



Welcome  
to  
RFID  
COUNTY



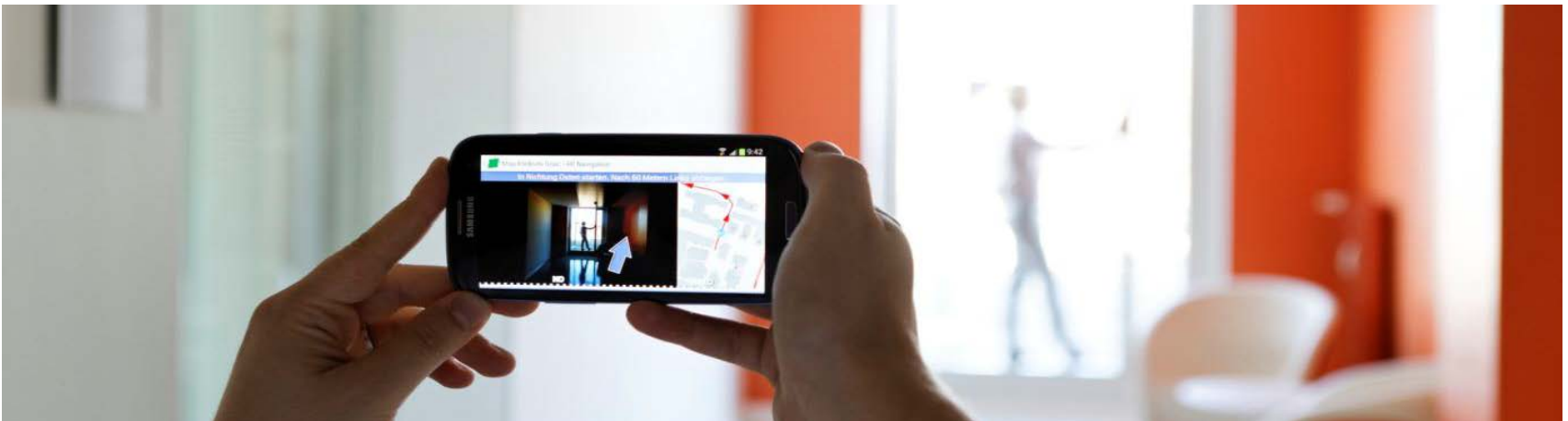
Steiermark

# RFID Hotspot Styria

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Werner Haas

DIGITAL – Institute of Information and Communication  
Technologies



Graz, 30/03/2015

# RFID Hotspot Styria

Werner Haas

DIGITAL – Institute of Information and Communication  
Technologies

Coordinator of SeCoS

Secure  
Contactless  
Sphere –  
Smart RFID-Technologies for a Connected World



Graz, 30/03/2015

# SFG - Steirische WirtschaftsförderungsGmbH Styrian Business Promotion Agency

- Official commercial entity of the Styrian government (Abteilung für Wirtschaft und Arbeit (A 14))
- Responsible for all matters concerning regional development, business promotion, funding & financing, R&D projects, internationalisation
- Implements Styrian business strategy 2020
- Core themes: Mobility, Eco-Tech and Health-Tech
- Areas: material technologies, mechanical and plant engineering, process engineering and technology, electronics, measuring and control technology, creative industries
- Budget (2013): € 65 Mio., funding 1.468 projects with € 41,8 Mio

# History (success stories)

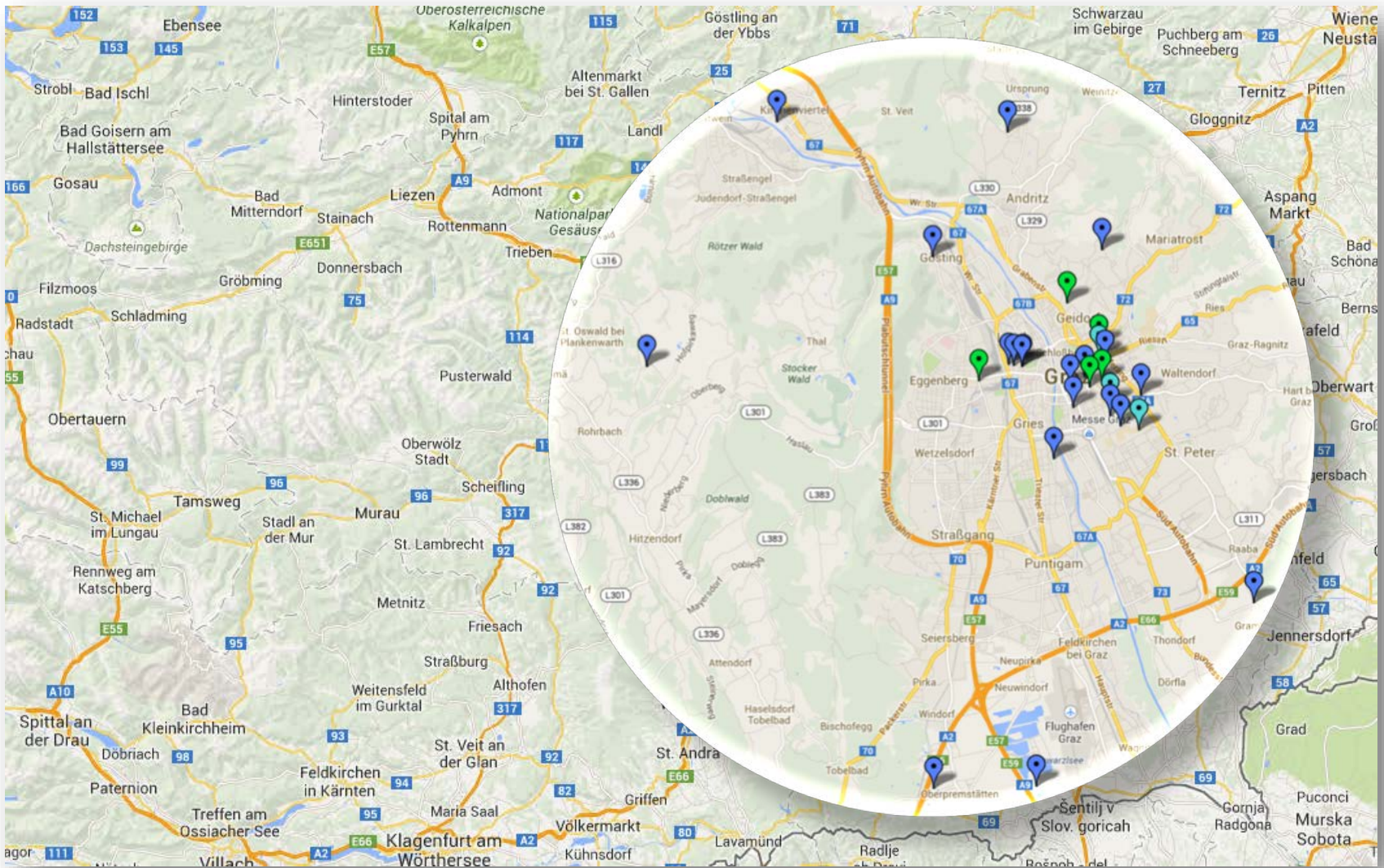
- 1987 Mikron Gesellschaft für Integrierte Mikroelektronik
- 1994 *MIFARE* (Mikron Fare Collection System):  
so far 10 billion smart card chips and 150 million reader modules sold
- 1995 Philips Semiconductors
- 2002 *NFC* (Near Field Communication)
- 2006 NXP Semiconductors



- ams AG founded in 1981 (joint venture between voestalpine AG with American Micro Systems (AMI))
- Fab opened in 1983

# History

- 2010/2011: SFG study on RFID in Styria
- 2011: Start of „**RFID-Hotspot Steiermark**“, an initiative of SFG
  - Core part of Styrian business development strategy within „Elektronik, Mess- und Regeltechnik“ (electronics, measuring and control technology)
  - Website (<http://sfg.at/rfid>), RSS-feed, folder
  - Events, workshops etc. >> so far more than 1.600 participants
  - Various „Supporting Measures“ (eg RFIDeas, RFIDsec, RFID Task Force, Digitaldialog, ...)
- 2012
  - „RFID Qualifizierungsnetzwerk Österreich I“ (TU Graz) >> FFG supported
  - K-Project „Secure Contactless Sphere (SeCoS)“ (JOANNEUM RESEARCH)
- 2014
  - „RFID Qualifizierungsnetzwerk Österreich II“ (TU Graz) >> FFG supported



# Status quo

- Expertise along the full value chain (incl. R&D as well as education and training):

Chip → antenna → reader → software → system- & application integrators

- 25+ companies, 2.000+ employees, practically all of them are active worldwide , export percentage > 90 %
- Universities, Universities of Applied Technology, independent research institutions, Competence Centers



# Status quo

- Approximately 50 % of all RFID chips in global use have been developed in the Graz region
- Chips for official documents: Styria Nr. 1 market share > 95 %, > 100 countries
- Readers for passport chips: Nr. 1 from Styria
- Chip innovations in the automotive area: Styria Nr. 1 with a market share of approx. 50 %
- Chip innovations for applications like access control, electronic ticketing and payments: Styria Nr. 1

# Styria is a global hotspot of RFID technology:

Styrian companies contributed a vast amount of RFID innovations.

RFID ecosystem of industry and science has evolved over the last two decades

Research, education, training & higher qualification

25+ enterprises, 2.000+ employees

Chip design & production, antennas, readers, software, system- & application development and integration)



## RFID-Hotspot Initiative

RFID Hotspot events with 1.600+ participants

RFID Task Force

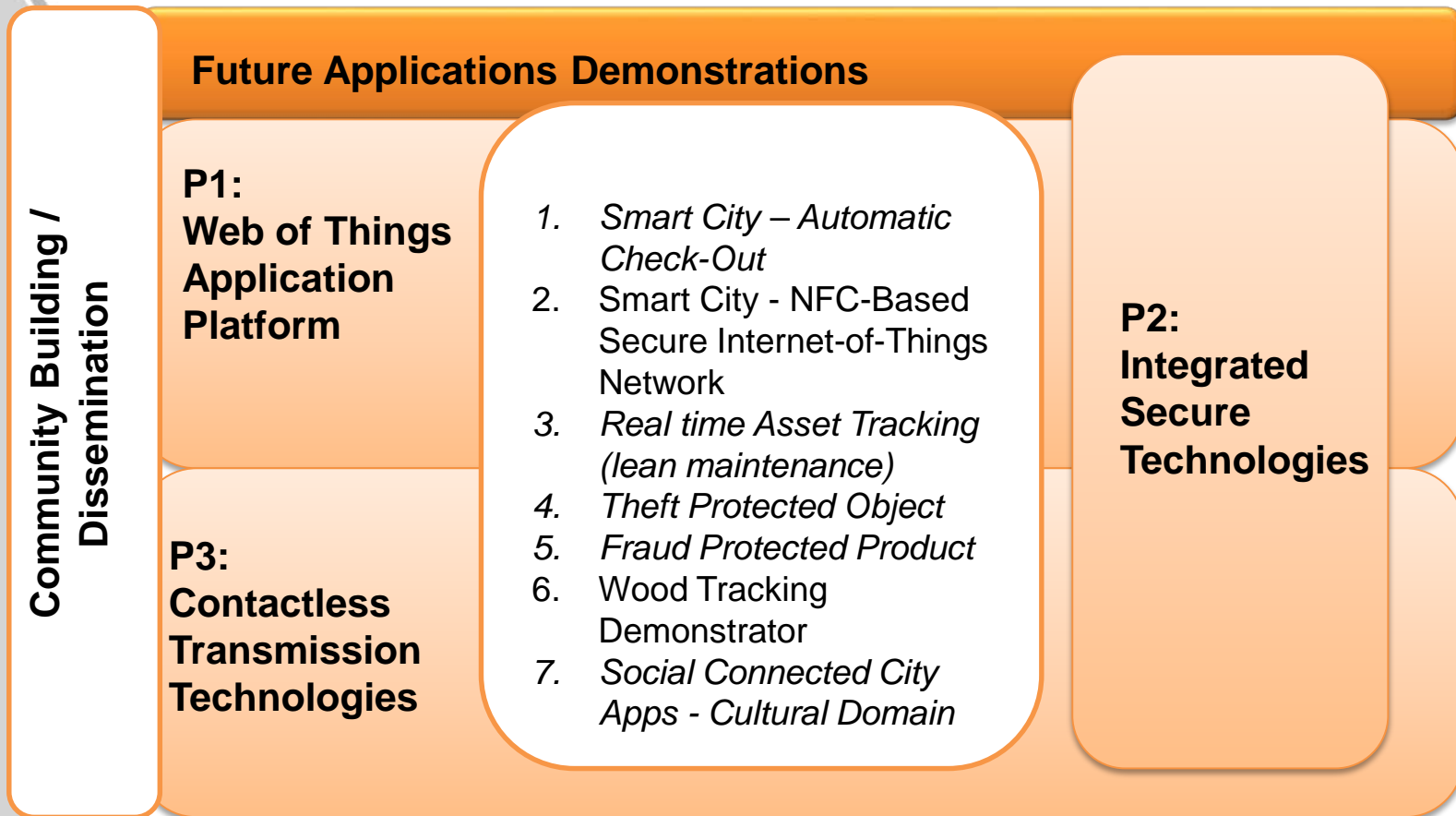
RFID Qualification Networks, coord. TU Graz ➔ Life Long Learning, 28 partners

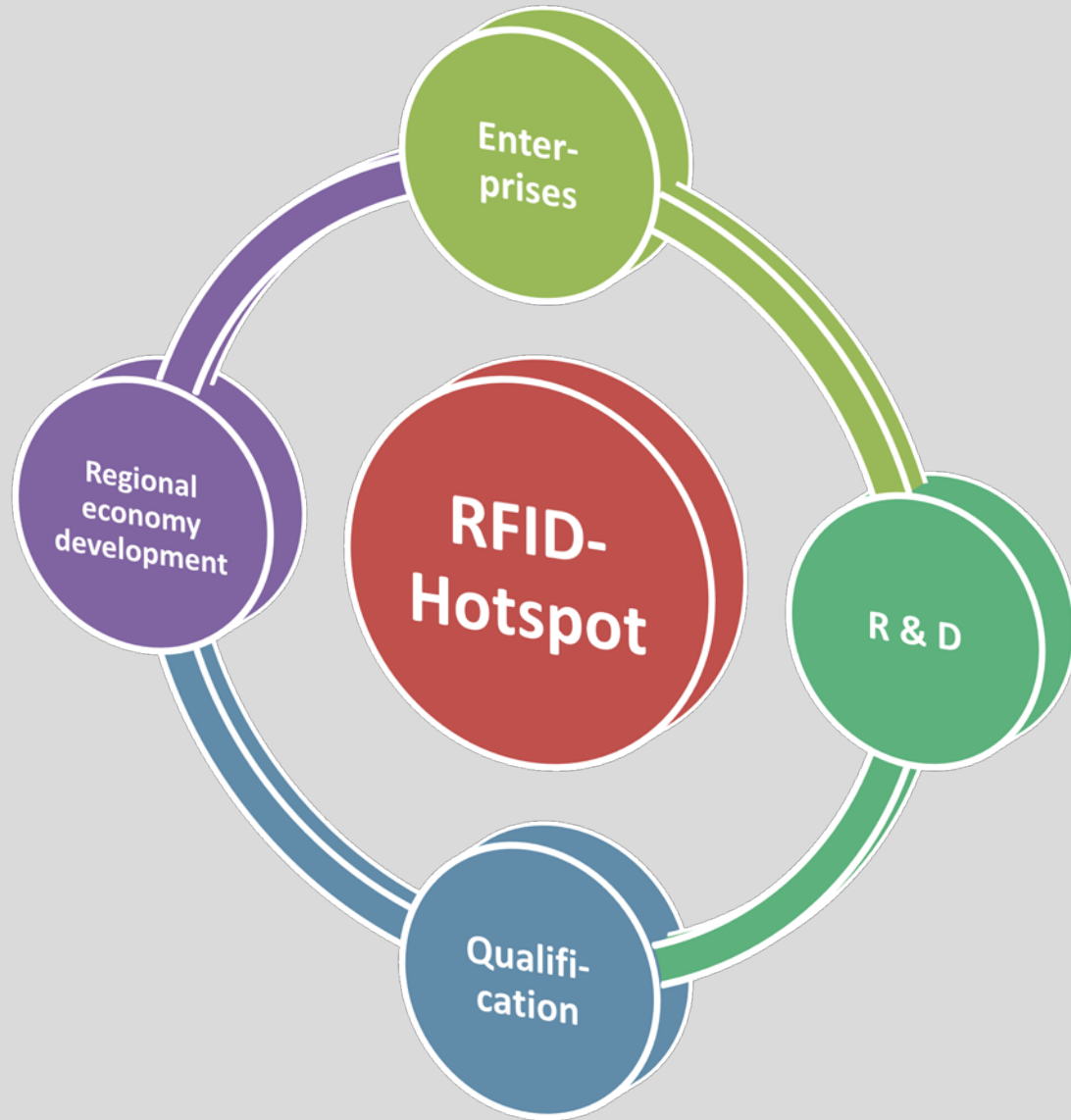
K-Projekt SeCoS, coord. JOANNEUM RESEARCH, 9 partners



# Project structure

main idea: vertical and horizontal integration of entire supply chain for innovative future applications





# Contact

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