1. Optimised measurement **geometries** (WP3)  
2. Specifications for **instruments** (WP1)  
3. Pre-normative **guidelines** for future evolution (mesopic, obtrusive & light pollution) (WP3)  
4. Pre-normative **guidelines** on new aspects (aging, weather, adaptive systems...) (WP3)  
5. Contribute to **CEN TC169/WG12 CIE TC4-50**, improve CIE database (WP3, WP4)

**WP 1: INSTRUMENTS**  
Technical and metrological specifications for measurements

**WP 2: APPLICATIONS**  
Analyse the different scenario and applications

**WP 3: GUIDELINES - DATABASE**  
“... To be incorporated into the standards at the earliest opportunities...” SRT N-05

**WP 4: CREATING IMPACT**  
- Partners in 5 CEN-WGs, 3 CIE-TCs, 1 ISO TC, 6 National SDO  
- CEN, CIE, NMF stakeholder  
- Meetings concurrently with CEN/CIE  
- 2 CIE Expert Symposia  
- training courses  
- didactic resources

**EU Road Safety Action**  
Road lighting -65% death\(^3\)  
-50% adaptive-70%\(^2\)

**EU 20/20/20 Action**  
-40%  
5,5 \(10^6\) km\(^1\)

**NEEDS**

**OBJECTIVES**

**IMPACT**

**EXCELLENCE**

**NEEDS**

**OBJECTIVES**

**IMPACT**

**EXCELLENCE**
### Excerpts from letters of support

**TC169**

*WG12 – WG7*

... The activities of this project would be of interest to the following two Working Groups of CEN/TC169: WG7 Photometry, WG12 Road lighting (Joint WG with CEN TC226 Road Equipment). CEN/TC169 would benefit from the work of this project and its interests are focused on the following objectives: Definition and improvement of standardized methods for road surface characterisation, Technical and metrological specifications, Methodologies for calibration, Optimised measurement methods, Methods and procedures for mesopic visual conditions, obtrusive light, light pollution...

**CEN**

*TC169 WG7*

... the need of a future European standard that gives data for road lighting installation design (see CEN/TC 169/WG12) and requirements for measurement and instrumentation (in the scope of this WG) is of our concern... We are highly interested in the progress of the proposed JRP, in receiving period report, and are willing to support the proposed JRP.

**CIE**

*Central Bureau*

... CIE and with it the international scientific lighting community would therefore directly benefit from the work of this project, in particular if an improvement of the standardized method of road surface characterization is defined. In addition we greatly appreciate the proposed work on the technical and metrological specifications for instruments... We welcome the considerations on measurement methods for mesopic visual conditions, and the new geometries that would allow the quantification and minimization of obtrusive light and therefore reduce light pollution...

**CIE TC4-50**

... TC4-50 will benefit from the work of this project that proposes results directly useful in writing several chapters of the TC4-50 Technical Report...

**ISO**

*Ministero delle Infrastrutture e del Transporto of Italy*

...on the last plenary meeting of ISO/TC 274 the member of ISO/TC 274 supported the European research programmes on “Pavement surface characterisation for smart and efficient road lighting”

**TRAFFIKVERKET**

... Our company, the Swedish Transport administration is the Swedish road authority and we need reliable data to design road lighting. It has been demonstrated several times that available standard references on road surface characteristics do not fulfil the actual needs of standardization bodies nor road authorities or road lighting design. The Solid State Lighting technology and new concrete materials pushed forward these needs; this proposed project will contribute to grasp the lacks in knowledge that all involved subjects experience continually.

**ACCREDIA**

... This proposed project will contribute to grasp the lacks in knowledge that all involved subjects experience continually. The accreditation market needs more and more standards references materials for calibration, this project will provide new reference materials to be used for calibration of measurement devices...

**LiCon-AT**

... In Nordic countries (Finland, Sweden, Norway and Denmark) there is also a very high interest to study the reflection properties of the pavement materials used today. Based on the studies Nordic countries could revise their national guidelines on usage of different road surface classes in road lighting design... Furthermore a liaison could be established between SRT N-05 and NMF. NMF is a Nordic co-operation group of road authorities with the scope of co-ordinating research and development of road equipment.