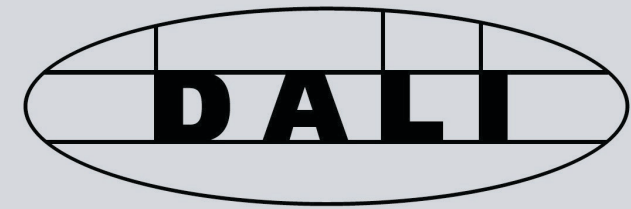# D4i standard in outdoor: Importance for customers

DALI Summit 2019

Peter Duine / Jan Fitters
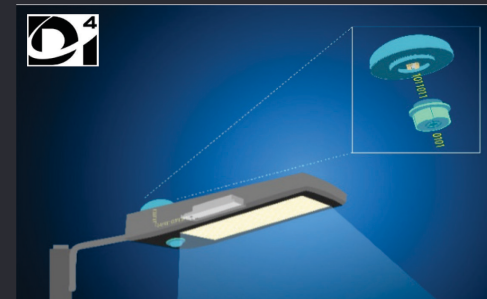
September 25, 2019

Signify

Why customers need standards in public lighting ?

- Secure serviceability of long lifetime of LED Luminaires (>20 years)

- Support of fast evolving wireless technologies for Smart Cities

- Open standards for plug-and-play interoperability over multi-vendor products

- Compatibility of data storage/retrieval for asset management, energy reporting and diagnostics.

- Upgrade of digital functions of smart luminaires

- Certification of products by independent parties

Complete solution

- SR Certified nodes implementing Z-D4i fit on Zhaga receptacle
- Operate on all SR outdoor drivers
- Choose node product depending on required feature set

Zhaga book-18

- Zhaga connector secures future-proofness and compatibility

DiiA Aux   Auxiliary supply (24V)

DiiA Part 253 Diagnostic information

DiiA Part 252 Energy metering

DiiA Part 251 Asset management info

DiiA Part 250 DALI power supply

DALI-2 Part 207 LED modules

DALI-2 Part 102 Control Gear

DALI-2 Part 101 System

Xitanium driver implementing D4i
- Accurate energy-metering
- Backwards compatible with SR1.7
- Asset information must be filled in

Signify

Universal Zhaga book-18 connector

Node on top for GPS and RF communication

Sensor on bottom for presence, traffic, air quality

D4i for the end-user

- ✓ **D4i opens the arena of connected lighting applications**
  - • **Simple, standardized and scalable**
- ✓ **Ecosystem offer**
  - • **Flexibility to choose from range of products**
  - • **Plug & Play products with Zhaga book-18 connector**
- ✓ **Data availability and usage**
  - • **Luminaire information**
  - • **Energy reporting**
  - • **Diagnostic and Maintenance information**
- ✓ **Guaranteed peace of mind**
  - • **Robust and mature products**
  - • **Always works!**

signify

Z-D4i luminaires

Simple

- **Easy to use**
  simple user interface. No expert knowledge needed.
- **Flexible**
  Straightforward, plug and play solutions.

Open

- **No proprietary technology**
  World-wide standards ensures compatibility.
- **Freedom of choice**
  Seamlessly connect of different providers.

Innovative

- **IoT-ready**
  Simple add sensing, connectivity and intelligence to lighting.
- **Innovative**
  making use of latest technologies.

Scalable

- **Future-proof**
  Solutions are scalable and future requirements in mind.

Signify

Lessons learned

1. Standardization essential for public lighting

2. Customers need official bodies they can refer to

3. Introduction of new standard needs time and conditions needs to be met

4. Partners are needed to create a standard