

PRESENTATION OUTLINE

- BACKGROUND INFORMATION**
- MAIN REQUIREMENTS**
- FUNCTIONAL REQUIREMENTS**
- ENERGY LABEL**
- SAFETY REQUIREMENTS**
- STATUS OF THE PROPOSED COMPULSORY SPECIFICATIONS**

BACKGROUND INFORMATION

- **REQUEST CAME FROM DMRE TO REGULATE GENERAL SERVICE LAMPS:2018**
- **TO ALIGN WITH NEW DEVELOPMENTS IN LIGHTING INDUSTRY AND ENSURE THAT THE NEW LED TECHNOLOGY PERFORM AS CLAIMED BY SUPPLIERS**
- **TO ASSIST CONSUMERS IN MAKING AN INFORM DECISION USING THE ENERGY LABEL**
- **TO ALIGN WITH UN GUIDELINES ON GENERAL SERVICES LAMP REQUIREMENT**
- **INTENTIONS OF THE REGULATION TO PHASE OUT CFLS AND INCANDESCENT (HALOGEN LAMPS) CURRENTLY REGULATED BY VC 9091& VC 8043**
- **REGULATE SAFETY OF GSLS AS THEY POSE SAFETY AND HEALTH RISK TO THE PUBLIC**

BACKGROUND INFORMATION

- **CONSULTATION STARTED IN OCTOBER 2018 (MANHATTAN HOTEL, FIRST MEETING).**
- **SECOND STAKEHOLDERS MEETING AT NRCS DISCUSS THE SCOPE AND CONDUCTED RISK ASSESSMENT.**
- **4 MEETINGS WERE HELD IN 2019 (1 IN MAY, 2 IN JULY AND 1 IN NOVEMBER) TO DISCUSS THE DRAFT, RISK ASSESSMENT, IMPACT ASSESSMENT AND COMMENTS RECEIVED FROM STAKEHOLDERS**
- **PARALLEL TO THE CONSULTATION PROCESS AN IMPACT ASSESSMENT WAS CONDUCTED BY NOVA ECONOMICS.**
- **CLASP ASSISTED WITH TECHNICAL INFORMATION**
- **STAKEHOLDERS INCLUDED: IESSA, SUPPLIERS, CONFORMITY ASSESSMENT BODIES (TEST LABS), CONSUMER BODIES, GOVERNMENT DEPARTMENTS/ENTITIES.**

BACKGROUND INFORMATION

➤ SCOPE OF THE REGULATION:

- ALL LAMPS WITH ELECTRICAL LIGHT SOURCE (mainly hous hold application)
- THIS INCLUDE LEDES, CFLS, INCANDESCENT/HALOGEN



- SPECIAL LAMPS ARE EXCLUDED FROM PERFORMANCE REQUIREMENTS, BUT SHOULD COMPLY WITH SAFETY REQUIREMENTS. E.G. LAMPS FOR PROJECTORS, STUDIO LAMPS, SURGICAL LAMPS



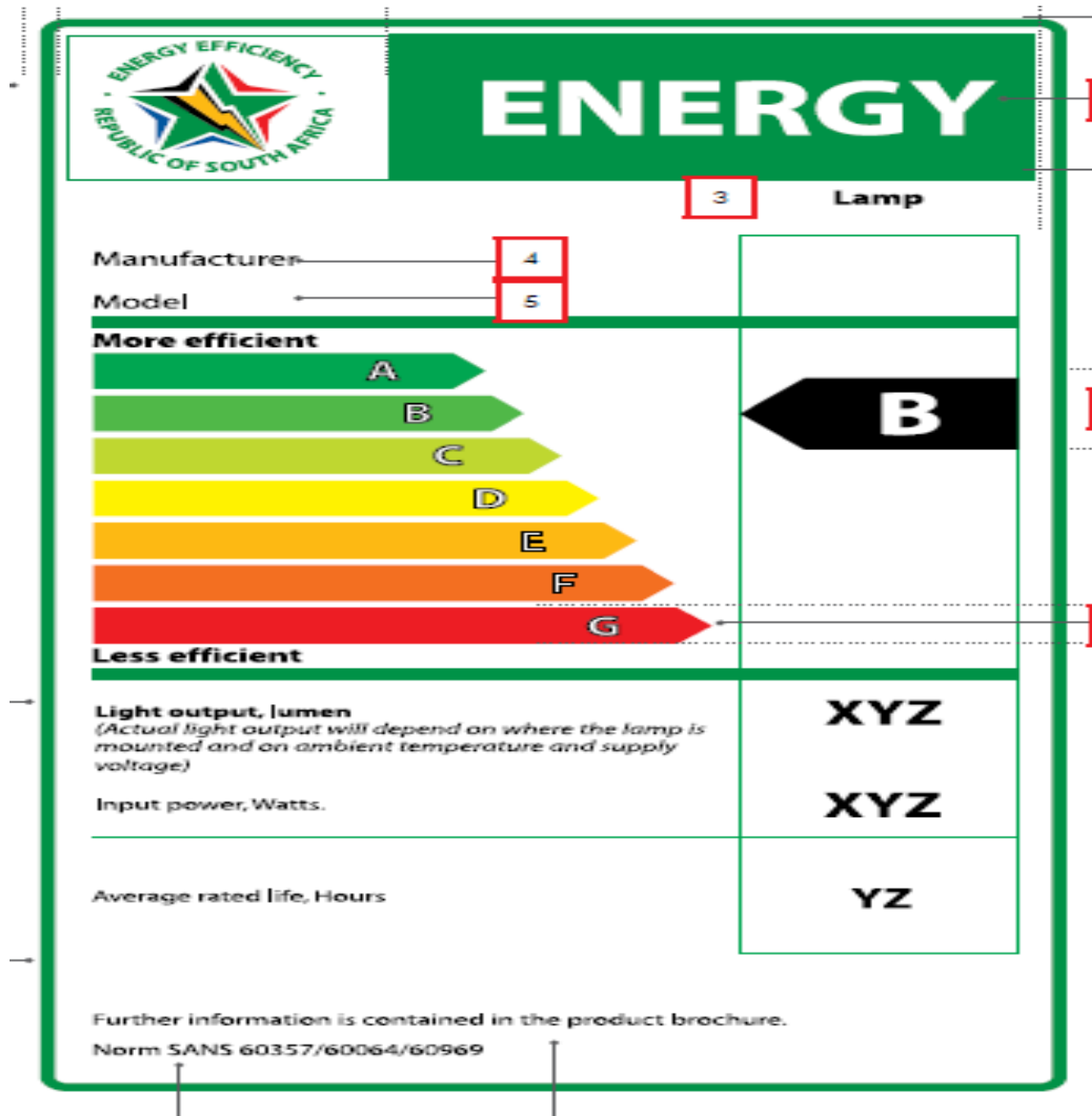
MAIN REQUIREMENTS

- **PHASE 1: 90 LUMENS/WATT, 12 MONTHS AFTER FINAL PUBLICATION OF VC9109**
- **PHASE 2: 105 LUMENS/WATT, 36 MONTHS AFTER THE PUBLICATION OF THE VC 9109.**
- **DISPLACEMENT FACTOR: AS PER THE IEC REQUIREMENT**
 - **$2W < P \leq 5W$: 0.4**
 - **$5W < P \leq 10$: 0.7**
 - **$P > 10W$: 0.9**
- **STANDBY POWER $\leq 0.5W$**

FUNCTIONAL REQUIREMENTS

- **COLOUR RENDERING INDEX: $R_a \geq 80$**
- **LUMEN MAINTENANCE FACTOR: $XL_{MF, MIN} \% \leq 96.0\%$**
- **SURVIVAL FACTOR $\geq 90\%$**
- **SHORT TERM FLICKER INDICATOR (P_{stLM}) ≤ 1.0 AT FULL LOAD**
- **STROBOSCOPIC EFFECT VISIBILITY MEASURE (SVM) ≤ 0.4 AT FULL LOAD**
- **EMC EMISSIONS: CISPR15/SANS215**
- **EMC IMMUNITY: SANS/IEC 61547**
- **HARMONICS: SANS/IEC 61000-3-2**

ENERGY EFFICIENCY LABEL



SAFETY REQUIREMENTS

- **Tungsten filament lamps: SANS/IEC 60432-1,**
- **Tungsten halogen lamps: SANS/IEC 60432-2/3,**
- **Single-capped fluorescent: SANS/IEC 61199, or SANS/IEC 60968,W**
- **Self-ballasted LED-lamps: SANS/IEC 62560,**
- **Semi-integrated LED-lamps: SANS/IEC 62838,**
- **Photobiological risk requirements: For the blue light hazard: RG0 or RG1 are allowed. If an LED uses a UV-based LED chip, then it must meet UV RG0 and RG1: IEC 62471 and the particular prescriptions of IEC TR 62778.**

STATUS OF THE PROPOSED COMPULSORY SPECIFICATIONS

- **Expected dtic final publication: September 2022 (as per the Minister of dtic communication)**
- **Implementation of phase 1: expected to be September 2023: 90 lumens/watt,**
- **Phase 2 September 2026: 105 lumens/watt**

THANK YOU