in detail any specific risk of exposure of pregnant workers and in particular the exposure to non-ionizing radiation in order to decide what measures should be taken, including the moving of the worker concerned or the granting of a leave.

EN50499 Zoning approach



Summary

- CENELEC EN50499 is the standard prepared for use with the EMF Directive
- It contains general procedures for risk assessment
- Specific standards & procedures are called up for the details of assessment
- The standard is intended to be minimally-impacting for the vast majority of workplaces
- It will require detailed assessments, and remedial measures, where appropriate