



Intelligent System Lighting (ISL) Activities for Electrical Energy Saving

Youjin Kim

LED Communication Research Section



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 - First arrival bulb at March 1887 in Korea
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First arrival bulb at March 1887 in Korea

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- Demonstrated at Gyeongbokgung Palace
 - 電氣始燈圖 (starting electrical lamps demonstration)
 - 妙火 – Wonderful fire

After 126 years, LED brings us intelligence

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2013
Year

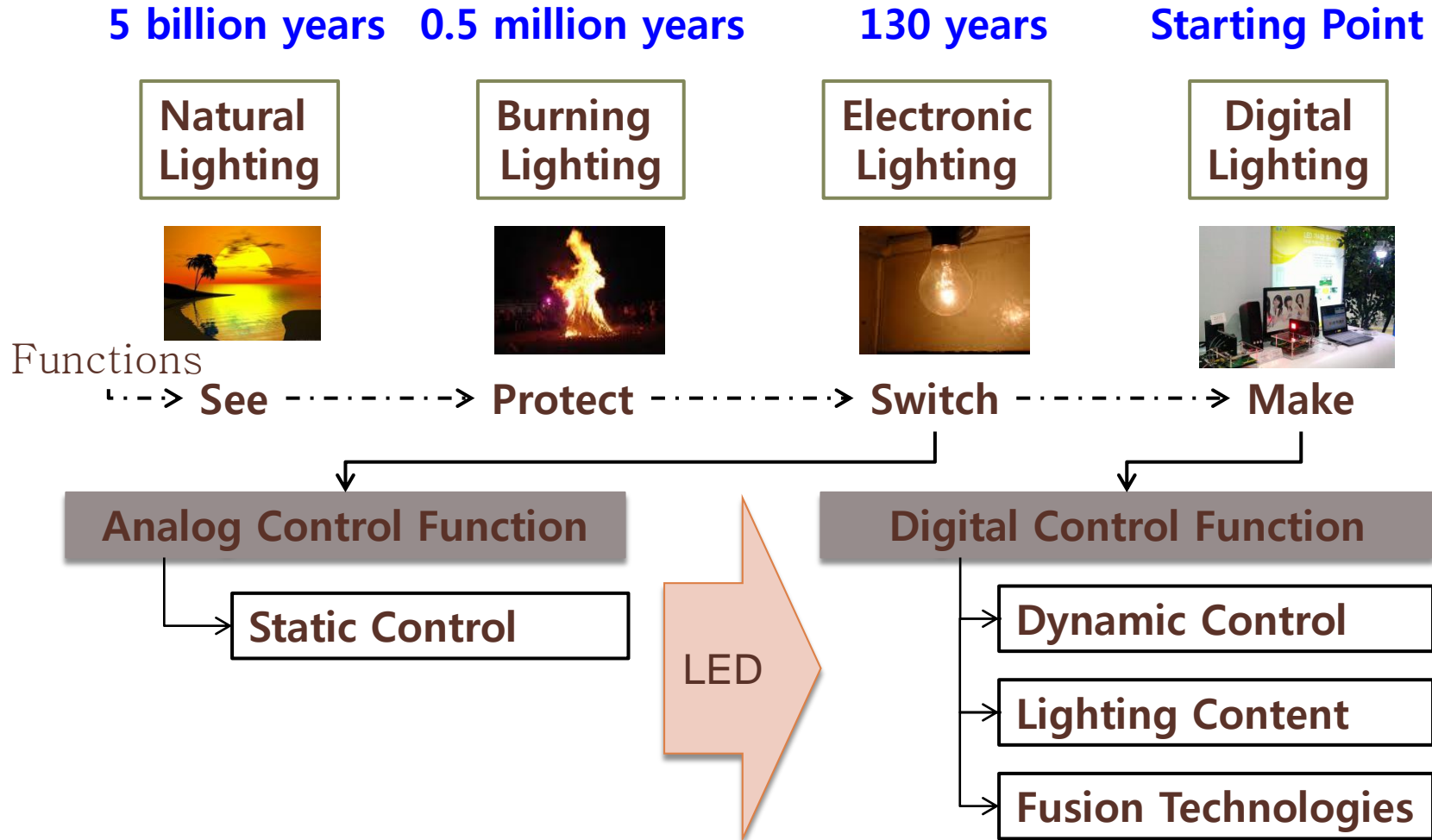
Intelligent System Lighting

Concept :

Intelligent System Lighting is to create the most energy efficient lighting solution

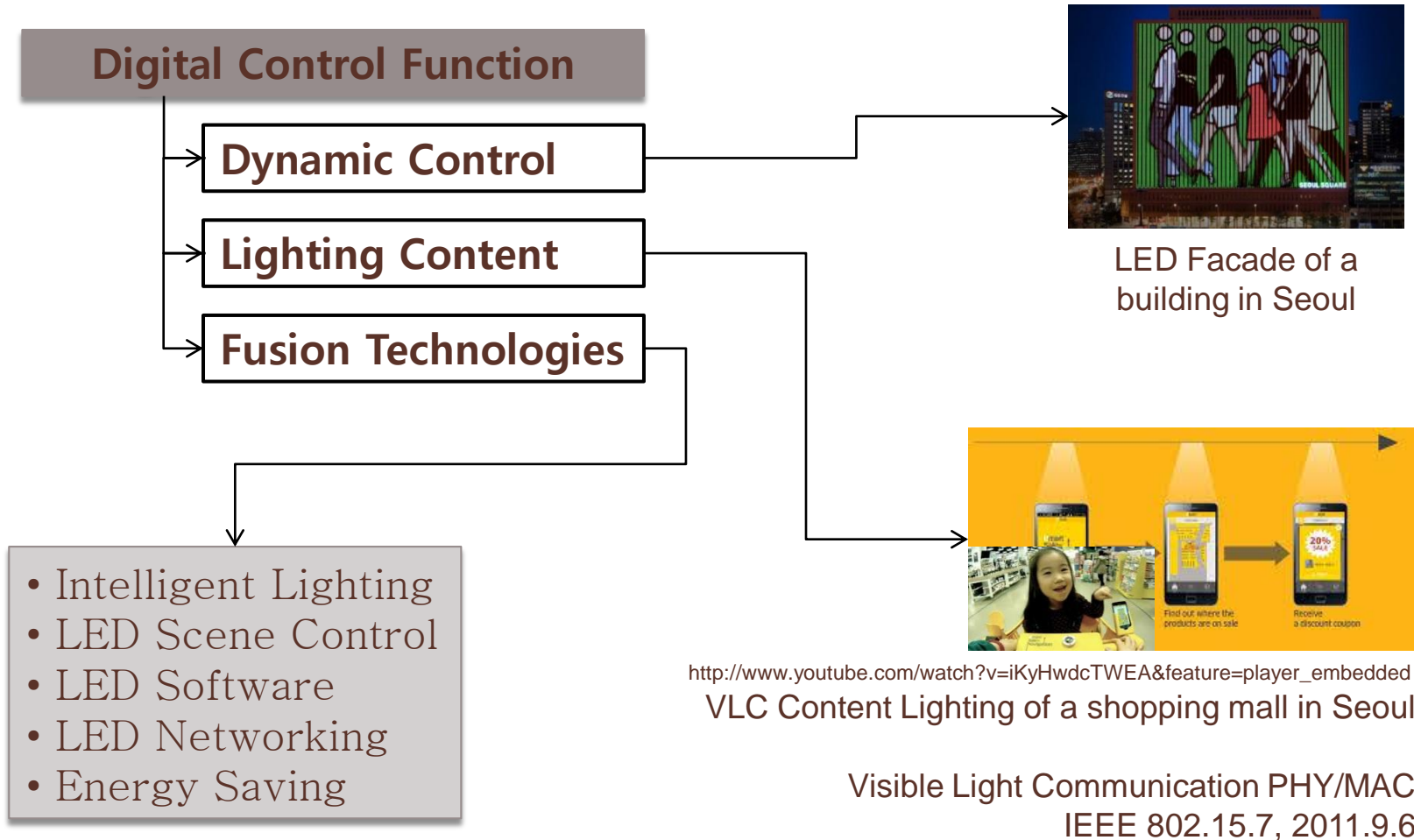
Evolution and Emerging New Concepts

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Digital Control Functions from LED

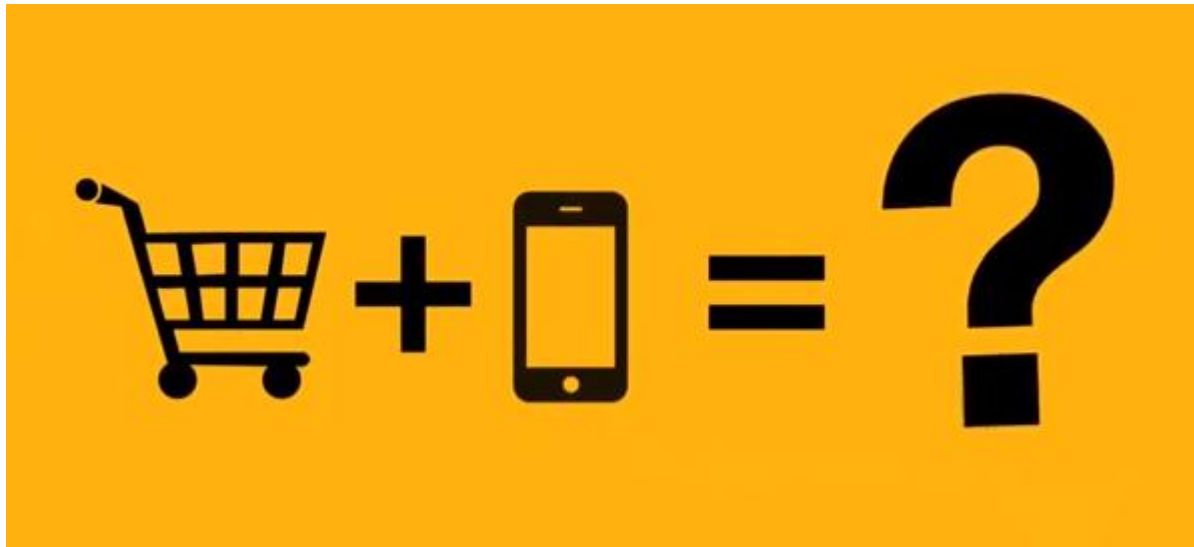
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Lighting Coupon

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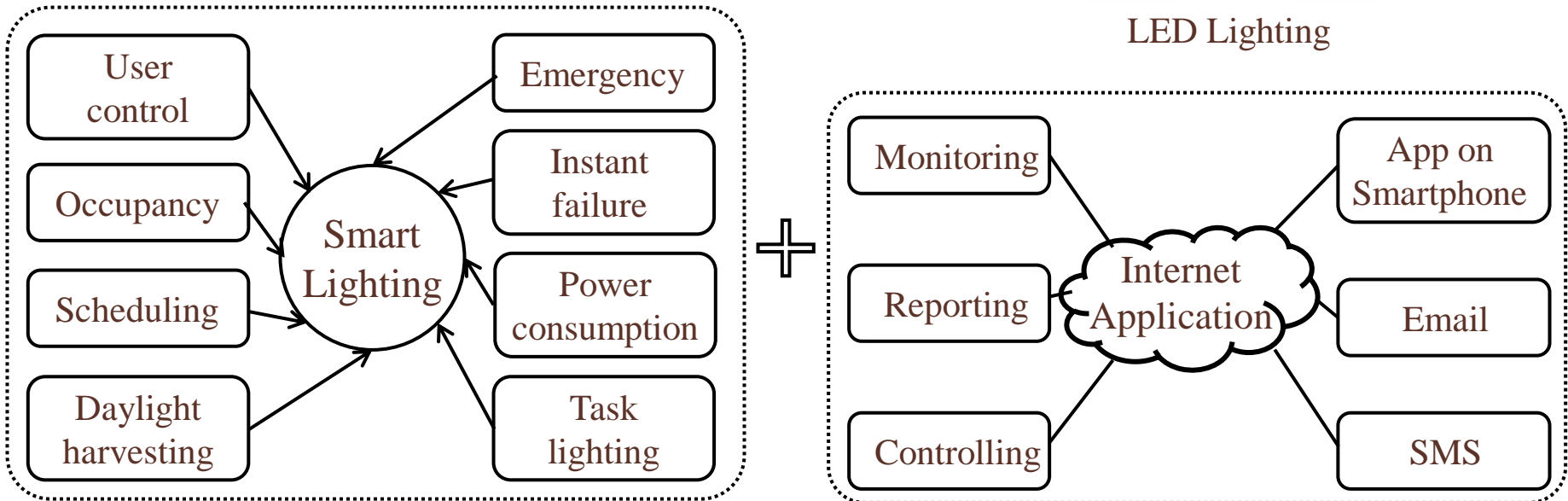
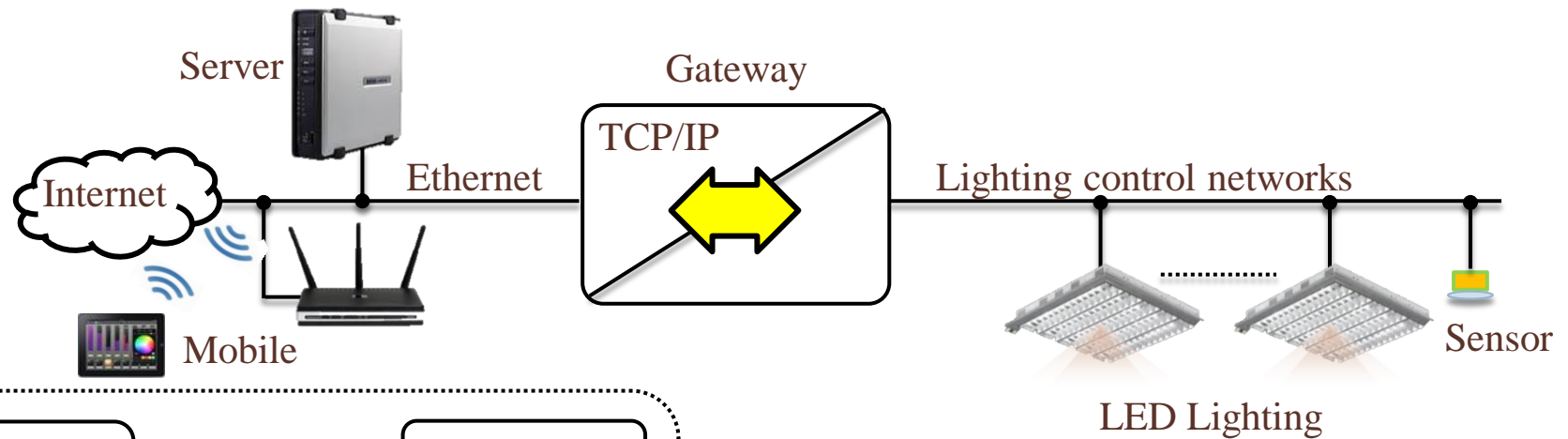
The lighting coupon is downloaded to the shopper's smart device via VLC at the coupon spot.



http://www.youtube.com/watch?v=iKyHwdcTWEA&feature=player_embedded

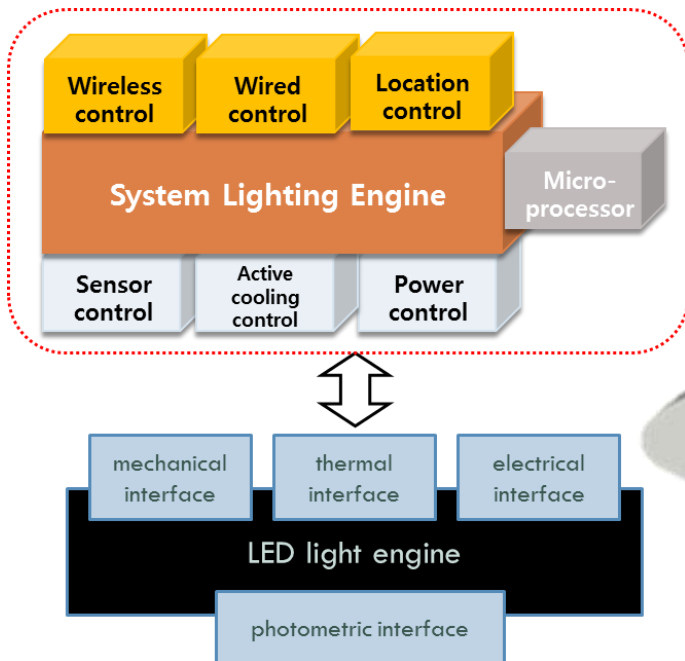
Smart Lighting and Internet Application

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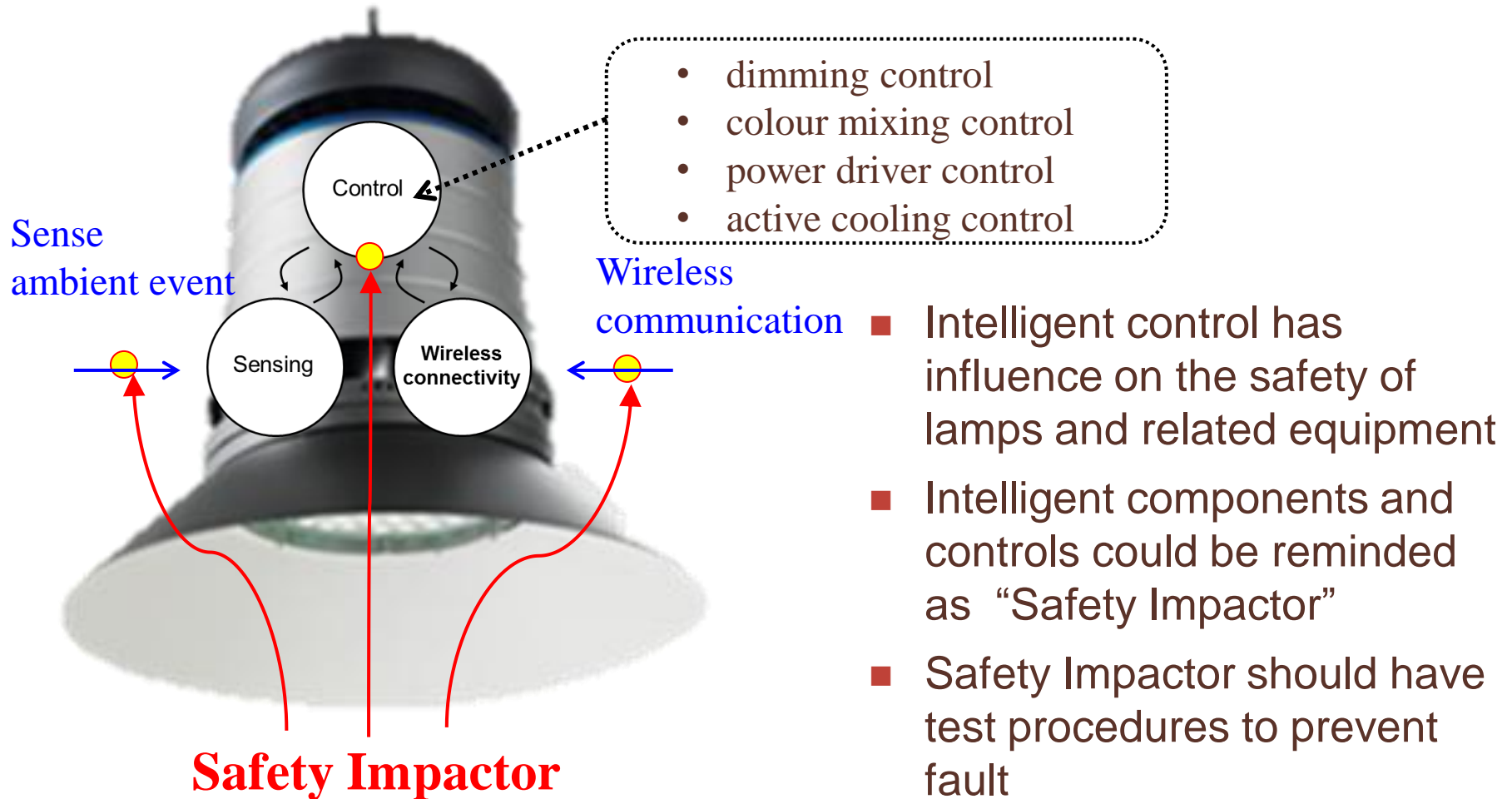
Introduction and Motivation of ISL

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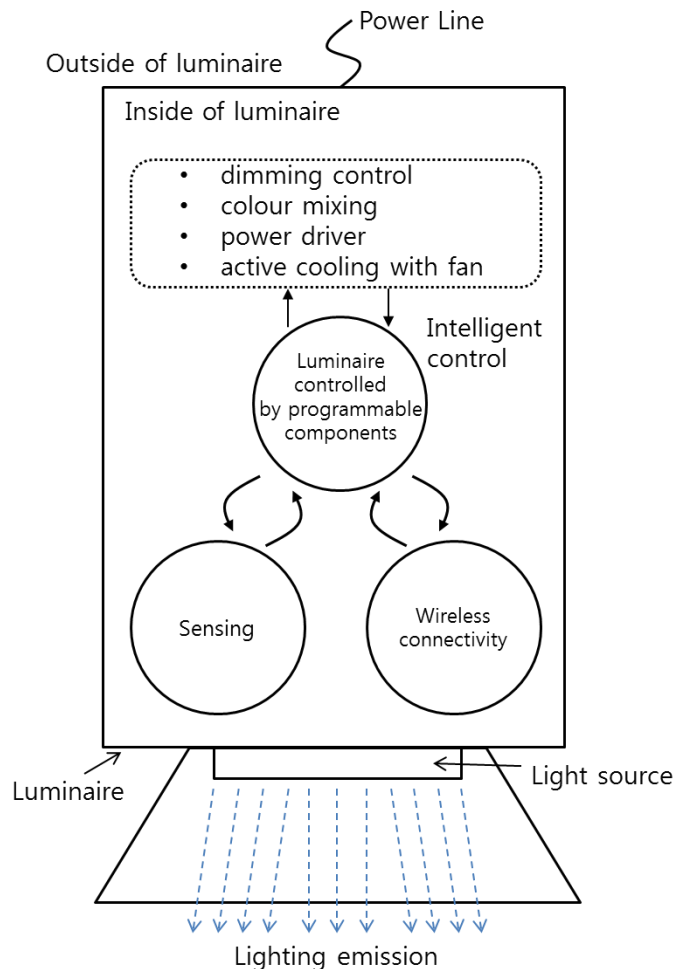
- As the use of LED lighting is increased, there is an increasing need for more intelligent control
- Require moving from a fixed function LED driver to microcontroller-based or programmable architectures integrated with sensor and wireless connectivity inside of luminaire
- How to start the standardization of 'Intelligent System Lighting' in IEC/TC34 ?

What is the intelligent impact on safety?



Standardization Scope and Plan

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- Specifies general requirements and test requirements of LED lamp integrated with a programmable architecture based sensor and wireless connectivity inside of luminaire to control dimming, colour mixing, power driver, and an active cooling
- PWI proposal is introduced at 9 Apr 2013 Seoul IEC/TC34 meeting
- 12 members are declared
- Plan to make up meeting

Thanks & let's work together!

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- System Lighting makes new value added lighting industry.



Eighth *lites.asia* meeting – Manila, Philippines, 2-3 October 2013