



Christoph Perktold

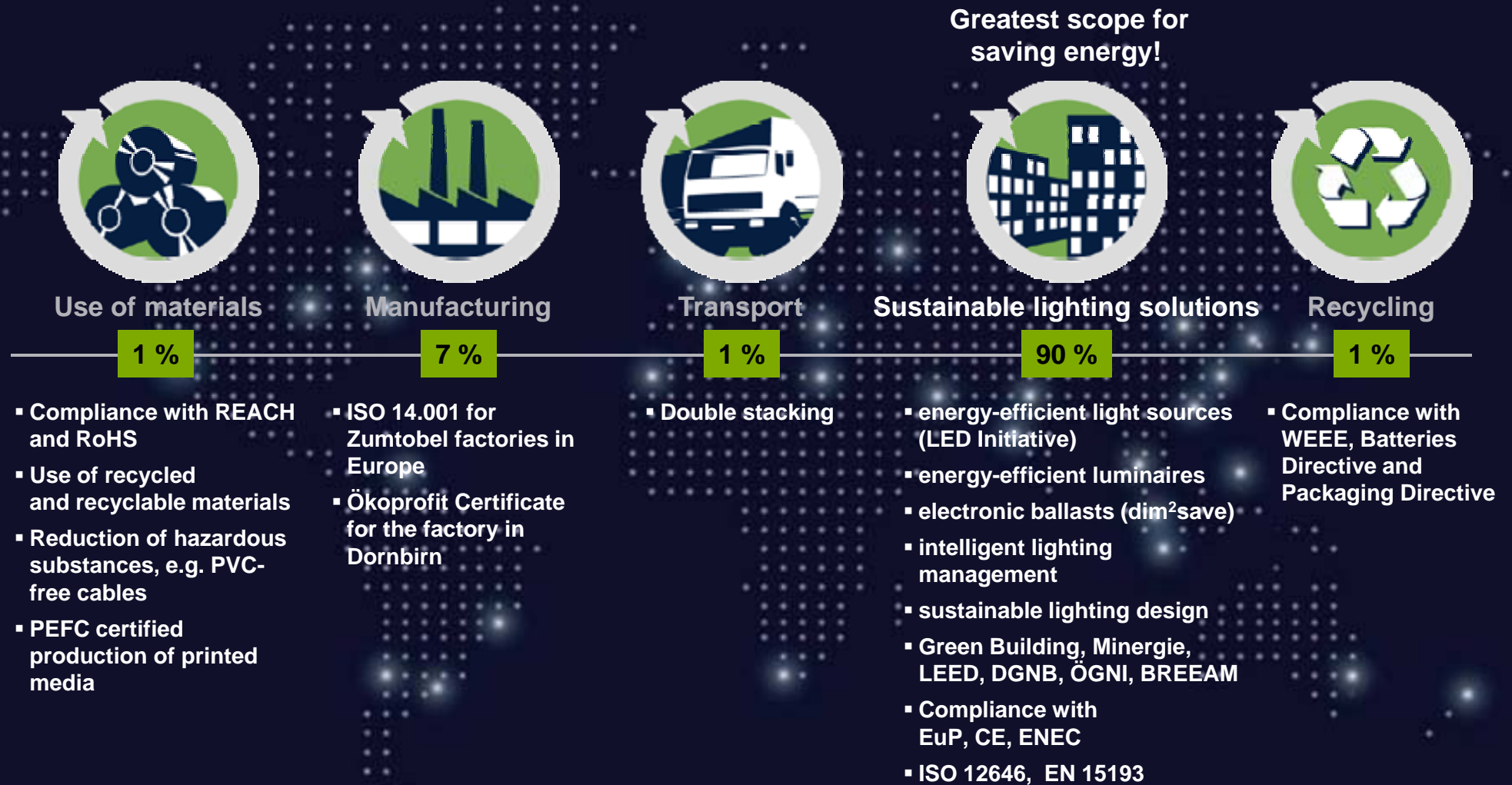
Field Marketing Manager

Mission

**WE WANT TO USE LIGHT TO CREATE WORLDS OF EXPERIENCE,
MAKE WORK EASIER,
AND IMPROVE COMMUNICATONS AND SAFETY
WHILE REMAINING FULLY AWARE
OF OUR RESPONSIBILITY TO THE ENVIRONMENT.**

Lighting and sustainability

Our responsibility to the environment



Lighting solutions

Zumtobel develops lighting solutions jointly with its partners

ARCHITECT

CLIENT / END CUSTOMER

INVESTOR

DEVELOPER



Benefits for all target groups

- Global approach (network)
- Local market presence
- Established brand
- Supplier of complete solutions
- High process-oriented consulting and service quality
- Excellent logistics

DESIGNER / SPECIFIER / CONSULTANT

SHOP FITTER

CONTRACTOR

WHOLESALER / DISTRIBUTOR

Application areas

See more than 500 references on the [Map of Light](#)



Innovation, design and technology

The product portfolio

TRACKS AND SPOTS

MODULAR LIGHTING SYSTEMS

DOWN-/UPLIGHTS

RECESSED LUMINAIRES

SURFACE-MOUNTED AND PENDANT LUMINAIRES

OUTDOORS LUMINAIRES

CONTINUOUS ROW AND BATTEN LUMINAIRES

HIGH-BAY LUMINAIRES

LUMINAIRES WITH EXTRA PROTECTION

EMERGENCY LIGHTING

LIGHTING MANAGEMENT

MEDICAL SUPPLY SYSTEMS



History

Light years



1952

Onset of manufacture of complete luminaires. The first successful series is PROFILUX, the “world's narrowest batten luminaire”



1958

The building of the German distribution organisation marks the beginning of the company's early orientation towards foreign markets. For the first time, Zumtobel KG participates at the Hannover Fair.

1950

Dr. Walter Zumtobel establishes the company “Elektrogeräte- und Kunstharzpresswerk W. Zumtobel KG” in Dornbirn



1957

A worldwide innovation is the first ballast with enamelled wire winding (“random winding”), which becomes the industrial standard.

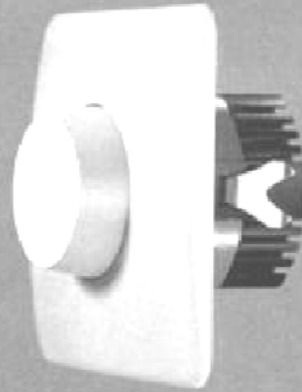


History

Light years

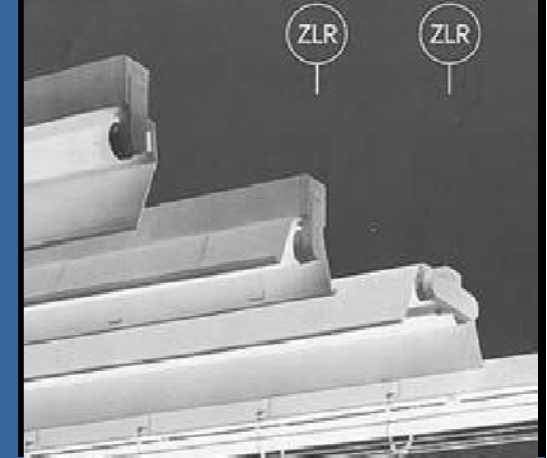
1959

Zumtobel's first lighting laboratory is opened. One of its first tasks is the preparation of photometric data.



1967

Staff & Schwarz Leuchtenwerke introduces the first German lighting track system, LightTrack



1966

Staff & Schwarz GmbH Leuchtenwerke – takeover in 1993 – launches the first European electronic dimming switch.



1967

W. Zumtobel KG presents the new Z batten luminaire system with the snap-in mechanism for one-man installation, unique at the time.



History

Light years

1979

Acquisition of the German manufacturer Disco Schneider & Co to augment the product portfolio with hospital trunking



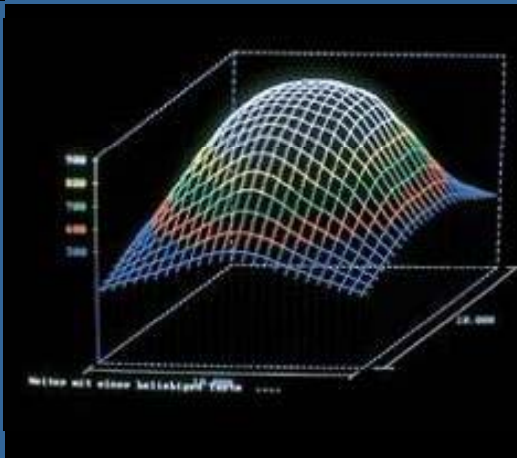
1984

Development of the "Cophos" lighting design software, which later becomes the base for the industry standard



1980

Introduction of the world's first range of luminaires with indirect/direct light distribution for office applications



1986

Development of the first electronic ballast to be compatible with argon and krypton lamps by the Lighting Components Division of Zumtobel AG, later known as Tridonic-Bauelemente GmbH

History

Light years

1988

Debut of the MELLOW LIGHT concept, a new generation of lighting solutions for office applications



1993

Acquisition of a majority holding in the German luminaire manufacturer Staff of Lemgo, founded in 1945. All remaining shares in Staff are taken over by Zumtobel at the end of 1994



1991

Market launch of the BUS-compatible Luxmate® lighting management software, jointly developed by Tridonic-Bauelemente GmbH and Zumtobel Licht GmbH



1998

Zumtobel presents the AERO pendant luminaire, the first European waveguide luminaire.

History

Light years

1999

First standard lighting solution with LED technology and “Active Light” for lighting with variable colours



2008

AERO II Hybrid is the first straight-line luminaire for professional office applications on the market that completely integrates the LED technology.



2002

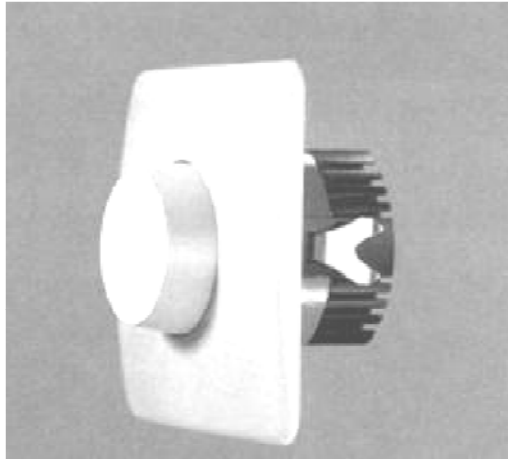
Introduction of the “micro-pyramidal optic” (MPO) for glare-free lighting at DSE workstations, including a complete range of luminaires



2010

The PANOS INFINITY LED downlight system outcompetes the traditional compact fluorescent lamps in terms of efficiency, lighting quality and colour rendition.

History



1991

Market launch of the BUS-compatible Luxmate® lighting management software, jointly developed by Tridonic-Bauelemente GmbH and Zumtobel Licht GmbH

1966

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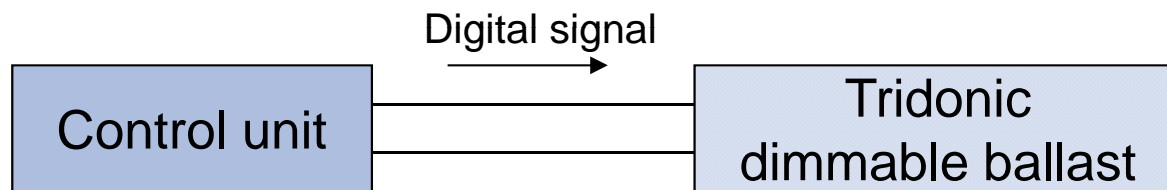


2012

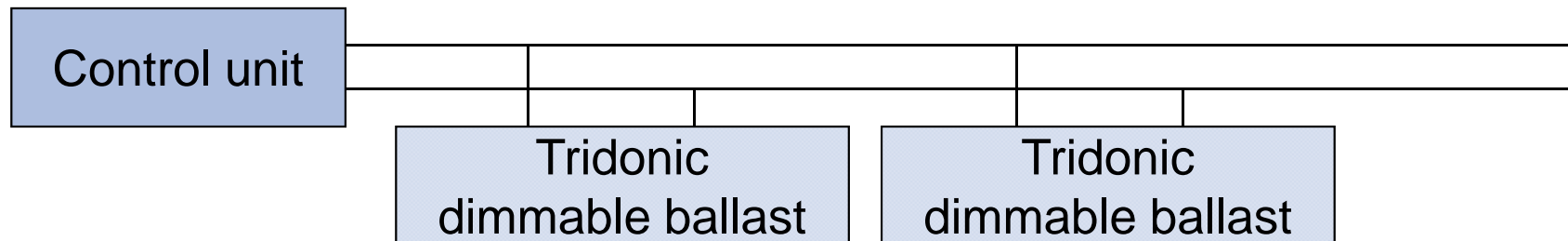
?

DSI means Digital Serial Interface

- **Digital communication interface** to control dimmable ballasts



- **Control line** = unit or ballast has no address
- Control unit is able to operate ballasts in parallel

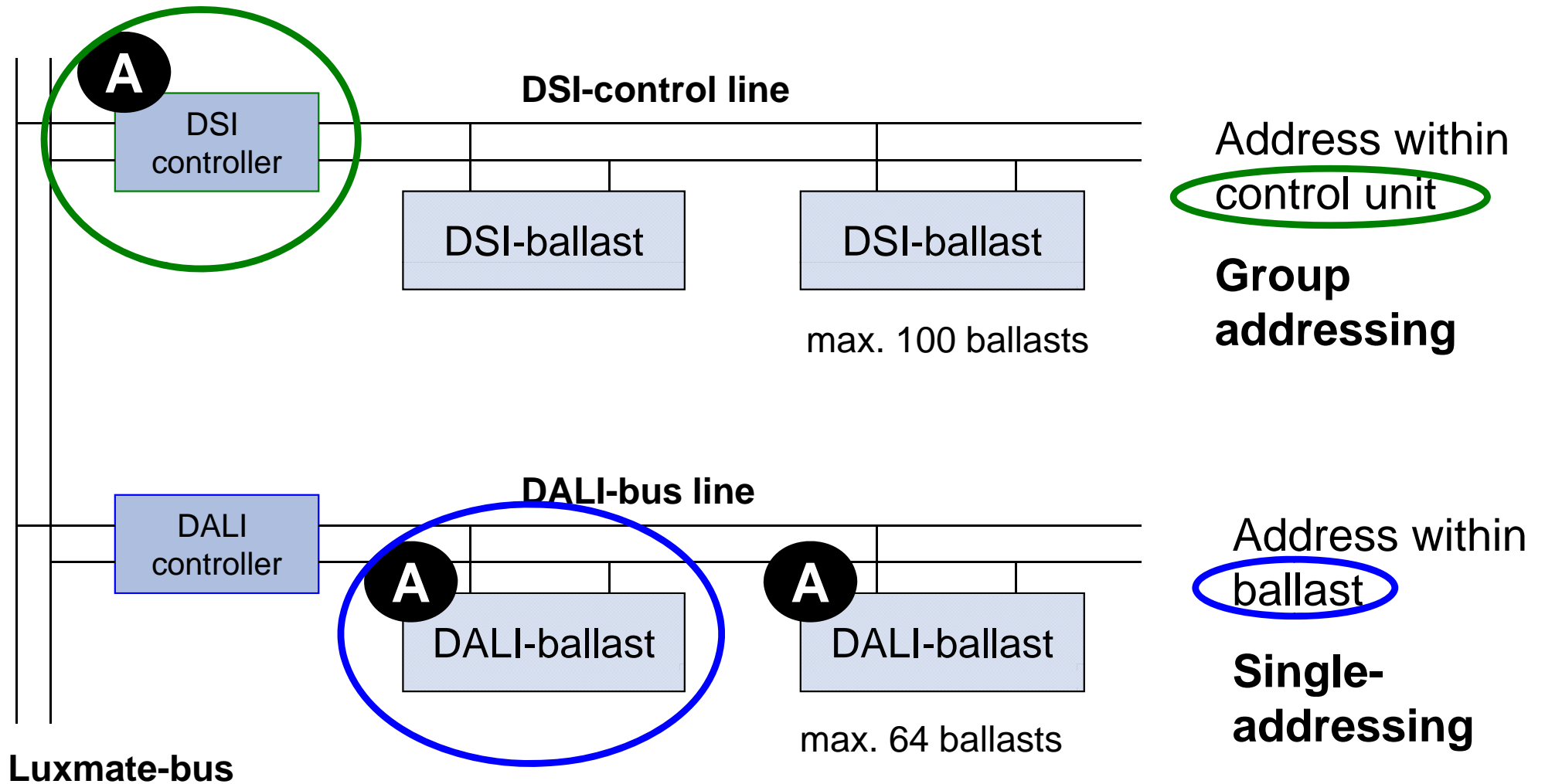


DALI means Digital Addressable Lighting Interface

- DALI is a **standardised** protocol for digital communication (only) between **light technology** components
- **No** control of climate, blinds, heating components...
- **Bus line** = each unit or ballast has a unique address (single address mode)
- Broadcast mode: no addressing, one sender – many receivers, all do the same

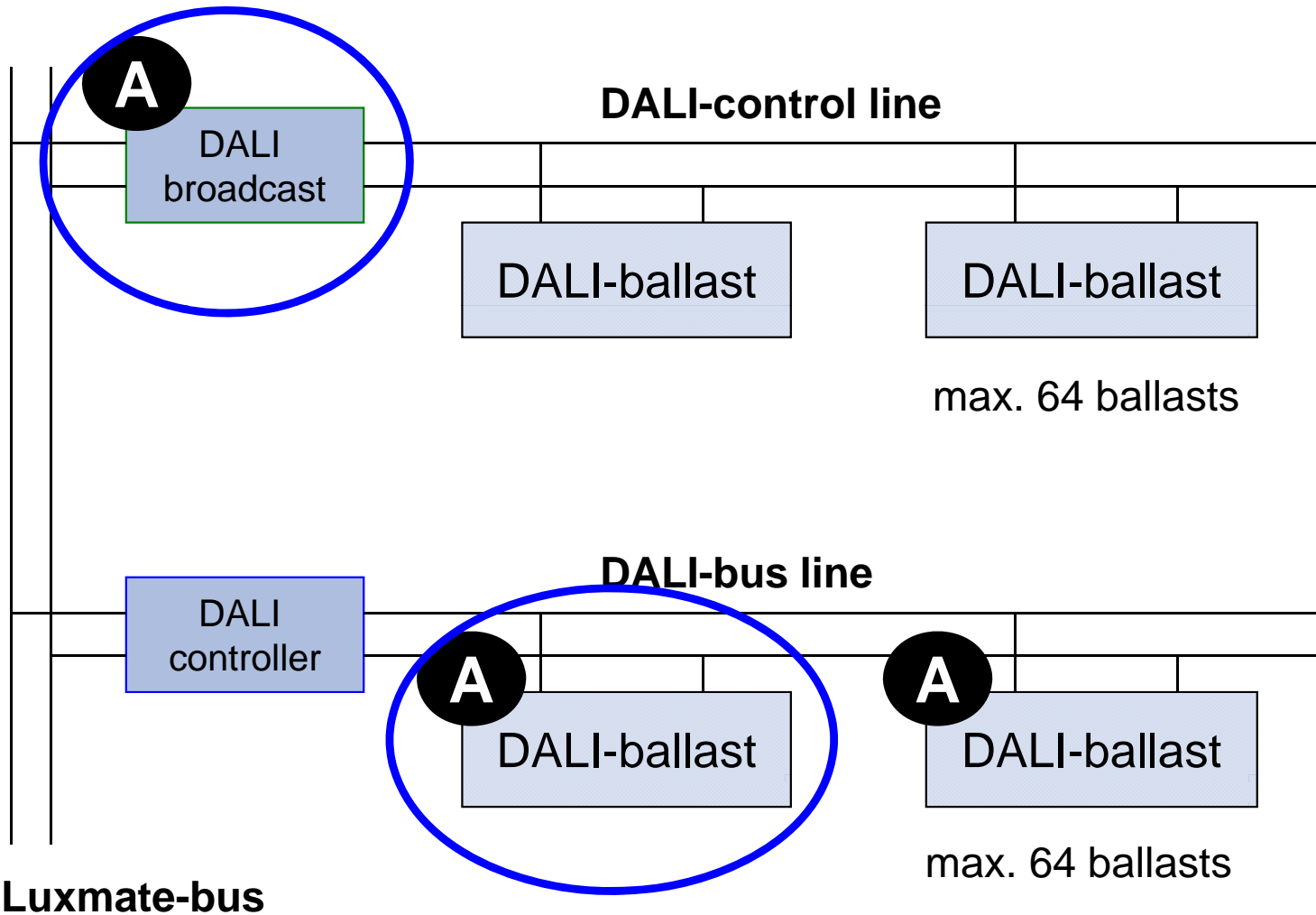
DALI

DALI versus DSI



DALI

Broadcast versus Single



Address within
control unit

**Group
addressing**

Address within
ballast

**Single-
addressing**

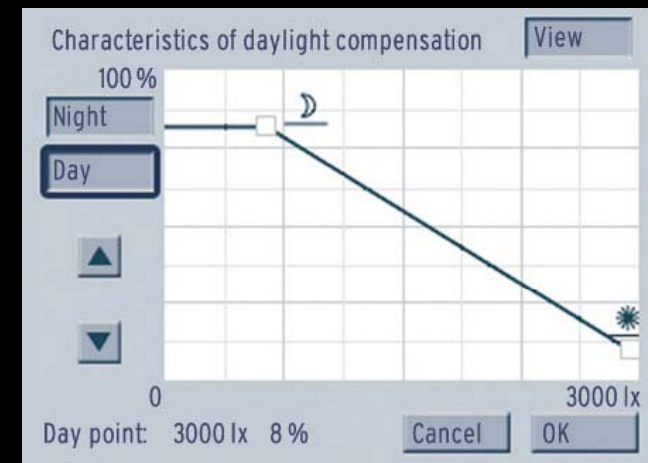
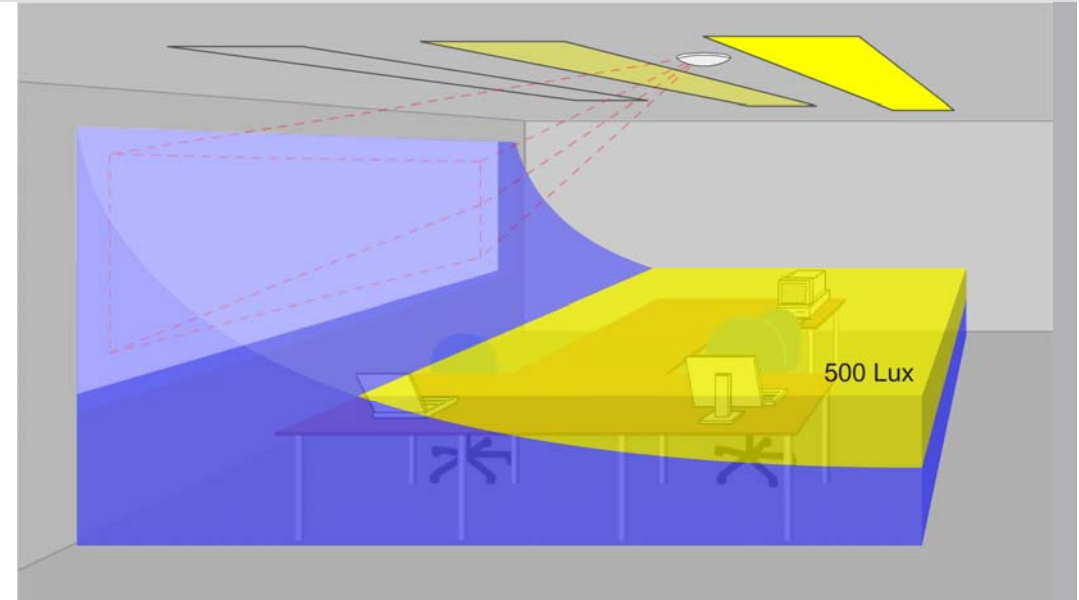
Luxmate-bus

LUXMATE EMOTION

Energy saving

up to 70 % energy saving

- daylight controlled lighting
- presence detector
- time control



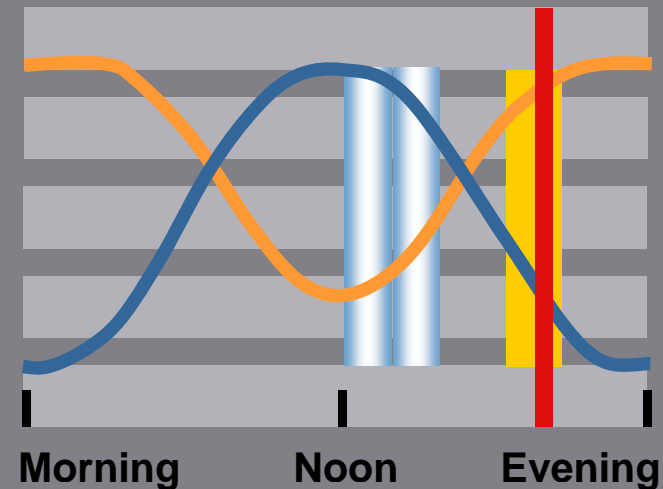
LUXMATE EMOTION

Motivation cycle

7.00 p.m.

Providing warmth and wellbeing

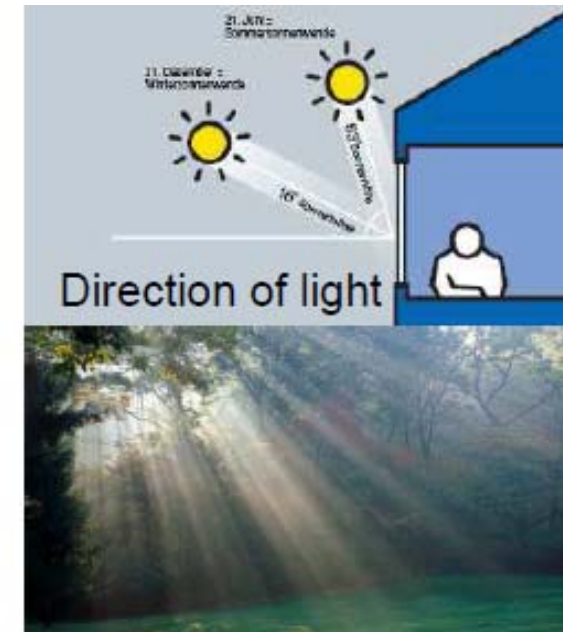
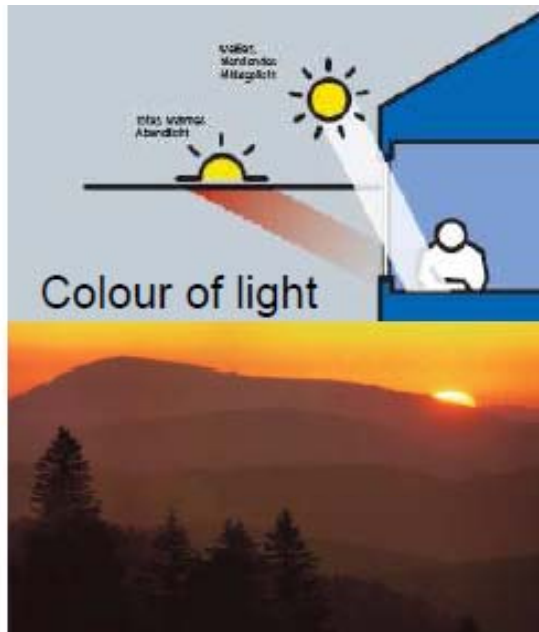
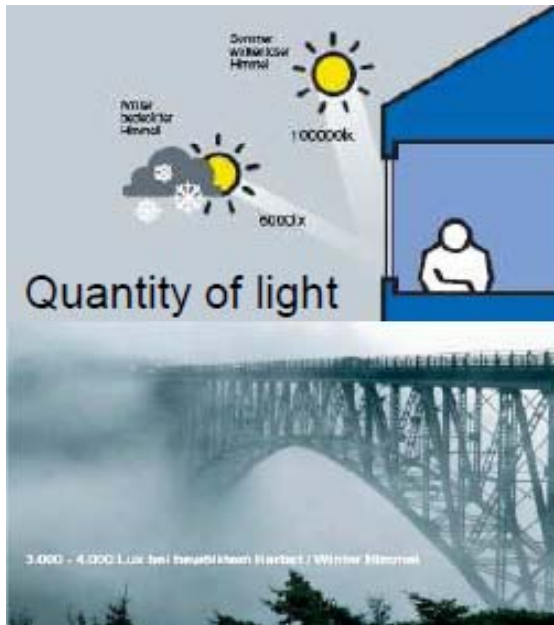
Warm white scolloping effects on the wall provide a feeling of warmth, corresponding to the sun setting in the evening.



TUNABLE WHITE

Biological: Daylight = internal clock

Change of lighting conditions



TUNABLE WHITE

Biological: Electric light = natural light

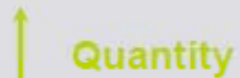
Biological effective light is only possible with dynamic lighting control



Static system:



Dimming:



Full dynamic:



TUNABLE WHITE

Biological: a concept for all applications





Thank you

www.zumtobel.com