

# Le standard mondial pour la gestion technique des bâtiments résidentiels et tertiaires



22 juin 2015 *Nîmes / 10h* 

Patrice de Carné Président de KNX France



### **Présentation ETS5**

#### Programme

10h00 : Accueil par Direction IUT de Nîmes

10h10 : Introduction et Présentation de KNX – Patrice de Carné (ABB France) et Joost Demarest (KNX Association)

10h20 : KNX et Gestion technique au service de la maîtrise des coûts d'exploitation du bâtiment – Jean-Yves Bouchet (Rexel) et Laurent Melmoux (Siemens)

10h40 : Présentation du nouvel outil de paramétrage ETS5 – Jean-François Klotz (LECS)

12h00 : Questions / Échanges

13h00 : Pousuite discussions autour du buffet

### Le standard de référence



#### → Un standard mondial

- Norme européenne EN 50090
- Norme internationale ISO/EIC 14 543-3
- Norme chinoise GB/T 20965

#### → Un protocole reconnu

- 374 membres industriels dans le monde
- 47 695 KNX Partners dans 136 pays
- 2 278 KNX Partners en France

#### → Une solution pertinente

- Pérennité
- Interopérabilité
- Qualité



### Le rôle de KNX en France

- > Assurer la promotion technique des solutions KNX
- > Favoriser les échanges avec les filières du bâtiment et les professions concernées afin d'enrichir et d'optimiser les solutions destinées aux équipements techniques
- > Adapter l'usage de la norme aux spécificités culturelles et structurelles de la France
- > Mettre en place une stratégie et des actions de communication à destination du marché

### Les membres de KNX France











































### **Domaines d'application**





































#### **Réalisations**



Bateau "La Belle Adriatique"



Pôle emploi Diguoin



Boutique Guerlain à Paris



Hôtel Arboisie - Megève

#### **Réalisations**



Lycée Fénelon



Maison Domotique adaptée au handicap



Maison "Construisons demain"



Grand Hôtel - Bordeaux















www.knx.org

# **KNX France ETS 5** conference

**News from KNX International** 

**Joost Demarest – KNX CTO** 



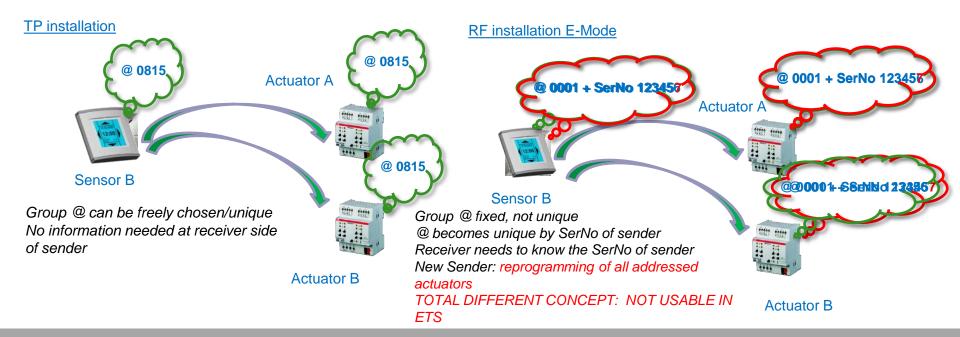
#### Content

- Support of RF in ETS5: implications?
- Novelty: KNX RF Energy Harvesting
- The growing KNX community
  - KNX eCampus
  - KNX Online Shop versus MyKNX
  - The overall growth figures
  - The newest KNX national group
  - Recent KNX activities worldwide
- Upcoming novelties KNX/ETS
  - IP and Data Security support in ETS 5.5
  - ETS Tablet
  - ETS Core
- Save the date: 25th anniversary KNX worldwide KNX event



### KNX RF S-Mode (1)

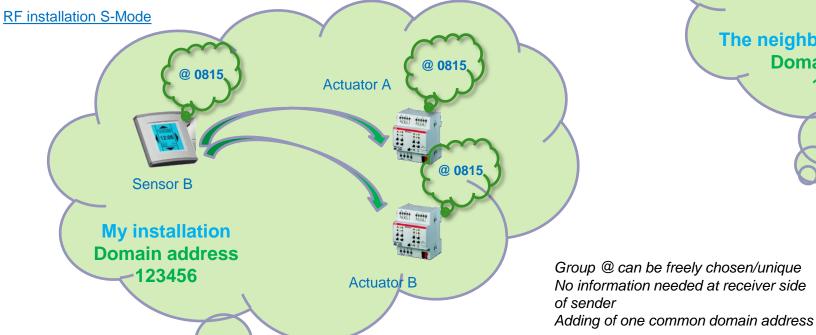
- Why RF in ETS?
  - ETS needs to support all available KNX media
  - E-Mode is ideal for smaller installations, S-Mode offers more flexibility
- Why need for KNX Standard update for RF support in ETS?
  - ETS support not in the focus when defining RF medium in 2001
    - E-Mode
    - Needed possibility to develop unidirectional senders (while at that time more cost-effective)





### KNX RF S-Mode (2)

- Extension to the KNX Standard for RF S-Mode
  - Use same system profiles as on TP but with minor RF changes
    - Exactly same approach/look & feel for configuration of devices as TP
    - Add domain address to the RF devices (as is done in Powerline) for Group Communication to separate neighbouring installations
    - Possibility to have semi-bidirectional devices (only during configuration)
    - New Coupler module (e.g. TP/RF) standardized



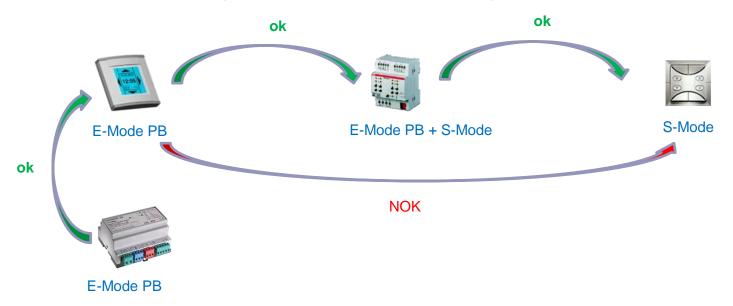
The neighbour's installated Domain address 123457

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### KNX RF S-Mode (3)

- Current Possibilities for KNX manufacturers following RF S-Mode extensions
  - Continue developing E-Mode RF devices only
  - Develop KNX RF compatible devices according new S-Mode Profile
    - and one or even more of the E-Mode profiles (E-Ctrl or E-PB)
    - And/or own configuration methods
  - Stricter labelling requirements defined by KNX Certification Group to be able to clearly distinguish devices with different configuration mode





## KNX technology extensions: KNX RF energy harvesting

#### Harvester solution

Member company ZF developed a mechanical "energy harvester" solution, capable to supply KNX RF devices sending <u>standard KNX RF</u> telegrams with sufficient power.



- energy harvesting wireless system
- energy production on press [in]/ release [out] action (e.g. for KNX dimming)
- available as integrated module solution to embed it in own designs
- small size, with high energy efficiency and low actuation force
- maintenance free no batteries need to be changed
- •long mechanical life, up to 1,000,000 operations
- technical data e.g. dimensions, total travel/ amount of generated energy avail. at ZF

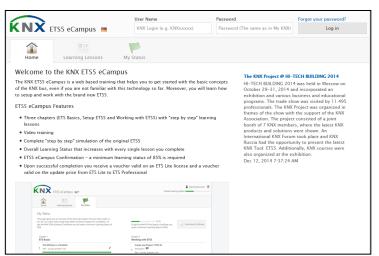
#### Concept proof & demonstration

Solution was presented to KNX as an application with KNX RF "harvesting" sender, linked to an standard (today available) KNX RF actuator.

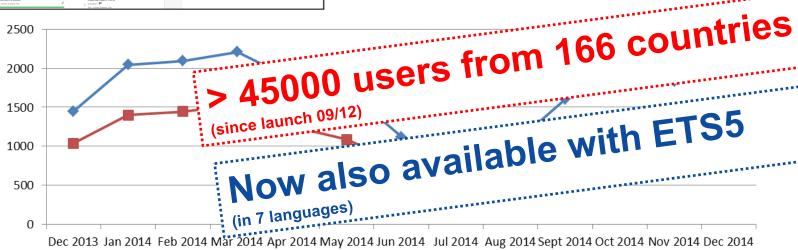
ZF presented the solution at the 2014 light+building fair



### Want to get to know KNX? First step → eCampus!

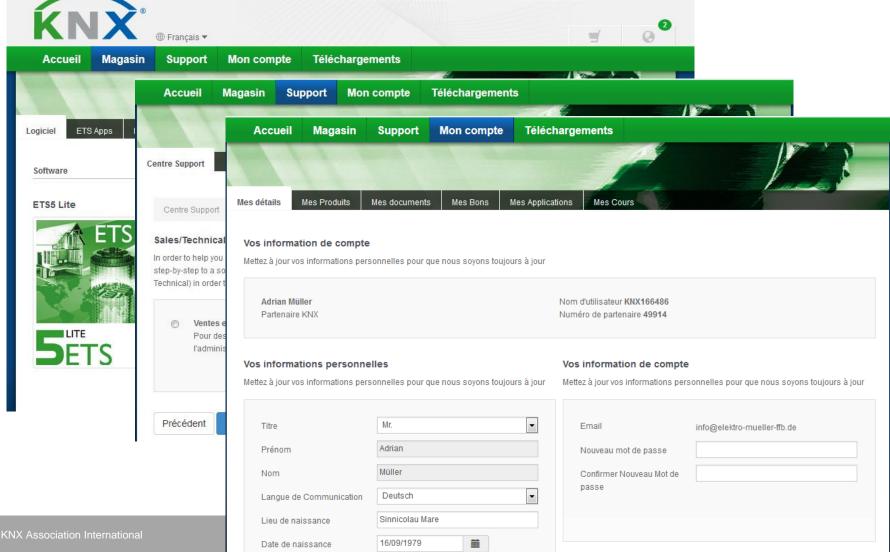


- Get acquainted with KNX and ETS quick and easy!
  - Reduced effort:
    - on average 2 hours
    - Free of charge
  - For each chapter: exercise + test
  - When passed: eCampus confirmation + ETS Lite (only need to buy the dongle)





## Bye Bye Onlineshop Welcome: my KNX!





### A (still) growing community





+ 63

380















+ 23

297

















**45895** 





















### **Novelty: KNX USA founded at Lightfair NYC**







INTERNATIONAL

The future. Illuminated.

2015

#### The elected Board

- Siemens (Presidency)
- Somfy (Vice-Presidency)
- **DMC** (Secretariat)





KNX now represented in 43 countries!

## KNX®

### Recent KNX activities worldwide (1)



General Assembly NG Luxembourg



KNX Austria Awards '15 winners



First KNX Tutor Course in Mexico



KNX SOA at Power & Electricity World Africa



New video for KNX newbies - electricians



### Member section in KNX YouTube channel



eCampus in 7 languages (DE, UK, FR, ES, NL, FI, GR, ...)

### KNX® Recent KNX activities worldwide/novelties (2)





KNX UK awards

KNX at ISE fair in **Amsterdam** 

KNX Greece UC meeting



KNX Professionals Germany at Eltefa 2015



First KNX Basic course by Ivory Egg in NZ



KNX BE at Batibouw



#### **KNX** at ISH

# SH

Frankfurt am Main 10. – 14. 3. 2015





New KNX staff member Mr. J. Arias KNX Solutions

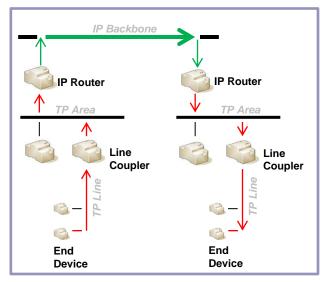


## **Upcoming KNX standard and tool extensions – KNX Security**



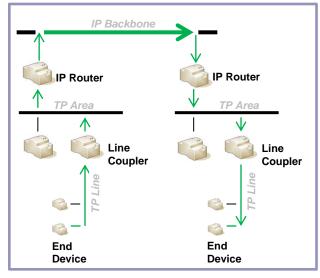
#### **Technology Overview**

#### **KNXnet/IP Secure**



All KNX telegrams between the two (or more) IP Routers are encrypted

#### **Data Security**



The group communication of a particular sender (one or more group objects) to another group object(s) is encrypted

- Unsecured communication
  Secured communication
- KNXnet/IP Secure and Data Security can be combined in one installation.
   ETS Professional



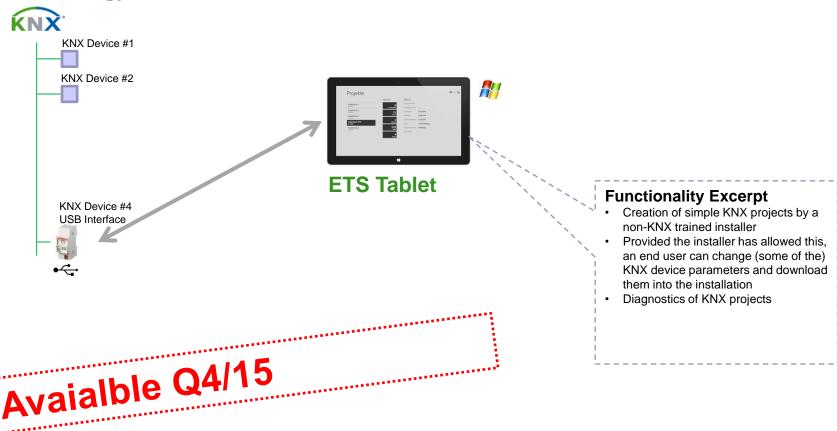
#### **Functionality Excerpt**

- Key management and distribution
- Establish secure link and download



### **Upcoming tool extensions: Tablet**

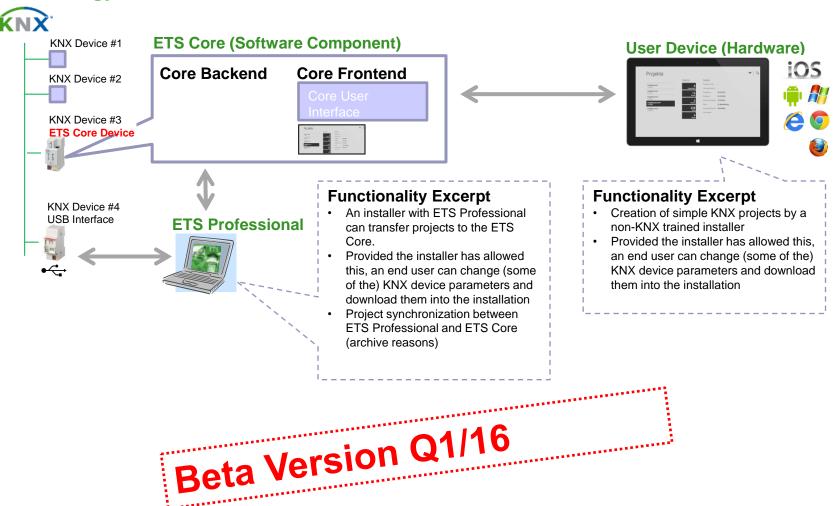
#### **Technology Overview**





### **Upcoming Tool extensions – ETS Core**

#### **Technology Overview**





### **Upcoming KNX activities worldwide**



International Celebration Day of 25 years of KNX October 2015



KNX Technology Track at Wireless Congress Munich November 2015

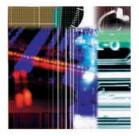














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# Thank you for your attention!

Contact: <u>info@knx.org</u> – www.knx.org