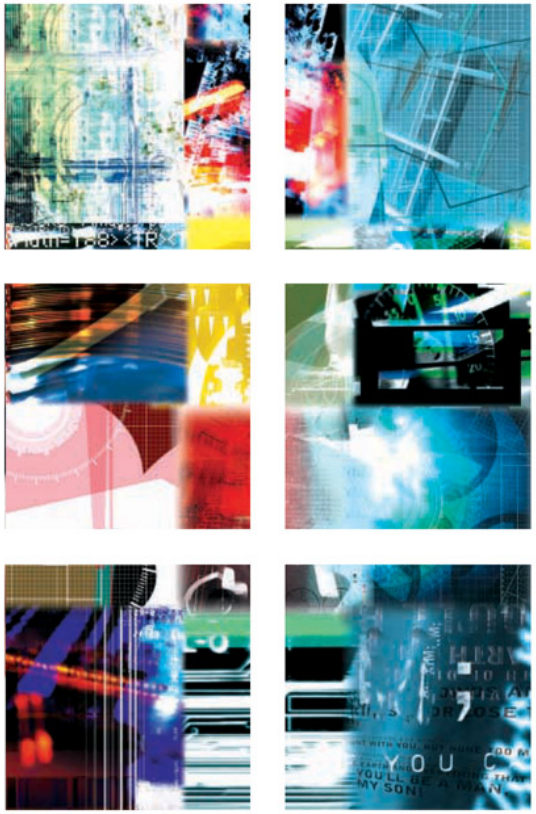


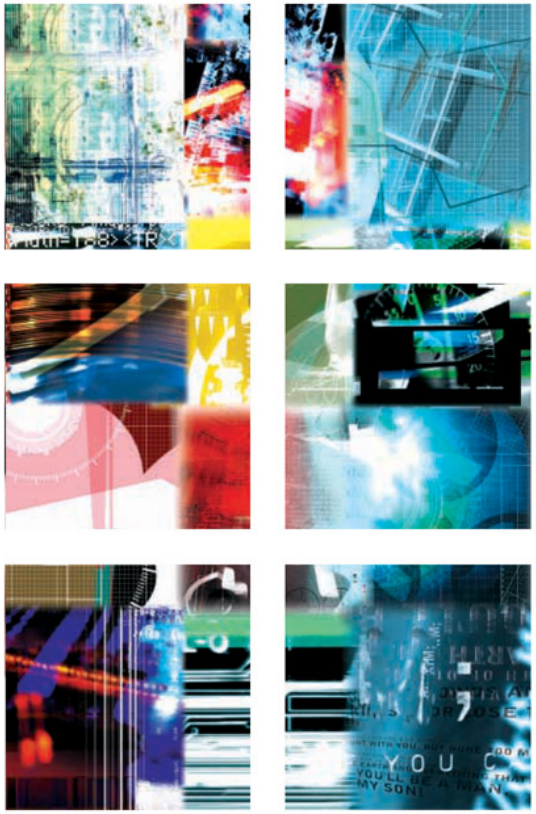
www.knx.org

KNX National Group Czech Republic

Foundation Meeting

September 24th, 2014

KNX Association International



www.knx.org

K N X

The worldwide STANDARD for home and building control

KNX Association International

KNX is the Standard

- CENELEC

EN 50090 – the only European Standard for Home and Building Electronic Systems (HBES) based on KNX.

- CEN

EN 13321-1 – the European Standard for Building Automation based on KNX.

- ISO/IEC

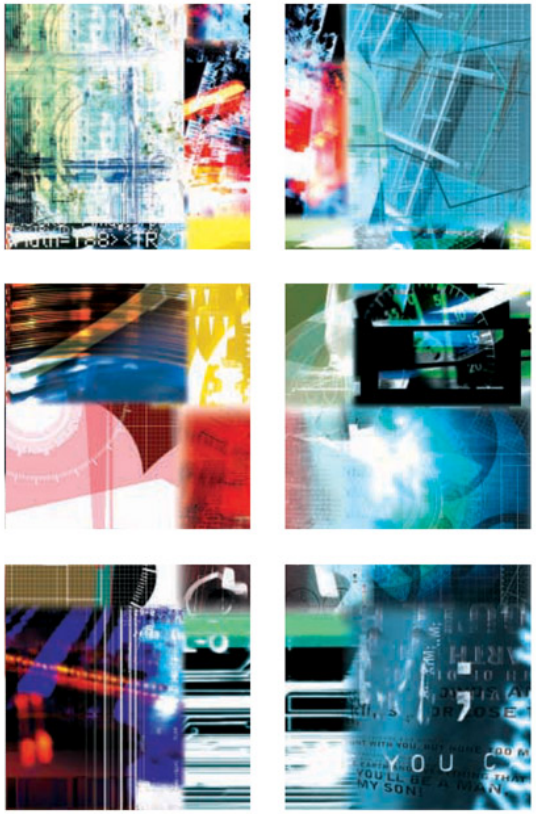
ISO/IEC 14543-3 – the World`s only Standard for Home Electronic Systems (HES) based on KNX.

- GB/T

GB/T 20965 – Chinese Standard for Home and Building Control based on KNX

- US Standard (ANSI/ASHRAE 135)

KNX: The worldwide STANDARD for home and building control!



www.knx.org

Advantages of KNX

KNX – Advantage No. 1

KNX is a standard here to stay!

- CENELEC

2003: KNX became **EN50090**

- CEN

2005: KNX became **EN13321-1/2**

- ISO/IEC

2006: KNX became **ISO/IEC14543-3**

- SAC (P.R. China)

2013: KNX became **GB/T 20965**

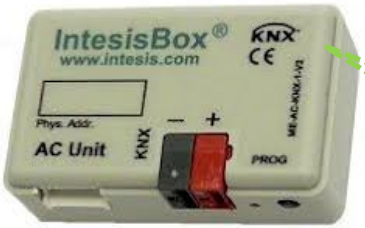
- ANSI/ASHRAE

KNX referenced in **US ANSI/ASHRAE** standard **135**

KNX – Advantage No. 2

Guaranteed Interoperability through neutral certification

1. KNX is the only home and building control standard running global certification schemes for
   A. Products
   B. Training Centers
   C. Persons



2. Product compliance is checked at neutral third party test laboratories

KNX Logo guarantees interoperability between products of different manufacturers and applications

KNX – Advantage No. 3

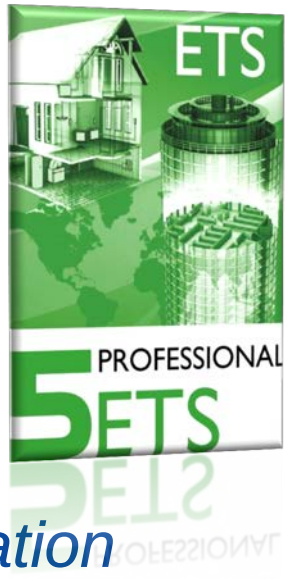
KNX = High Product Quality

1. KNX Association requires *high level production and quality control* during all stages of the product's life

2. All manufacturers have to show compliance to *ISO 9001* = prerequisite for product certification

KNX – Advantage No. 4

One Tool – the Engineering Tool Software ETS™!



1. One PC software tool for
   A. Design
   B. Configuration
   C. Diagnostics

   of KNX all certified products
2. Tool is *manufacturer, devices and application* independent – integrator can combine products of different manufacturers and applications in one installation
3. Tool is extendable with customized Apps

KNX – Advantage No. 5

Fit for use in ALL applications in home and building control!

KNX – Advantage No. 6

Fit for use in all kinds of buildings!

1. New or Existing Buildings
2. One family houses or large size buildings
3. Easy extendible/adaptable to new needs

KNX – Advantage No. 7

Support for different transmission media

1. *Twisted Pair*

2. *Power Line*

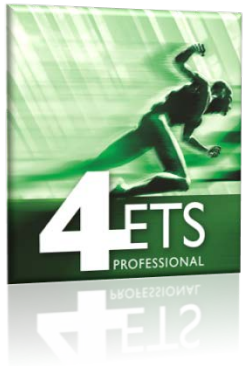
3. Radio Frequency

4. *Ethernet/WIFI*

KNX – Advantage No. 8

Support for different configuration Modes

1. *System Mode*
   A. Configuration with PC (ETS)
   B. Prior basic course training recommended
   C. Any size of installation



2. *Easy Mode*
   A. Configuration without PC
   B. No prior training necessary
   C. Small or medium size installations

KNX – Advantage No. 9

Easy coupling to other systems

1. KNX members offer large variety of gateways to couple to other systems

2. Examples

   A. Mapping to BACnet

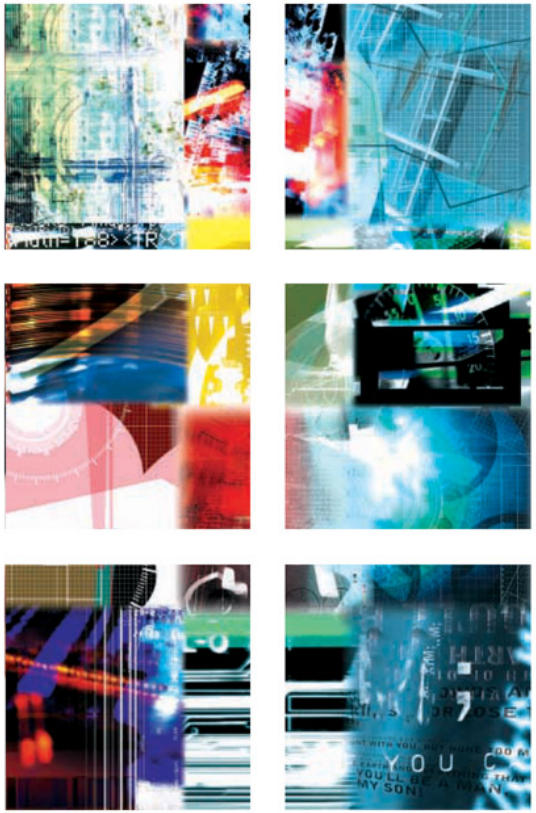
   B. Interfacing with DALI

KNX – Advantage No. 10

KNX is independent from any hard- or software technology

1. KNX manufacturers can develop own protocol solution
    1. From scratch
    2. On basis of existing certified system components from other KNX members

2. KNX is completely FREE of additional royalty fees: No IPR royalties to be paid for KNX standard features used in KNX certified produ to other KNX members



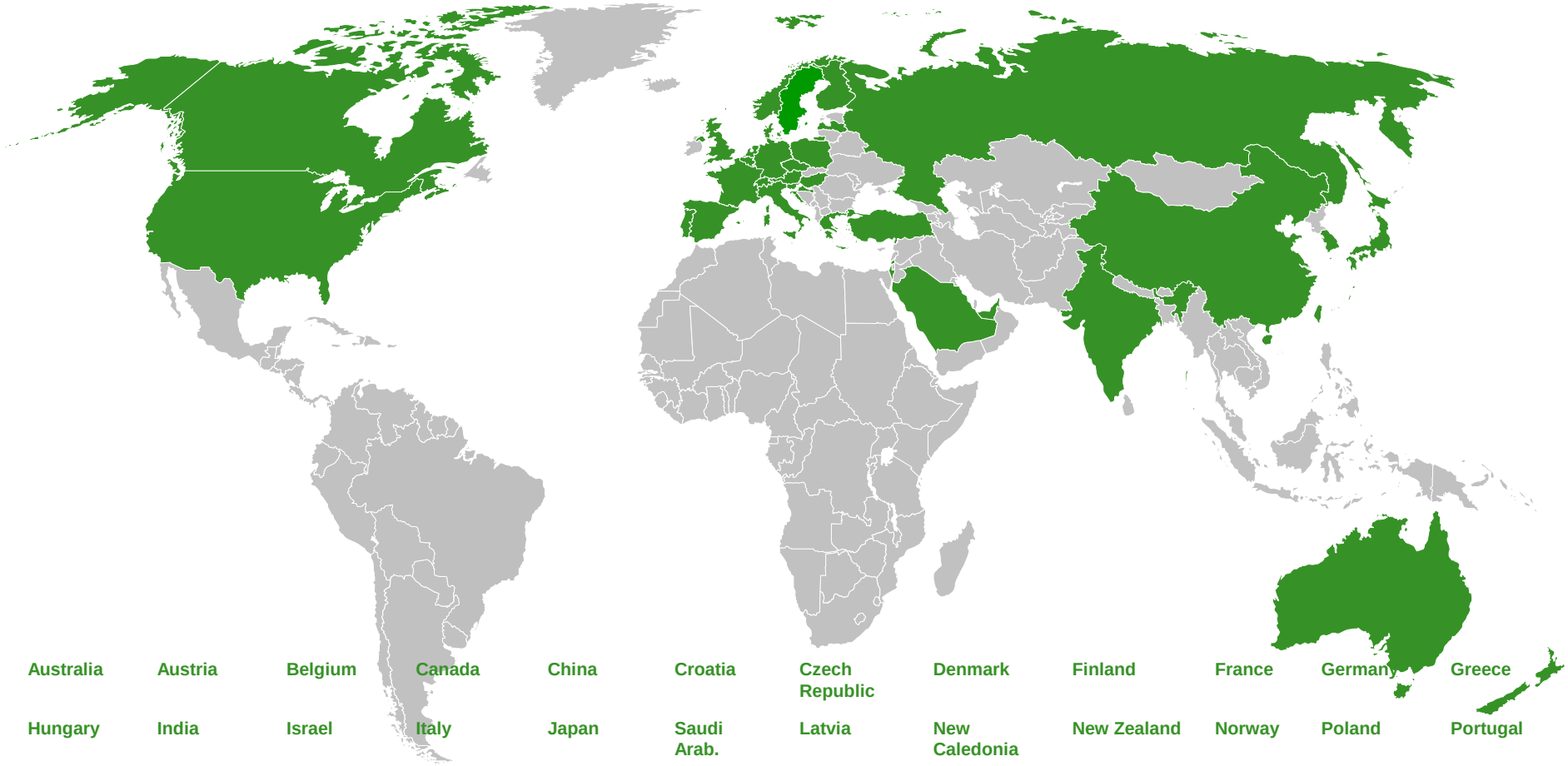
www.knx.org

KNX Facts and Figures

September 2014

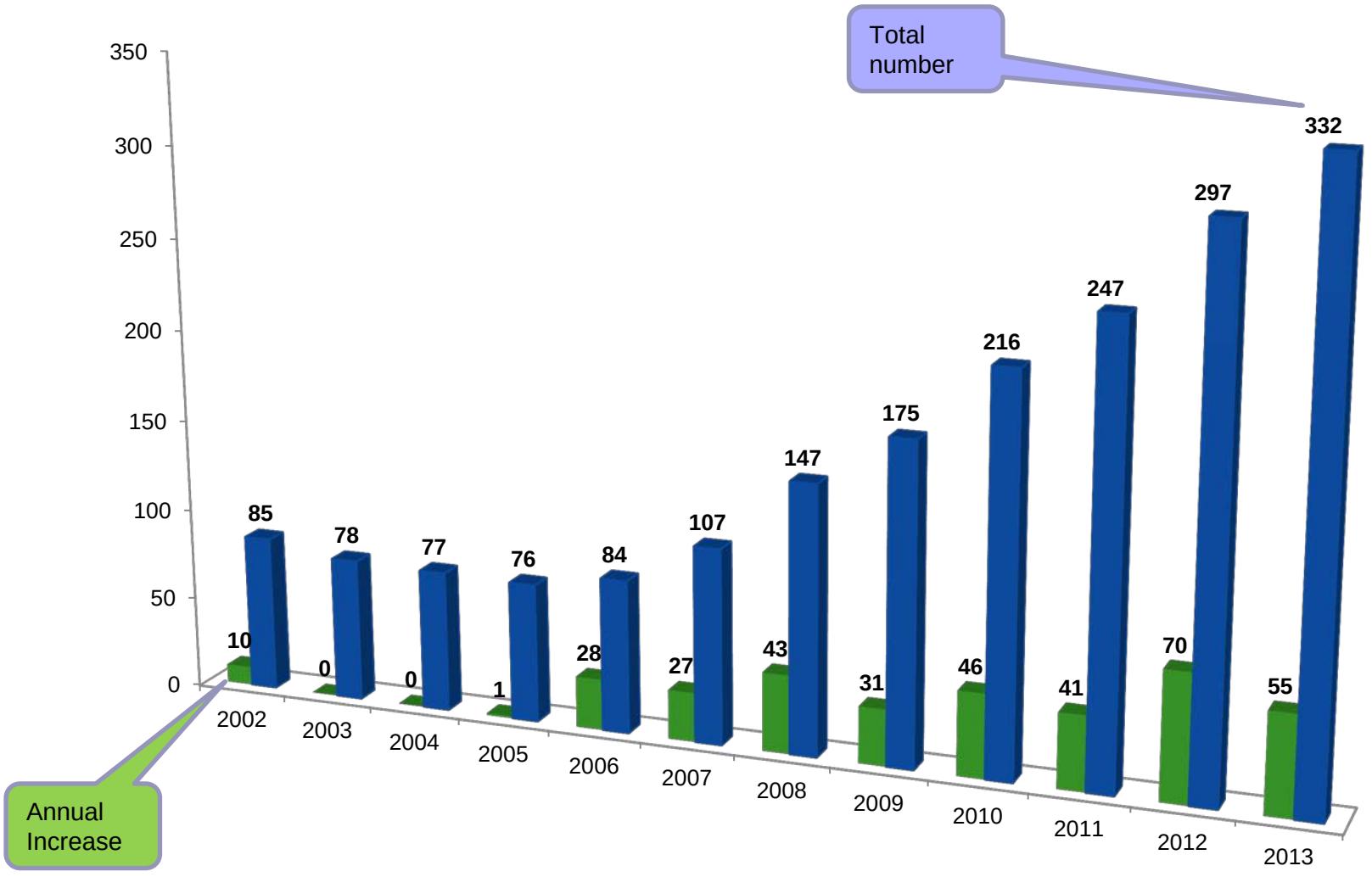
369 Members in 37 countries

369 Members in 37 countries



Australia	Austria	Belgium	Canada	China	Croatia	Czech Republic	Denmark	Finland	France	Germany	Greece
Hungary	India	Israel	Italy	Japan	Saudi Arab.	Latvia	New Caledonia	New Zealand	Norway	Poland	Portugal
Russia	Singapore	Slovenia	S-Korea	Spain	Sweden	Switzerland	Taiwan	Netherlands	Turkey	UAE	UK
USA											

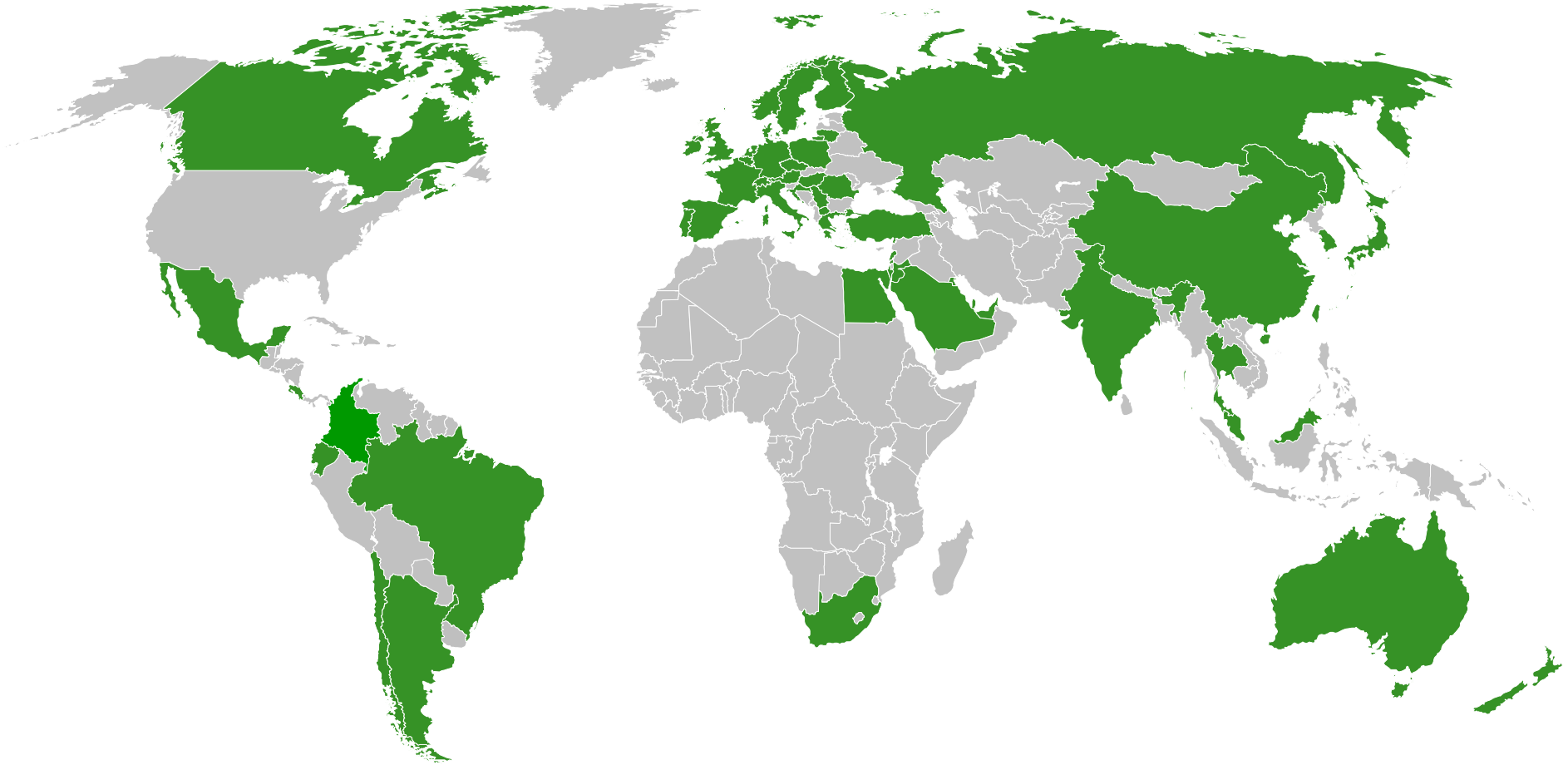
KNX Members


Total number
Annual Increase
350
300
250
200
150
100
50
0
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
85
78
77
76
84
107
147
175
216
247
297
332
10
0
0
1
28
27
43
31
46
41
70
55

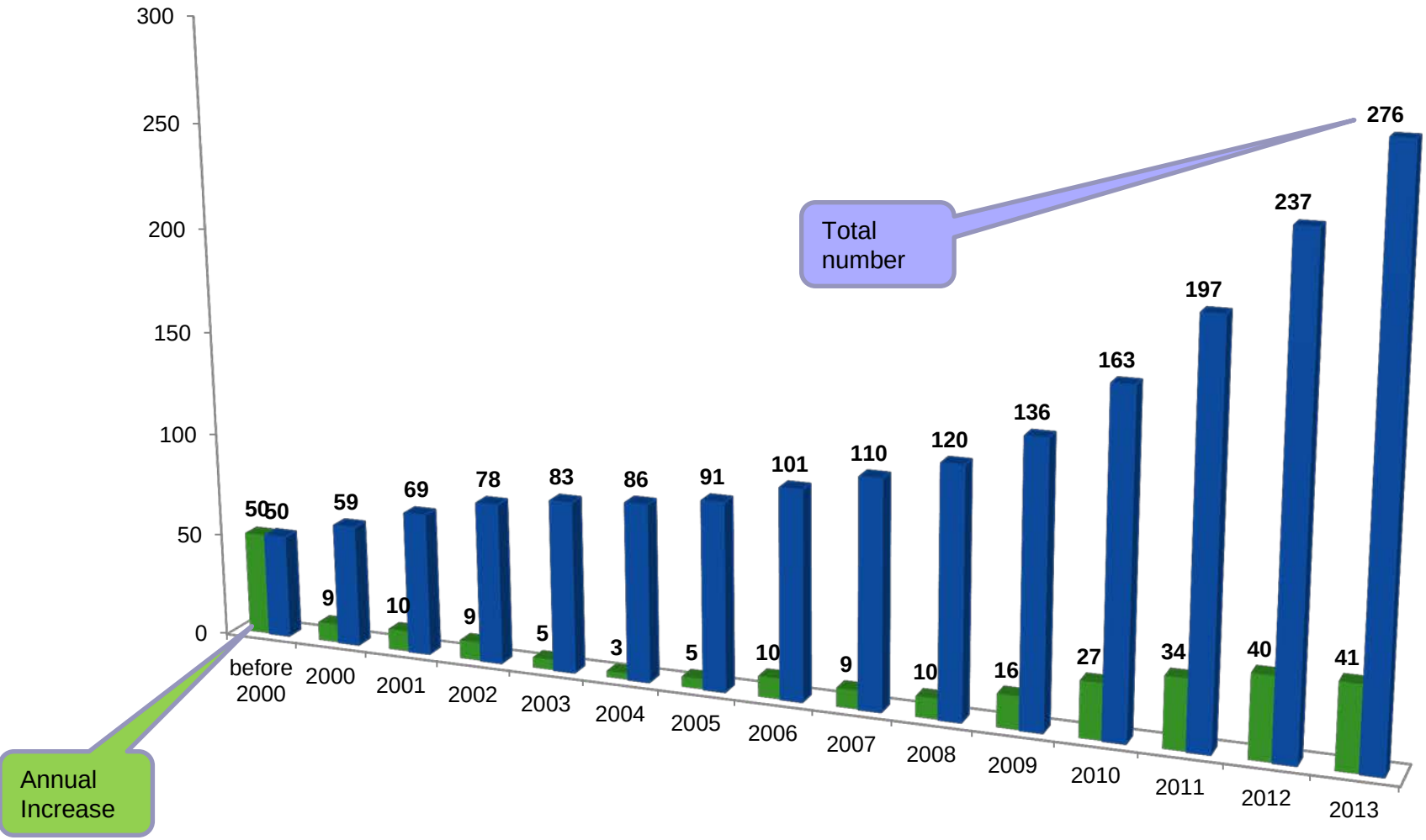
More than 7000 certified KNX Devices

299 Training Centres in 55 countries

299 Training Centres in 55 countries

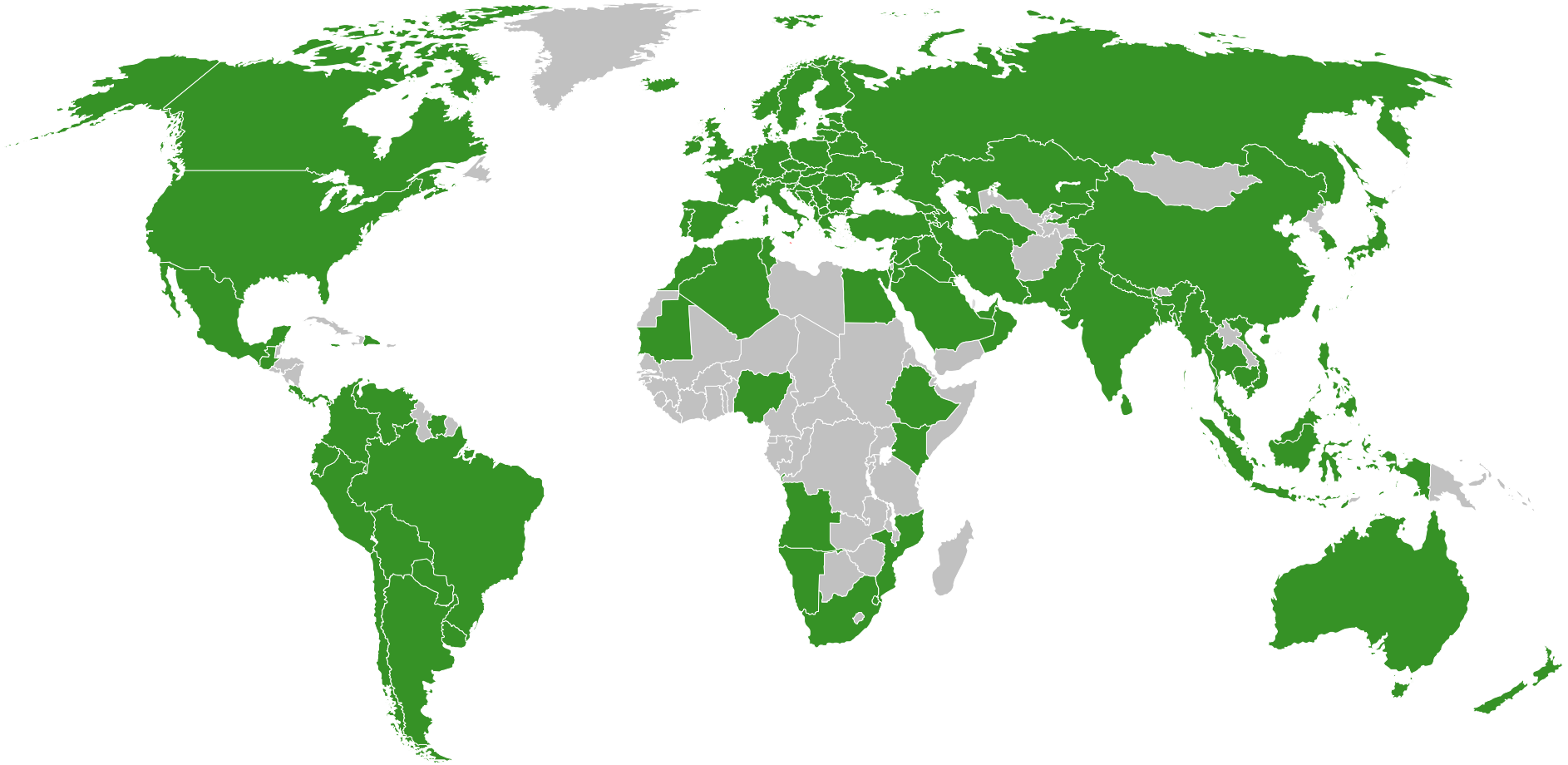


KNX Training Centres



43573 Partners in 127 countries

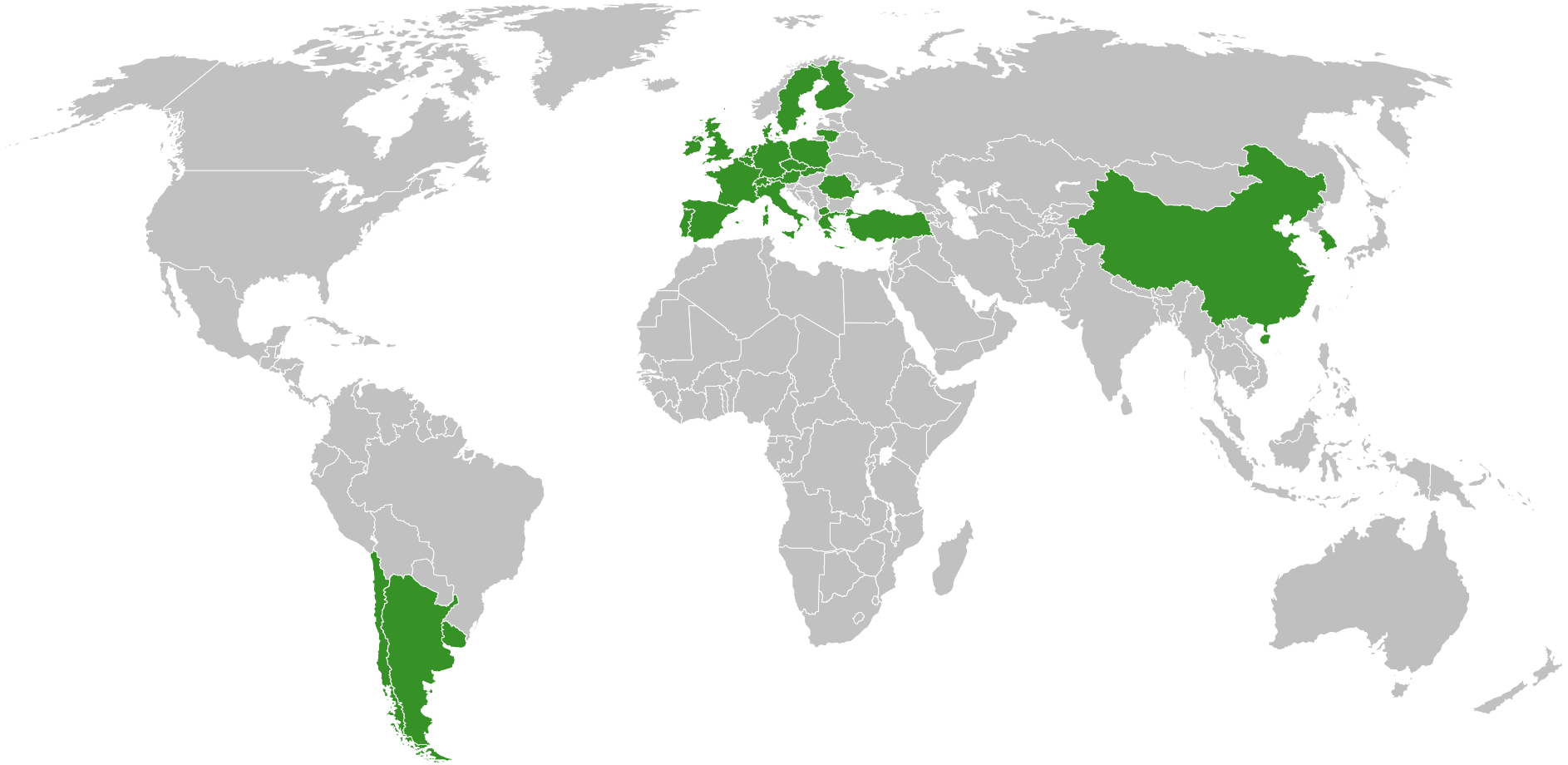
43573 Partners in 127 countries



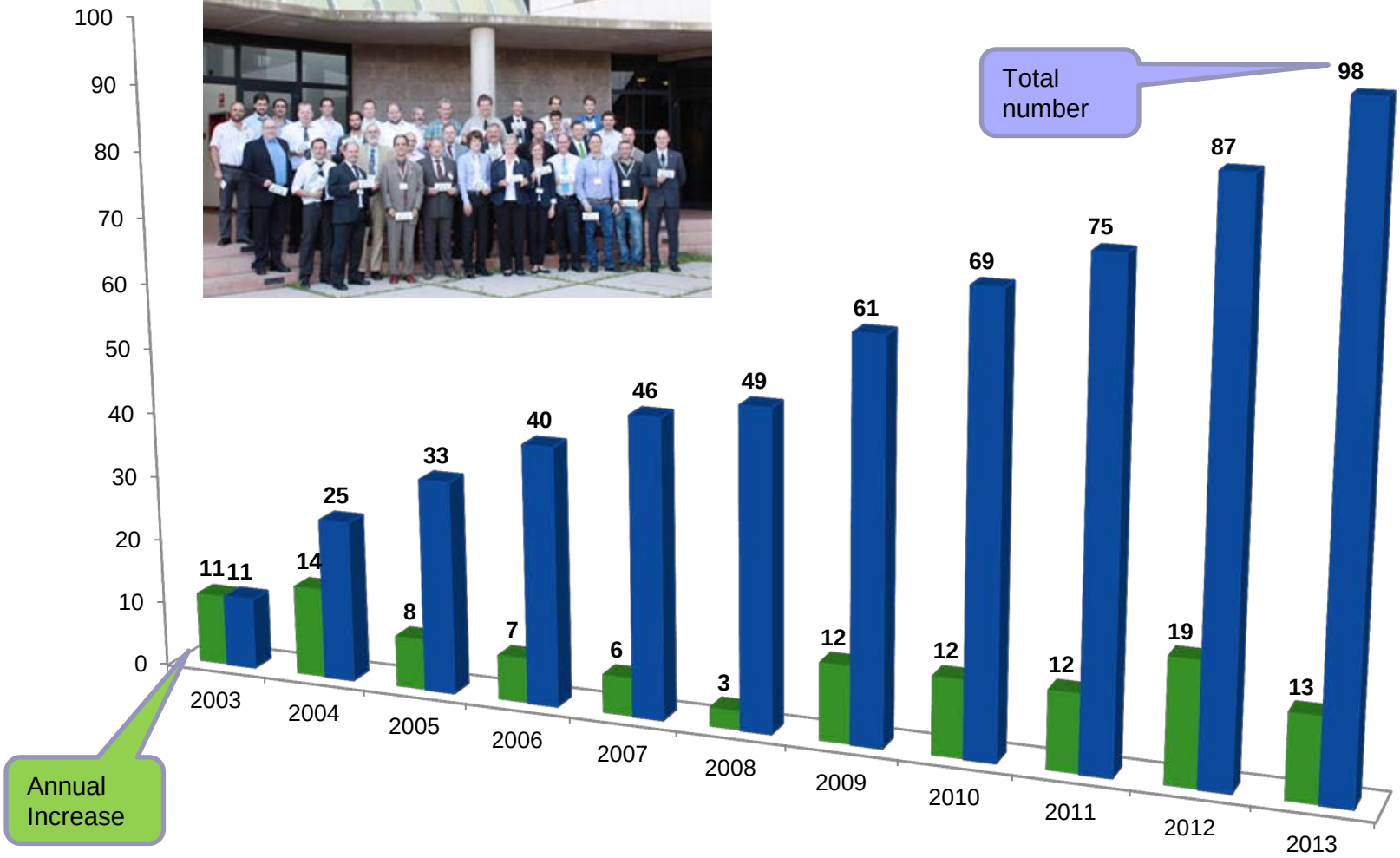
KNX Partners

107 Scientific Partners in 29 countries

107 Scientific Partners in 29 countries



KNX Scientific Partners



16 Userclubs in 15 countries

Austria

Belgium

Germany

Greece

Hong Kong

Hungary

India

Kuwait

Malaysia

Norway

Poland

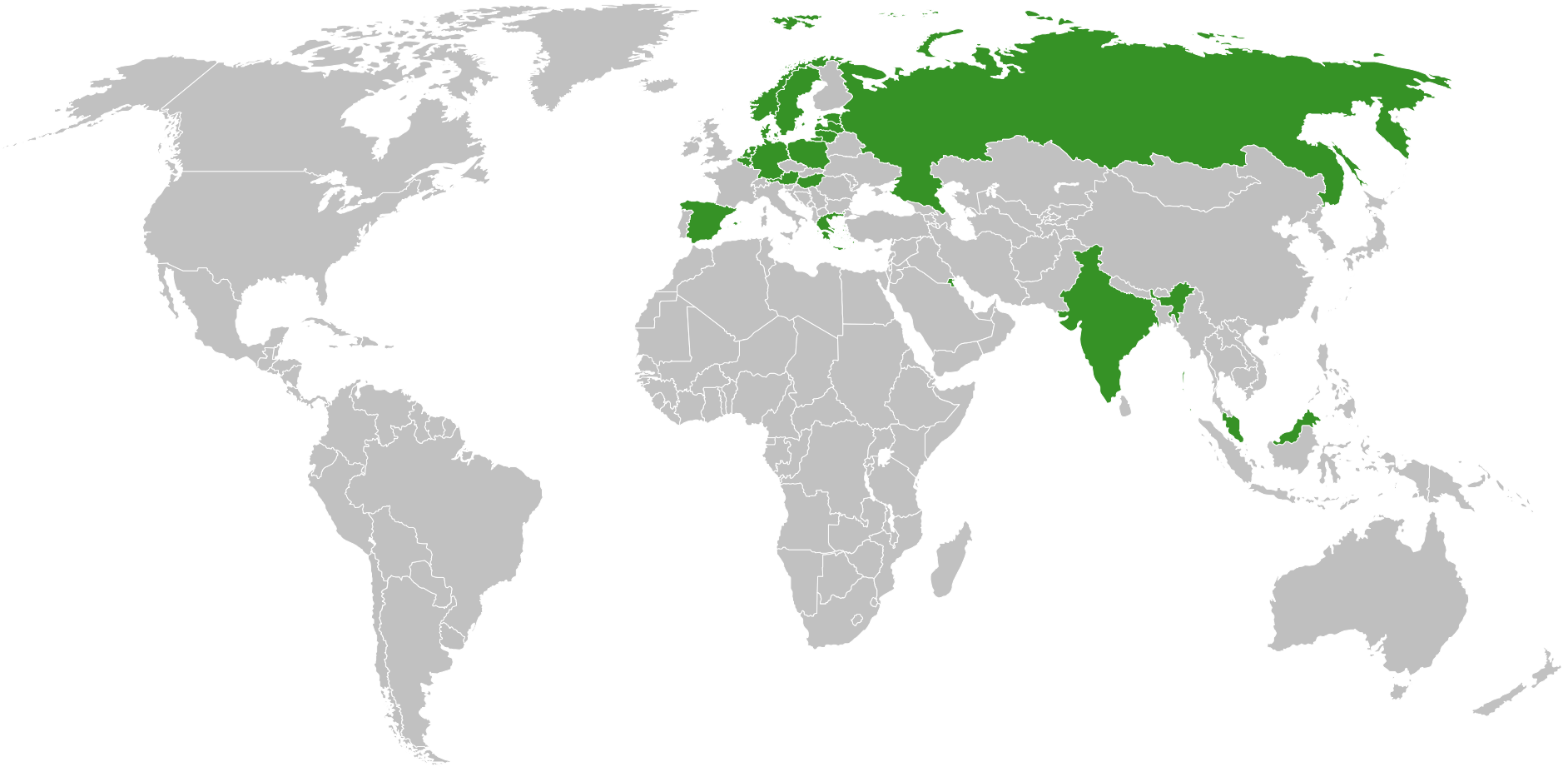
Russia, CIS and Baltics

Spain

Sweden

The Netherlands

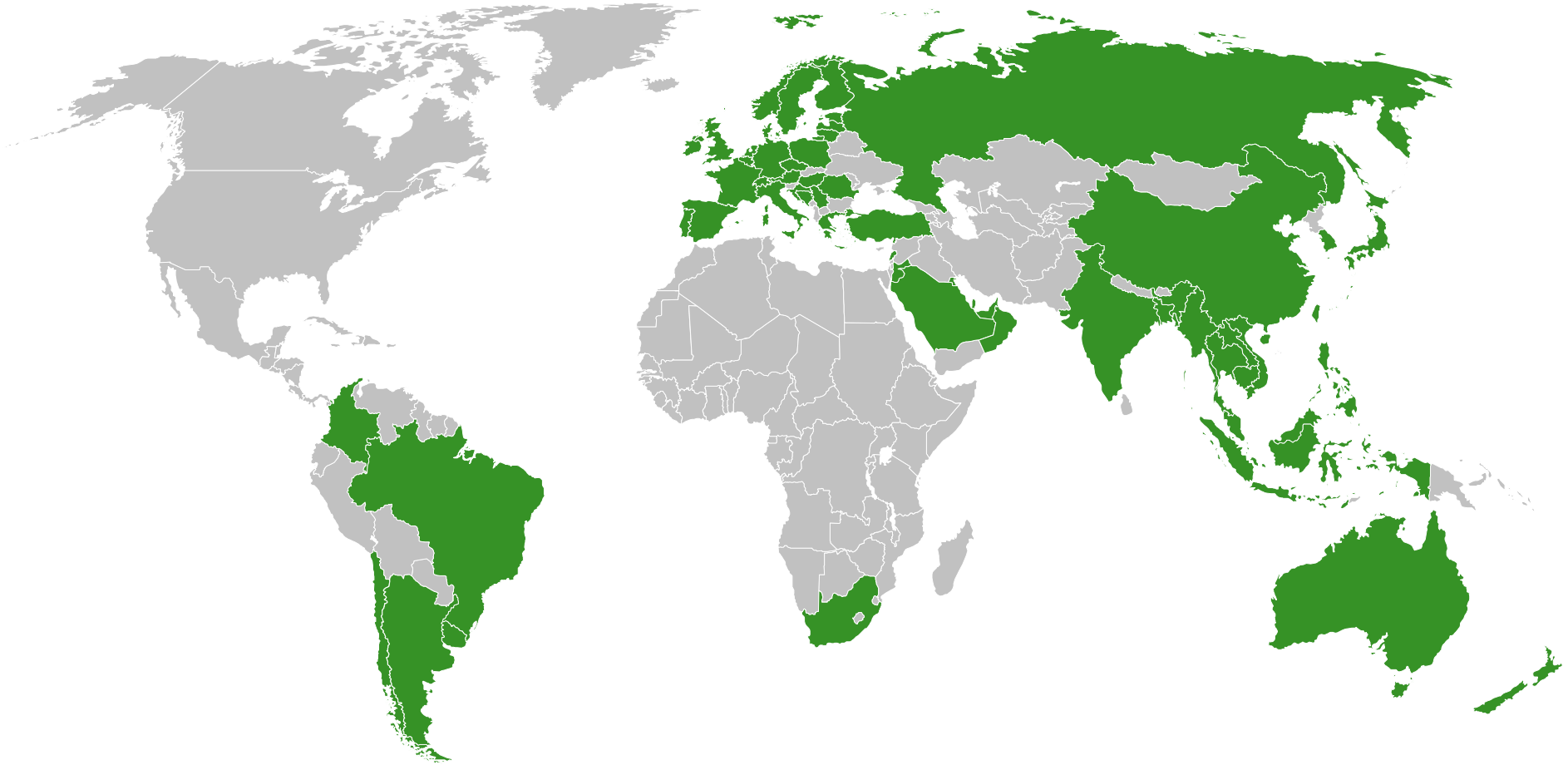
16 Userclubs in 15 countries



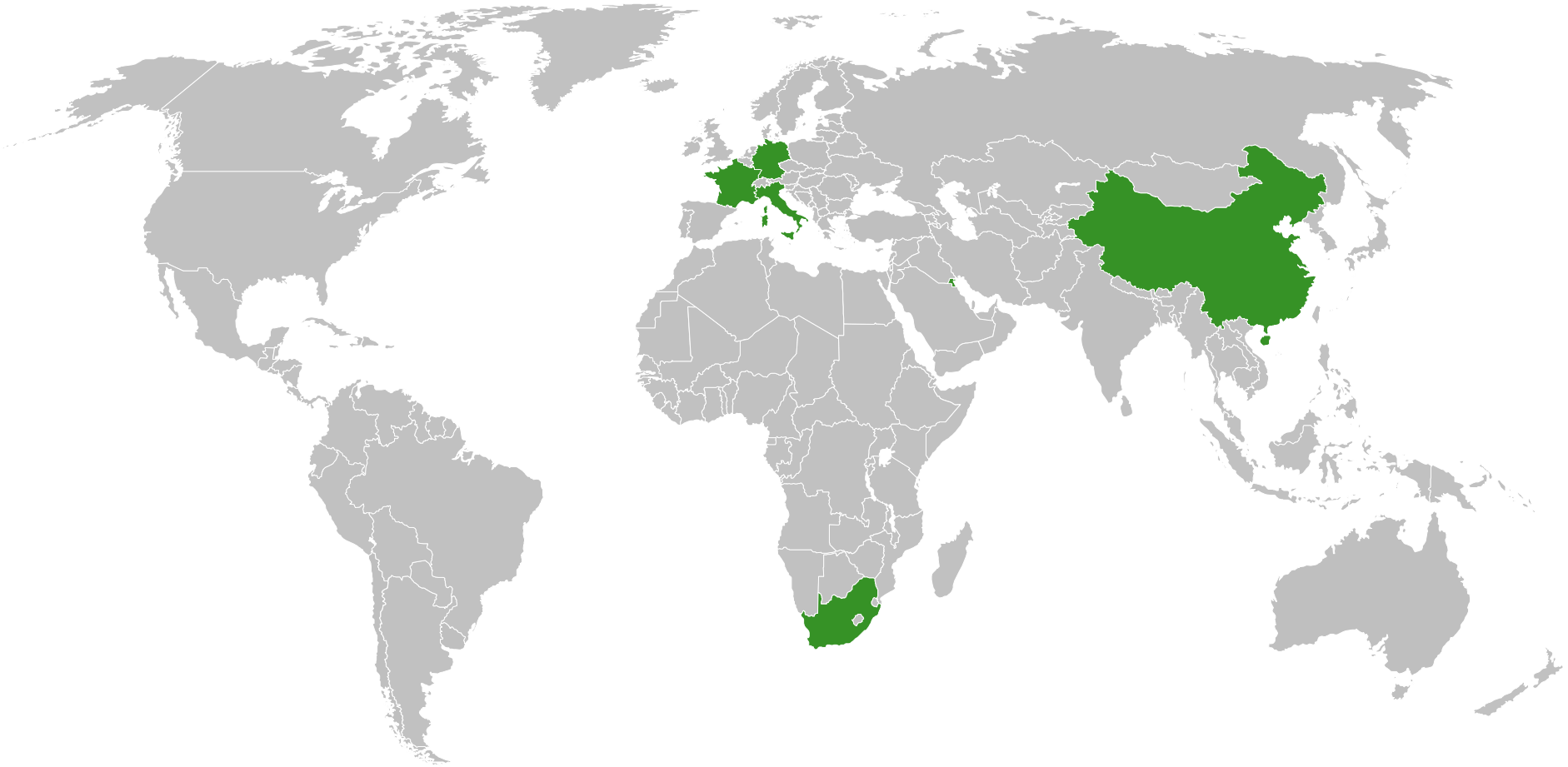
7 Associated Partners

Local represenation of KNX: 42 KNX National Groups

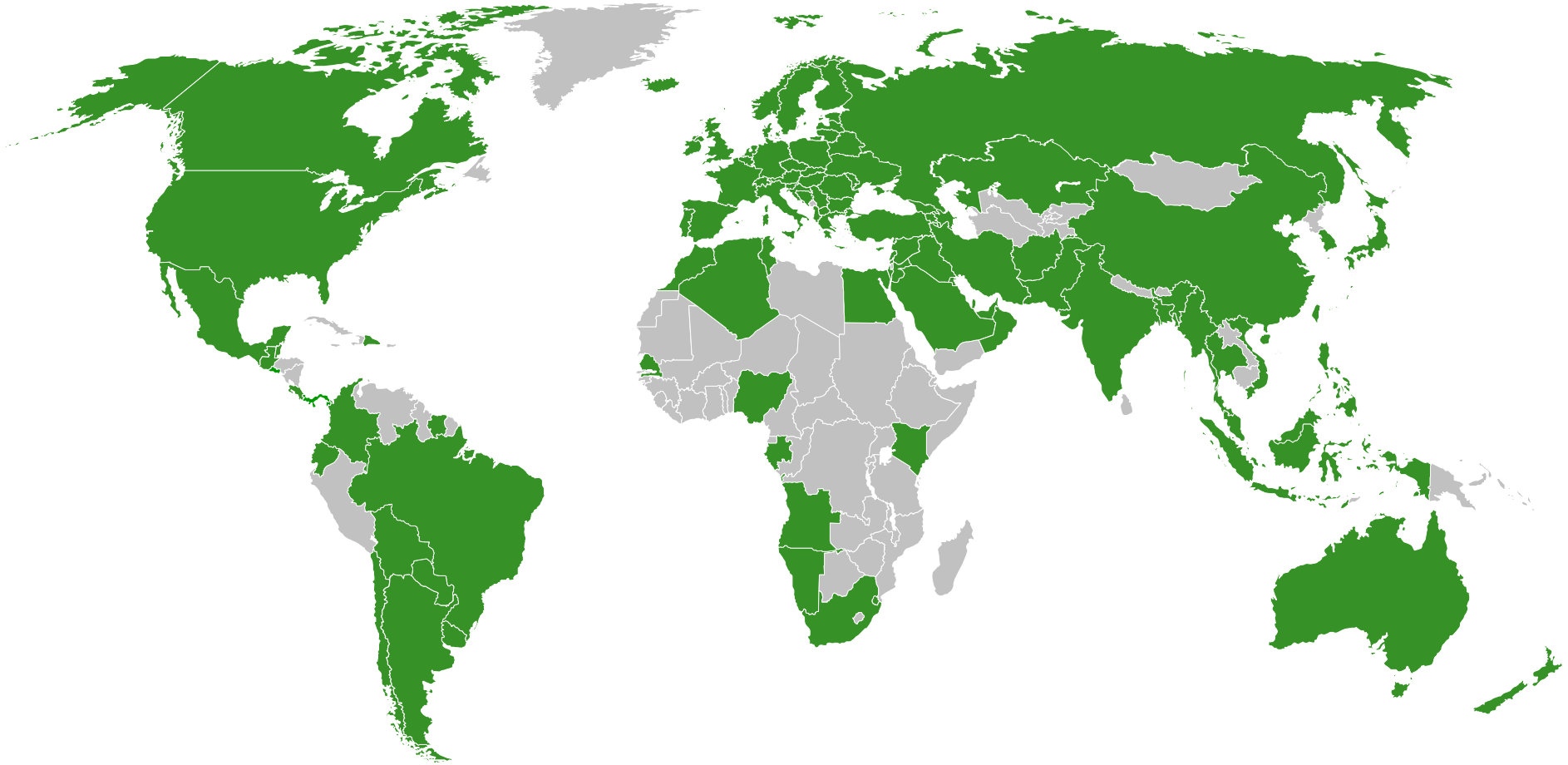
42 KNX National Groups



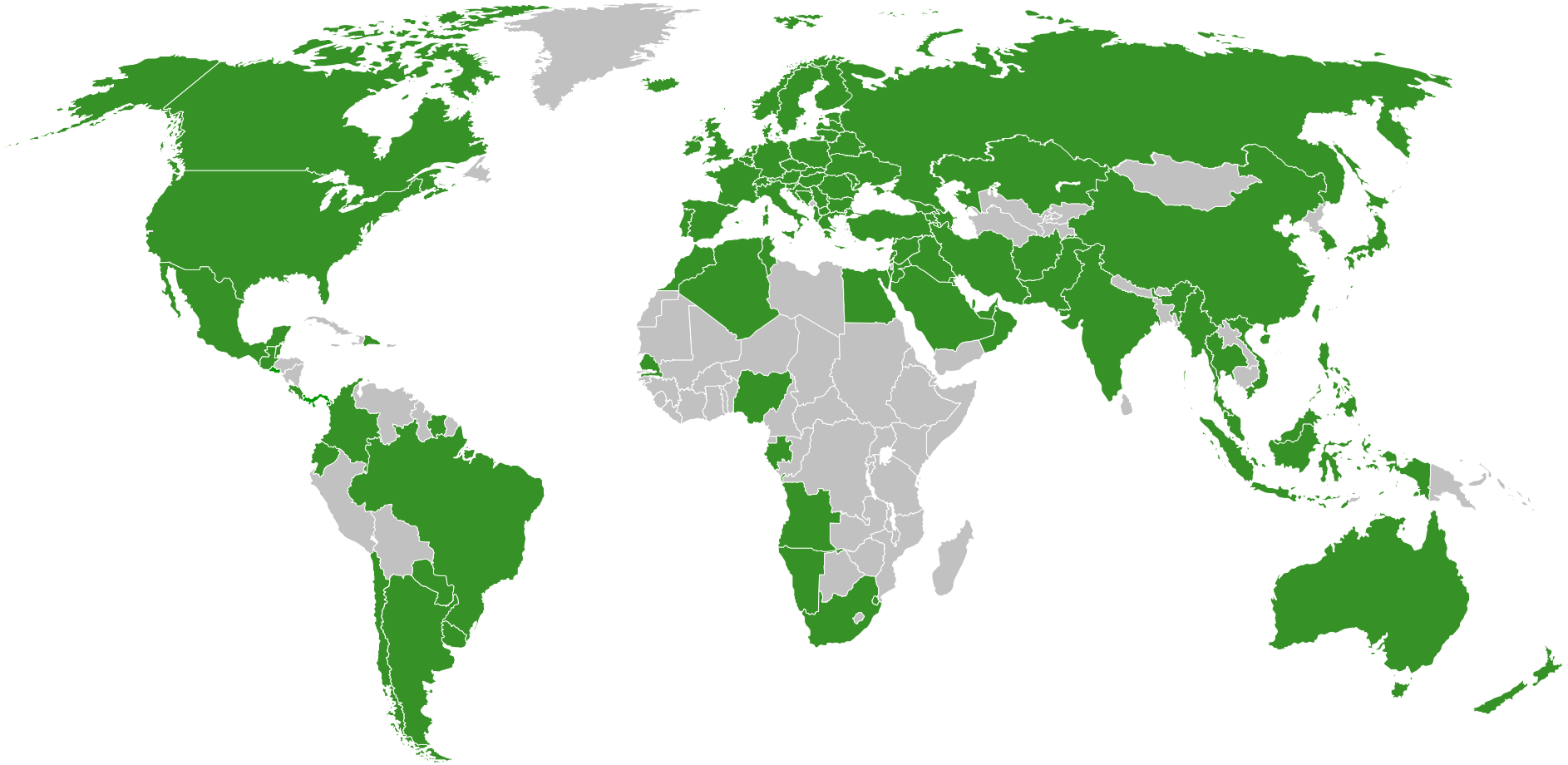
11 Test labs in 5 countries

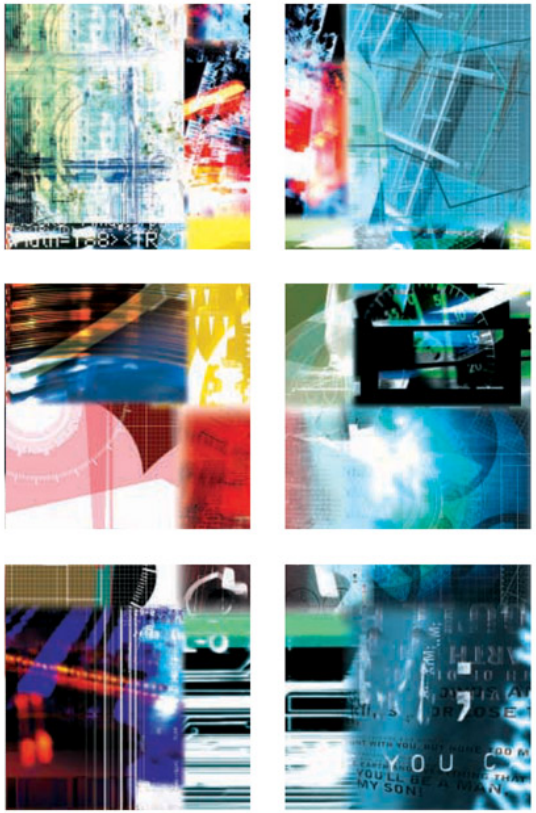


ETS Sold in more than 120 countries



KNX Projects in more than 120 countries





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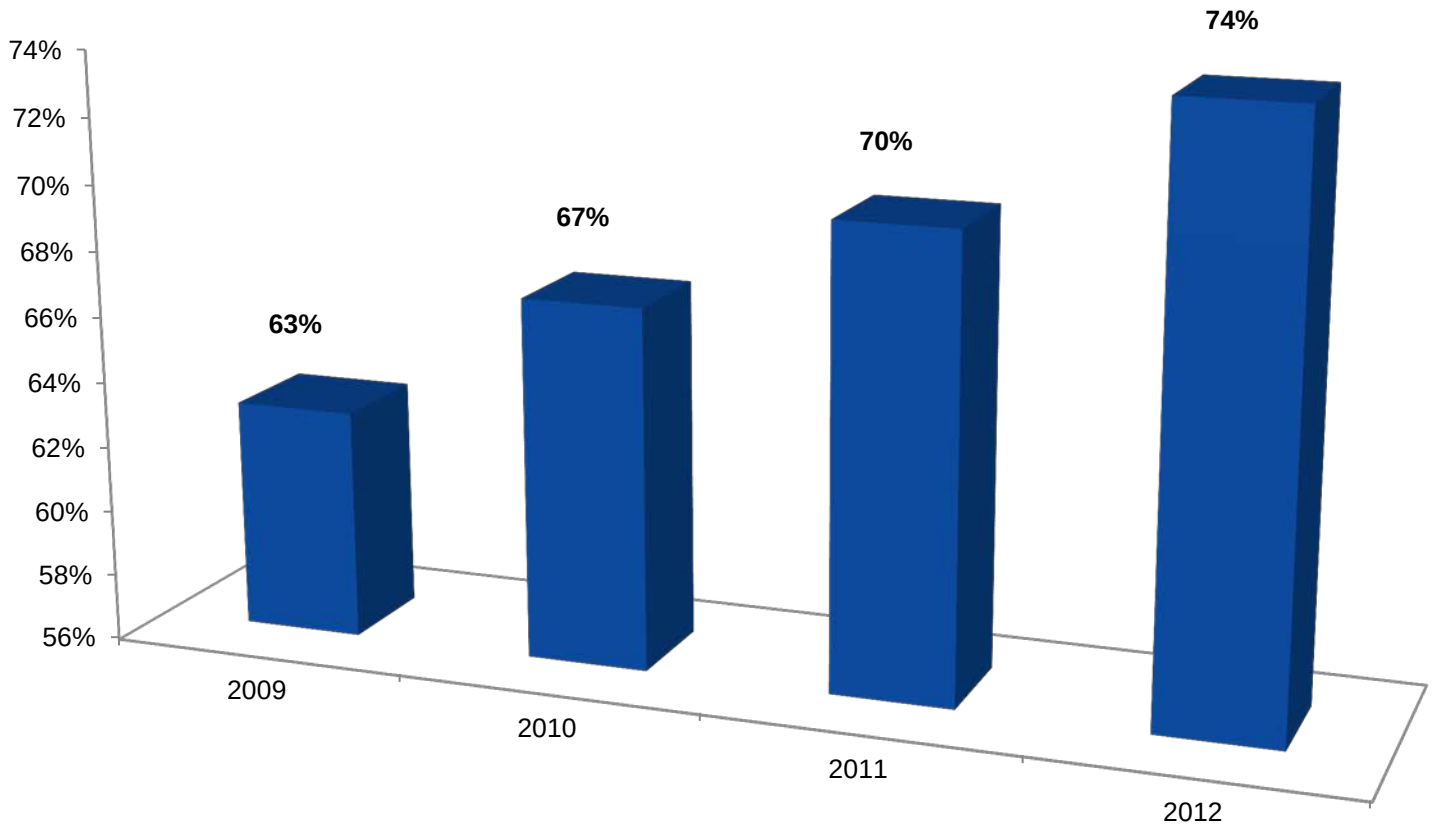
BSRIA

European Smart Home Market Study

European Smart Home Market Study

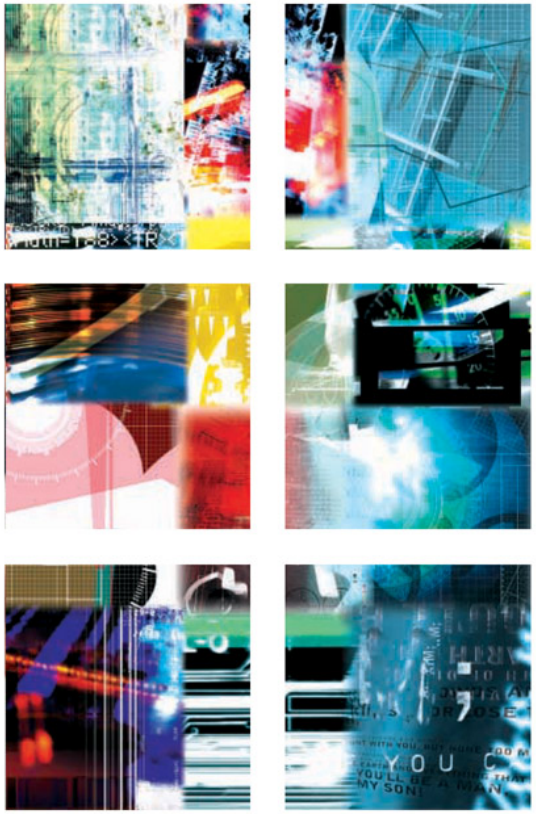
Share of KNX in the total smart home market value



European Smart Home Market Study

„In 2011 the share of KNX-based solutions exceeded 70% of the total market value. In the last three years, the KNX share has been adding three percentage points on average, suggesting the growing importance of KNX“

(„BSRIA - Smart home market: impressive growth; new opportunities”, June 20, 2012)



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KNX city

New business opportunities

city

From the KNX building to the KNX city

- Buildings are responsible worldwide for…

  …40% of the consumption of final energy

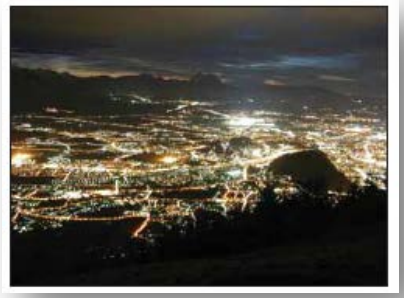
  …21% of the production of greenhouse gases

  …an increasing demand for energy

Energy Efficiency in the KNX Buildings

Energy Savings with KNX in the buildings:

- up to **40 %** with KNX shading control
- up to **50 %** with KNX individual room control
- up to **60 %** with KNX lighting control
- up to **60 %** with KNX ventilation control



Electricity for the City of Salzburg *(Austria)*

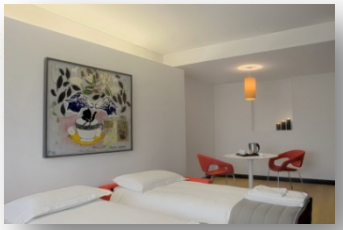
The largest building in the Middle East

Oundle School, Peterborough *(Great Britain)*

Energy efficiency in Guarda Polytechnic Institute

A family home in low energy standard in Innsbruck *(Austria)*

A new bioclimatic office building in Huesca *(Spain)*



Nerocubo Hotel in Italy

Improved energy balance in insurance company (Prague)

From the KNX building to the KNX city

- Cities are worldwide responsible for…
  - …two third of the total energy consumption
  - … 60% of the total water consumption
  - … 70% of the production of greenhouse gases
- More than 50% of the world population live already today in metropolitan areas
  - ➔ Until 2050 it will be up to 70% of the world population

KNX has its focus in the building…

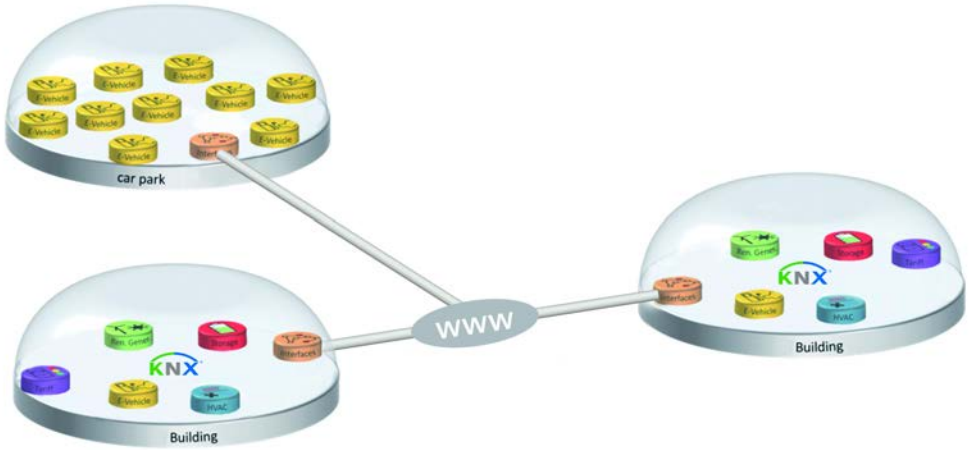
… but considers Smart Grid and city issues

- A “Single solution” doesn’t meet city sustainability objectives
- Smart cities require buildings that interact with the city
- Different fields need to interact. Examples:
  - “Mobility” effects “buildings”, e.g. charging of electric vehicles
  - „Energy generation“ affects buildings, e.g. decentralized generation on roofs of “buildings”.
  - The building affects the “City”, e.g. by feeding in surplus energy into the grid.

➔ **KNX city sets a new focus with existing KNX technologies in the buildings**

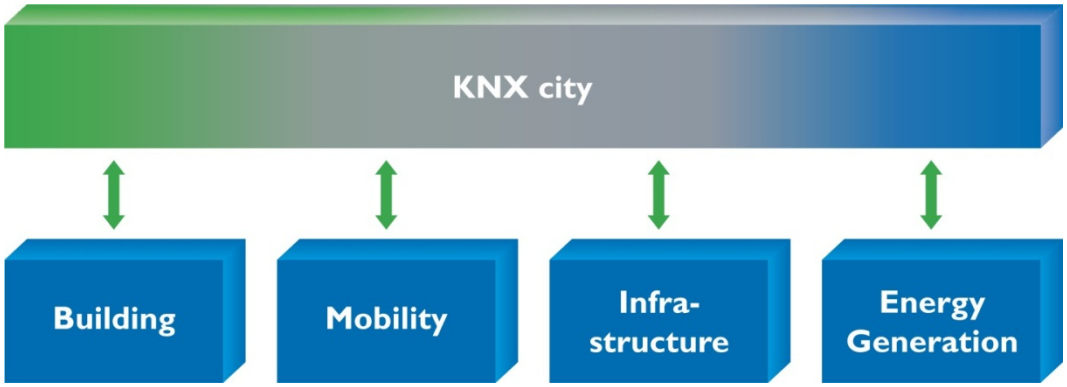
KNX city distributed facilities

- KNX offers communication by twisted pair, IP and radio frequency
- Buildings can be connected to each other over distances by IP as if they were one building
  - Distributed facilities
  - Energy management over distances
  - Balancing of generation and consumption of different buildings.



From the building to the KNX city

KNX city offers solutions in the interaction of buildings, mobility, infrastructure and energy generation



KNX city

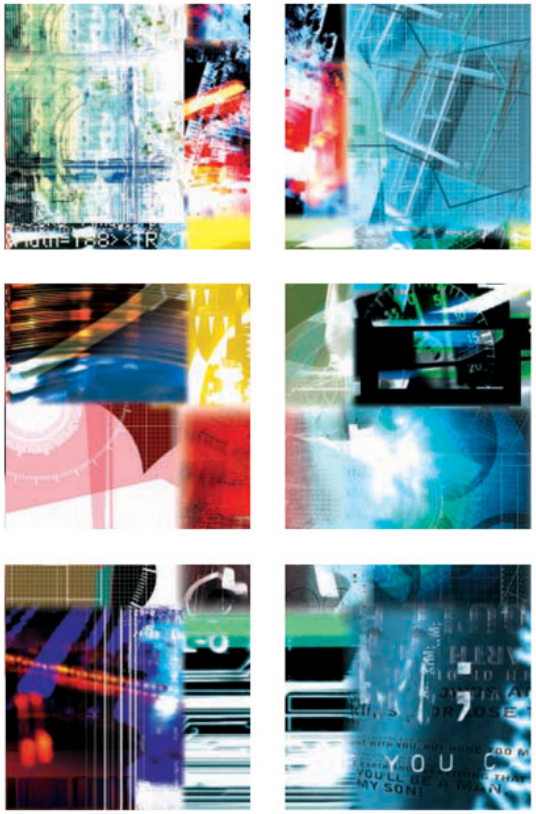
KNX city - Taiwan

KNX city - China

KNX Facts & Figures September 2014

- 369 KNX Members in 37 countries
- 7000 certified product groups
- 43573 KNX Partners in 127 countries
- 299 Training Centers in 55 countries
- 107 Scientific Partners in 29 countries
- 16 Userclubs in 15 countries
- 7 Associated partners
- 42 National Groups
- 11 Test labs in 5 countries
- ETS sold in more than 120 countries

Join the worldwide KNX community



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KNX National Group Czech Republic

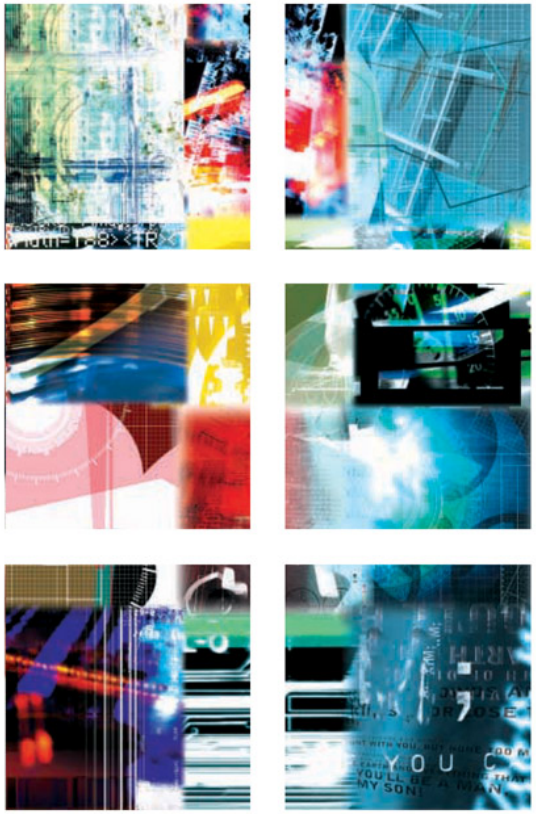
Foundation Meeting

September 24th

KNX Association International

Agenda

1. Summary, Discussion and Adaptions of Statutes
2. Election of Offices
3. Signing of Cooperation Agreement
4. Further Activities
5. Open Discussion



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The Statutes of the KNX National Group Czech Republic

Agenda

1. Summary, Discussion and Adaptions of Statutes
2. Election of Offices
3. Signing of Cooperation Agreement
4. Further Activities
5. Open Discussion

1. Statutes

1. Name

This Association should be known as

„KNX National Group Czech Republic“

1. Statutes

2. Place of Business

The place of business shall be: KNX National Group Czech Republic
C/o Brno University of Technology
Antonínská 1, 602 00 Brno

1. Statutes

3. Objectives

- To **represent and promote KNX** in Czech Republic;
- To **assist in the development and application** of technology, infrastructure and manpower skills for KNX;
- To **promote the development and applications of KNX Systems** for the expansion of Intelligent Building Control;
- To **advance, and actively promote and support education and technical training** to include KNX in the local teaching _curriculum and to enhance productivity, skills and product quality for consultants and electrical contractors;
- To **act as the advisory, consultative and coordinating body** for KNX Systems;

1. Statutes

3. Objectives

- To **acquire new members** for the KNX Association International
- To **promote the usage of the Engineering Tool Software (ETS)**
- To **act as a negotiating body for members** of the association concerning intelligent building control systems and technology with users, specifiers and relevant regulators;
- To **organize and/or participate in exhibitions, conferences for the promotion of its activity**;
- To **promote trade, friendly relations and contacts**;
- Generally to **do all lawful things** as the association may consider incidental or conductive to the attainment of objects of the association or any of them.

1. Statutes

4. Membership

- **Board Membership:**
  The Board Membership is **open to all members of KNX Association International in Czech Republic**.
  Board Members are decision makers for all activities of KNX National Group Czech Republic during the Board meetings (2-3 / year).
  Board Members have a **weighted vote of 5** in the General Assembly

- **Ordinary Membership:**
  Ordinary Membership is **open to manufacturers (respectively to only one of their official representative)**.
  Ordinary members are invited to the GA (1/year) in order to approve the common budget for the next financial year.
  Ordinary Members have a weighted vote of 2 votes in the GA.
  If the company, which is represented by an official representative, joins itself, the official representative shall resign and be listed as an integrator member,

1. Statutes

4. Membership

- **Integrator Membership:**
  The System Integrator Membership is **open to persons, involved in the integration of KNX Solutions in home and buildings** (like contractors, system integrators, consultants, specifiers and architects).
  Integrator Members are **invited to the General Assembly (1/year) in order to approve the common budget** for the next financial year.
  Integrator Members have **one weighted vote in the General Assembly**

- **Associated Membership:**
  The Associated Membership is open to **companies, institutions, statutory bodies and relevant regulators of national standings, supporting and promoting the aims and essence of the association.**
  Associated Members have **one weighted vote in the General Assembly**

1. Statutes

4. Membership

- **Educational Membership:**

The Educational Membership is **open to educational institutions, like universities and (vocational) schools** that are directly linked to the KNX Technology for supporting the aims of the association.
Educational Members have **no right to vote** in the General Assembly.

1. Statutes

5. Entrance Fees, Annual Subscription

- **Entrance fee shall be CZK 25,000**

- Educational Memberships are not subject of entrance fees or annual subscriptions as long as relevant KNX Training and Research & Development are conducted.

1. Statutes

5. Entrance Fees, Annual Subscription

- **Entrance Fee shall be waived for foundation members**

  (Members, which hand in their application form till the day of official Czech registration)

1. Statutes

5. Entrance Fees, Annual Subscription

- **Entrance fee shall be CZK 25,000**

- Educational Memberships are not subject of entrance fees or annual subscriptions as long as relevant KNX Training and Research & Development are conducted.

1. Statutes

6. Membership Fee Structure (from 1st of January 2014 on)

KNX National Group Czech Republic:

…

1. Statutes

Schedule for 2014/2015:

- *KNX Training Workshop (Q4 2014)*
- *KNX Technical Workshop (Q1 2015)*
- *KNX Czech Republic Fair (Q2 2015)*
- *KNX city Forum (Q3 2015)*
- *2nd Czech Forum (August 2015)*
- *For Arch (September 2015)*
- *…and much more!*

1. Statutes

6. Membership Fee Structure (from 1st of January 2014 on)

KNX National Group Czech Republic:

Board Members: CZK 100,000

Ordinary Members: CZK 50,000

Integrator Members: CZK 25,000

Associated Members: CZK 30,000

Agenda

1. Summary, Discussion and Adaptions of Statutes
2. Election of Offices
3. Signing of Cooperation Agreement
4. Open Discussion

2. Election of Offices

1. Management and Committee

The administration of the Society shall be entrusted to a Committee consisting of the following to be elected:

President

Vice President

The President shall chair the General and Committee Meetings.
He shall also represent the Society in its dealings with outside persons.

Secretary

Treasurer

2. Election of Offices

1. Management and Committee

The administration of the Society shall be entrusted to a Committee consisting of the following to be elected:

Vice-President

The Vice-President shall assist the President and deputize for him in his absence but will not take any decision without the consent of the President.

2. Election of Offices

1. Management and Committee

The administration of the Society shall be entrusted to a Committee consisting of the following to be elected:

Secretary

The Secretary shall coordinate the National Group's activities and keep all records of the Society and shall be responsible for their correctness. He will be responsible of the minutes of all Board meetings and General Assemblies.

He will not keep more than CZK 15.000 in form of cash and money in excess of this will be deposited in a bank to be named by the Committee.

For the Secretary's work, the Secretariat will be remunerated from the funds as raised via membership fees as set by decision of a majority of the General Assembly.

The Secretary shall keep all funds and collect and disburse all monetary transactions and shall be responsible for their correctness, he is authorized to expend up to CZK 25.000 per month for petty expenses on behalf of the Society.

He shall maintain an up-to-date Register of Members at all times.

Checks etc. for withdrawal from the bank will be signed by the Secretary and either the President or both Vice-Presidents.

2. Election of Offices

2. Election:

President

Proposal:

Jiri Plachy,
Marketing Manager
ABB

2. Election of Offices

2. Election:

Vice President

Proposal:

Jakub Horna, Siemens

2. Election of Offices

2. Election:

Secretary

Proposal:

Josef Kunc

Agenda

1. Summary, Discussion and Adaptions of Statutes
2. Election of Offices
3. Signing of Cooperation Agreement
4. Open Discussion

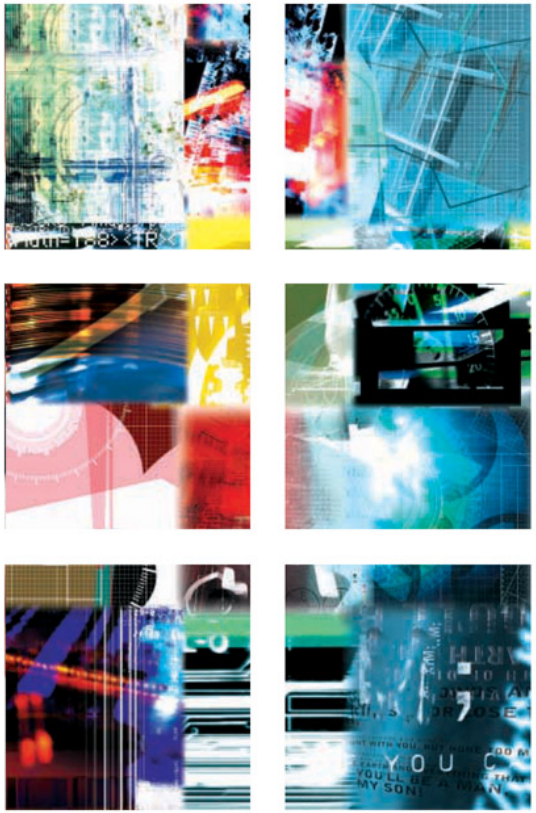
3. Signing the Statutes

By signing the cooperation agreement, the KNX NATIONAL GROUP CZECH REPUBLIC will be an official KNX National Group

Agenda

1. Summary, Discussion and Adaptions of Statutes
2. Election of Offices
3. Signing of Cooperation Agreement
4. Open Discussion

4. Open Discussion



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Thank you very much for your attention

For any questions – Contact

info@knx.org – www.knx.org