A History of KNX

KNX: The worldwide STANDARD for home & building control

www.knx.org

A History of KNX

At the beginning there was a Vision:

"It must be possible to more definitively include the market of classical electrical installation in the rapid development of electronics."

Getting Started (1990 – 1992)

The History of Success began on the 5th of May, 1990 in Brussels, Belgium

- 15 well-known European manufacturers of the electrical industry founded the European Installation Bus Association EIBA

- Their idea was to make electronic installations with Bus Technology fit for the future

Getting Started (1990 – 1992)

Twisted Pair as first Transmission Media

- It started with the Twisted Pair cable

- Twisted Pair TP1 came from EIB and is still the most important medium within the KNX standard

- It combines high quality and low cost of components

In 1991 the first "Handbook" Open Specification was published

To make Bus Technology fit for the future, all members of EIBA agreed on using the same system, a so called "Standard"

Getting Started (1990 – 1992)

Training – Knowledge is the Key to the Market

In 1991 the first basic course, teaching the EIB Standard for the first time, was organized in Germany at Siemens, Regensburg

Ushering the Era of EIB (1992-1997)

The First EIB Device on the Market

- In 1992 Siemens had its Bus Coupler certified by EIBA.

- This Bus Coupler was the first product which used the Open System "EIB"

The first ETS version was introduced in 1993

- For configurations of EIB Devices and EIB Installations, the Manufacturer-Independent EIB Tool Software was made available

Ushering the Era of EIB (1992-1997)

KNX

Introduction of Certified Training Centres

- In order to ensure a consistent standard of EIB training worldwide, the EIB certification scheme for training centres was established in 1994

- The first KNX Journal was an opportunity to inform every Member and Partner about the recent news of EIB

Step 2: Ushering the Era of EIB (1992-1997)

The first certified Partner

- The first Partner successfully passed the basic course in January 1996 and was the first to use the EIB Partner Logo

ETS 2 was released in 1996

- Due to the high number of orders for updates, new programs and positive feedback, EIB released ETS2 in 1996

Step 2: Ushering the Era of EIB (1992-1997)

Scientific Partnerships

In order to promote cooperation with institutions such as universities, technical colleges and research centres, another "EIB-Partnership" was created: **The Scientific Partnership**.

In 1996 Power Line was introduced as a new Transmission Media

- Power Line uses the electrical power distribution network that is mostly already installed in buildings

- Power Line offers a full range of devices for lighting, shutters and heating control

From EIB to the worldwide Standard "KNX"

From EIBA to Konnex Association

- 1997 the solutions of Batibus, EHS and EIB merged

- 2001 the new founded Konnex Association published the KNX Standard with EIB as its basis

From EIB to the worldwide Standard "KNX"

The first version of the KNX Specifications was published

- In May 2002 the first version of the KNX specification was published amongst the KNX members and the KNX Certification Scheme for products started

- In 2003 the KNX protocol, as well as the TP and PL media, were approved by the European National Committees and ratified by the CENELEC Bureau Technique as the EN 50090 Standard

- After a long period of research, KNX Radio Frequency became part of the KNX Standard

- With KNX RF, devices can be controlled wirelessly

From EIB to the worldwide Standard "KNX"

ETS 3 released

- The most important improvements: USB support, multi-tasking including simultaneous download of devices, design while downloading etc.

- With ETS 3 Professional it is possible to customize the user interface to the users' requirements. The focus was on user friendliness

From EIB to the worldwide Standard "KNX"

KNX - the Worldwide Standard

- After the presentation of KNX at the 2005 March ISO/IEC JTC1 SC25 WG1 meeting, the KNX Stack parts were submitted

- In October of 2006, the document was approved in the formal draft for an International Standard version, thereby becoming the Worldwide Standard for Home and Building Control

From EIB to the worldwide Standard "KNX"

From EIBA to the KNX Association

- In 2006 the still existing EIB Association merged with the Konnex Association and the new KNX Association was established

- The Chinese Standardization committee, SAC TC 124, introduced the KNX standard in China and adopted it as Standard GB/Z 20965 in July 2007

From EIB to the worldwide Standard "KNX"

Fourth Transmission Media: KNX IP

- In 2007 KNX IP was introduced as fourth Transmission Media

- It opened the door to the top level communication systems of buildings and presents simultaneously a standard gateway to the KNX installation from outside

- In October 2010 ETS4 was released

- ETS4 is, compared to its predecessors, faster and more user friendly

The Future of KNX

Energy Efficiency

- An energy efficient world, where the intelligent home and building are part of a smart grid

- Thanks to solar, wind or thermal sources, buildings will no longer only consume but also produce energy

- KNX automates energy saving processes in homes and buildings and informs us about energy consumption

Energy efficiency is and will be driven by KNX

The Future of KNX

A Totally Integrated Living Environment

- A living environment, in which home control, multimedia and IT equipment are fully integrated

- Home owner acceptance will be driven by the ease of use and reliable interworking

The totally integrated living environment is and will be driven by KNX

The Future of KNX

Internationalisation

- KNX becomes the most prominent system for home and building control worldwide

- The task lies in convincing key market players in all countries, to show them the benefits of using the KNX system

- It is essential to understand the local market needs and translate them in a KNX strategy adapted to that market

KNX is addressing and will address international needs

The Future of KNX

Growth

- In 2015 about 70% of the worldwide construction market will be in the emerging countries such as Brazil, Russia, India and China

- Only standardized systems are future proofed

- Other emerging markets will follow this strategy as well

KNX has and will stimulate growth