



The worldwide STANDARD for home and building control









www.knx.org



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KNX: 10 strong points (1)

Manufacturers

A technology supported and implemented by SMEs and multinationals worldwide

Strong Association

International Association in Brussels and representation in many countries worldwide

Intellectual Property Rights

- Free for KNX members No single source technology
- Fit for use on different media and in different application domains
 - Twisted Pair, wireless, IP and PL
 - Lighting, Façade control, security, any type of zoned HVAC control, Monitoring, Metering, Load shedding, Scheduling, Audio control,

Seamless interoperability

Between products of different manufacturers/application domains





















KNX: 10 strong points (2)

- One common design and commissioning tool
 - ETS™ Engineering Tool Software
 - Easy Mode mechanisms however allow linking without ETS for simple functions and smaller scale installations
- Common Training
 - Network of independent KNX training centers in many countries worldwide
- Product Certification
 - Products with KNX Trademark have been positively tested by third parties
- Internationally standardized
 - CENELEC EN 50090 CEN 13321 ISO/IEC 14543-3 GB/T 20965
- Large service network of qualified contractors/designers/integrators
 - Many ten thousands of KNX partners worldwide





















Evolution of KNX Members





2013: 55 New Manufacturers from 24 Countries (1)

Australia



Belgium

China



Canada

KNXENGINEERING



Germany













Czech Republic



Croatia



Denmark



Greece



India





2013: 55 New Manufacturers from 24 Countries (2)

Italy



New Caledonia



New Zealand



Poland



Singapore



Slovenia



Turkey

S-Korea



Sweden



Spain



Switzerland



USA



NARONIC

UK

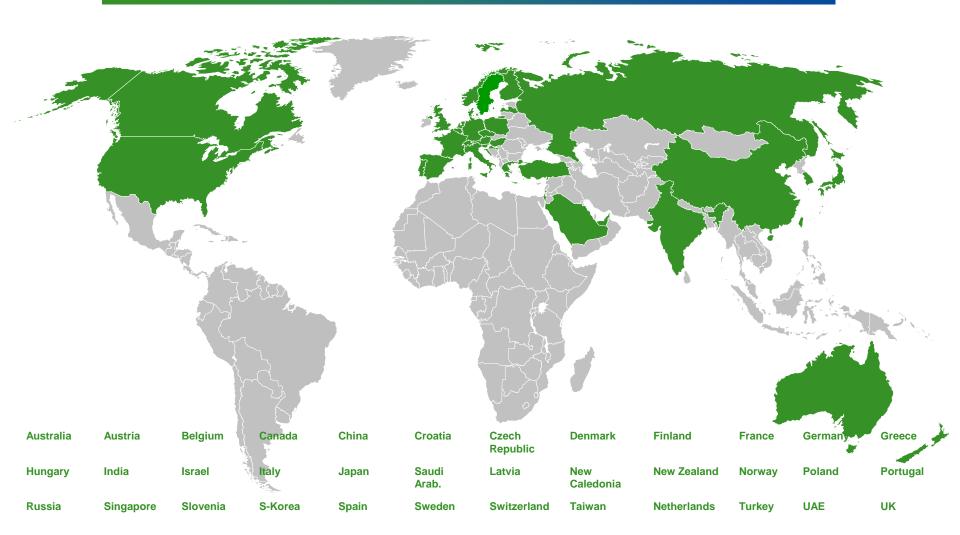
RET

šh; fgA Smart Solutions

UAE

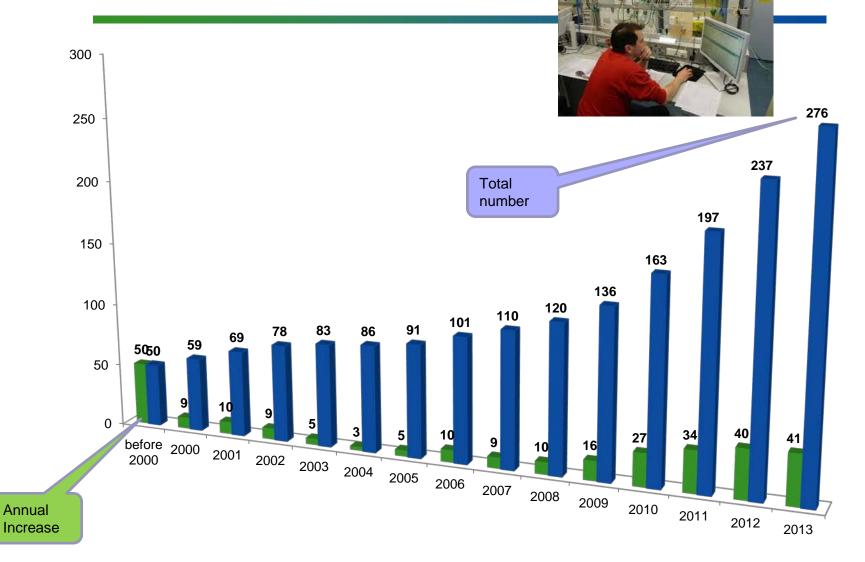


Currently: 348 Members in 37 countries

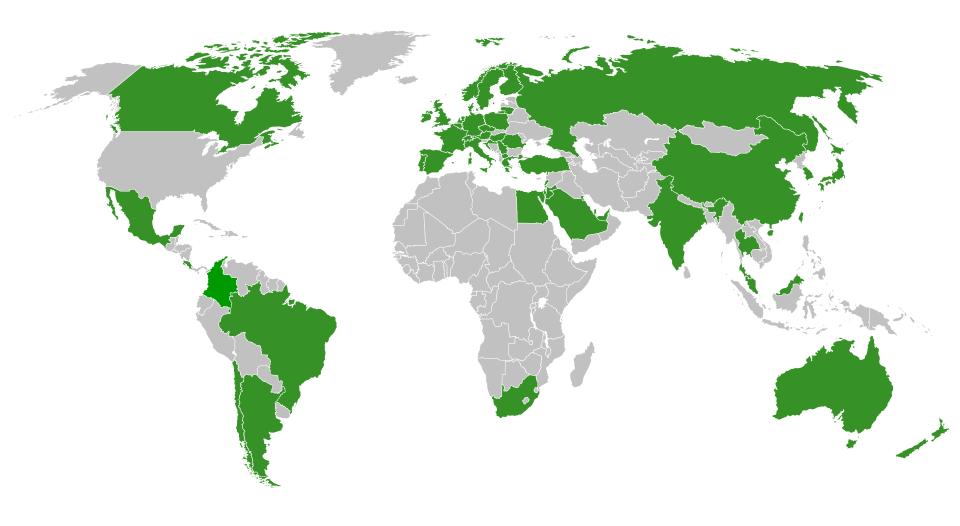




Evolution of KNX Training Centres



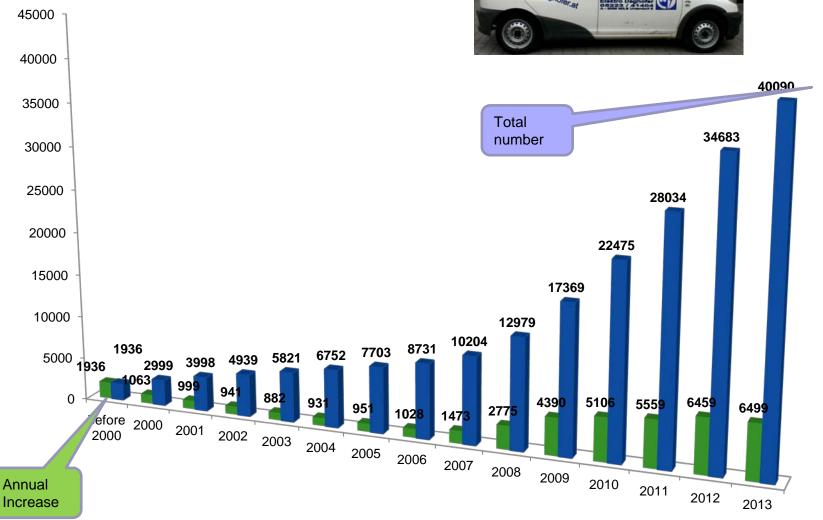
Currently: 291 Training Centres in 54 countries



Evolution of KNX Partners

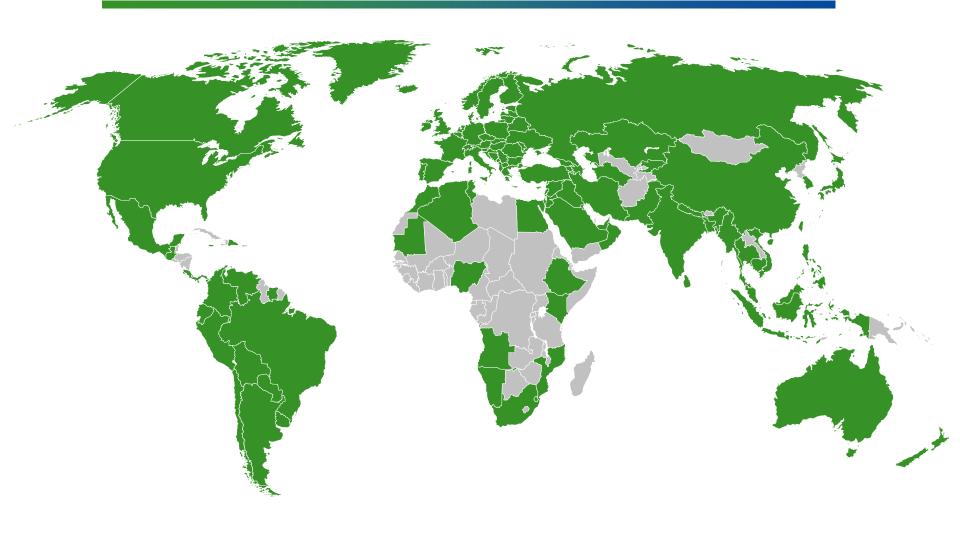








Currenlty: 42296 Partners in 127 countries







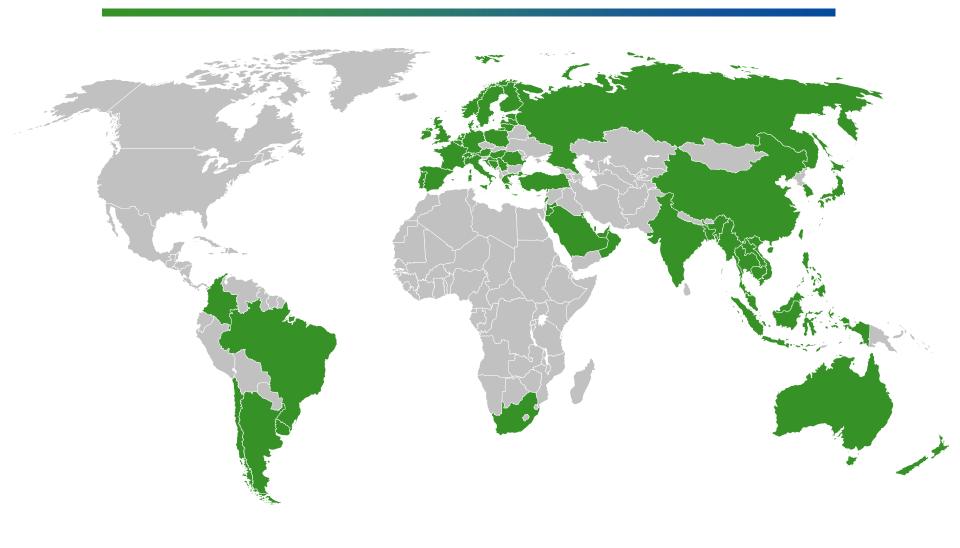
Local represenation of KNX: 40 KNX National Groups







KNX National Groups: worldmap

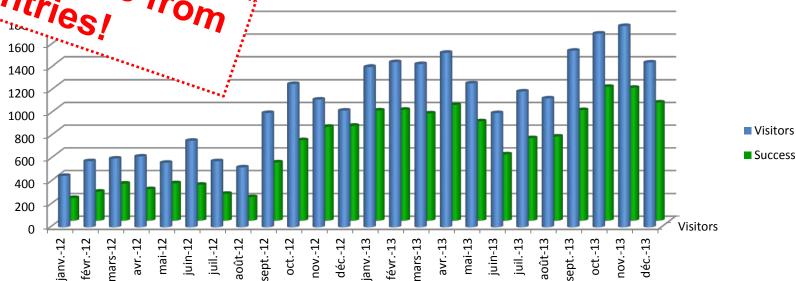




ETS eCampus: a clear success!

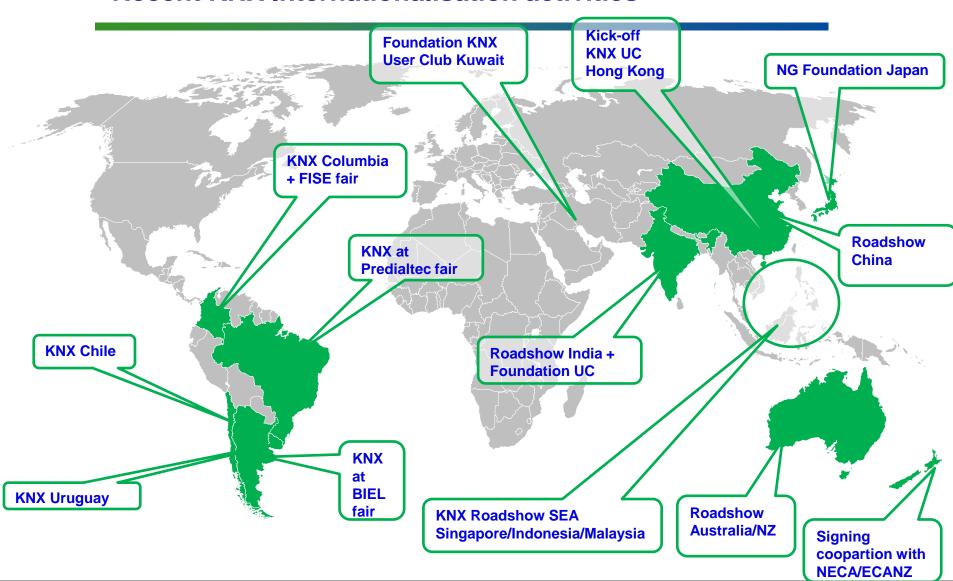


- Get acquainted with KNX and ETS quick and easy!
 - Reduced effort:
 - on average 2 hours
 - Free of charge
 - For each chapter: exercise + test
 - When passed: eCampus certificate + ETS 4 Lite





Recent KNX Internationalisation activities





KNX®

Recent KNX activities worldwide



KNX at ish Frankfurt 0313



KNX at Worldskills Leipzig 0713



GB/T standardization ceremony 0513 Beijing



3rd KNX Collogium KNX DE



KNX Forum Brazil



KNX Forum – Smart Grid Exhibition Japan - 0213



KNX Roadshow India 0913 – Puna, New Delhi, Kolkata, Chennai



light+building 2014: KNX booths



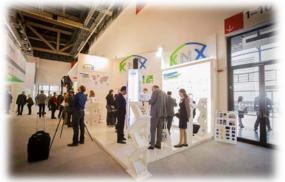




KNX city - Galleria

KNX Member Community booth Hall 8





Satellite Booth Hall 11

Joint booth with ZVEI/ZVEH in Hall 9 – showing applications

Member presence

 > 100 KNX member companies represented with own booth

KNX Booths

- Main booth: KNX city in Galleria South 700 m²
- Hall 8 (F98) International Member Community Booth
- Hall 9.0 (B30): Joint booth with ZVEI /ZVEH

 Energy Efficiency Prize 2014 -Applications
- Hall 11.1 (C92) Satellite booth incl. member presentations

Other KNX presence:

- ZVEH KNX based eHouse Hall 8.0 J60
- BZL Young Electrician KNX contest -Hall 9.1 D18



Improve energy efficiency with KNX

- Scientific studies (HS Bremen, TU Trento)
 - Up to 50% energy reduction compared to conventional installation techniques in a well insulated building
- Calculate effect of KNX on energy efficiency by tools of KNX members
- KNX controlled HVAC applications
 - KNX Room Controllers
 - KNX Schedulers
 - Presence Detectors
 - Window Contacts
 - C02 sensors
- KNX Controlled Lighting
 - Daylight intensity sensors
 - Presence Sensors
- KNX controlled Sun Shading
 - Weather stations
 - Blind actuators
- KNX Smart Metering/Smart Grid









New KNX Publications





Demand Side Management = adjustment of loads or energy generation in buildings depending on e.g. smart grid events

Discussion topic in many international standardization committees

Paper shows that KNX can be used to technically realize demand response in homes and buildings

Document is part of the bigger concept 'KNX City'



KNX®

- Participate in (free of charge) KNX eCampus
 - https://onlineshop.knx.org
 - Online course to acquaint with principles of KNX/ETS



- KNX Handbook for Home and Building Control
 - Available in Dutch from KNX Holland (25 €/copy) Contact info@knx.nl

- Visit KNX basic course at KNX certified training center
 - http://www.knx.org/knx-partners/training-centres/list/

















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Thank you for your attention!

Contact: info@knx.org – www.knx.org