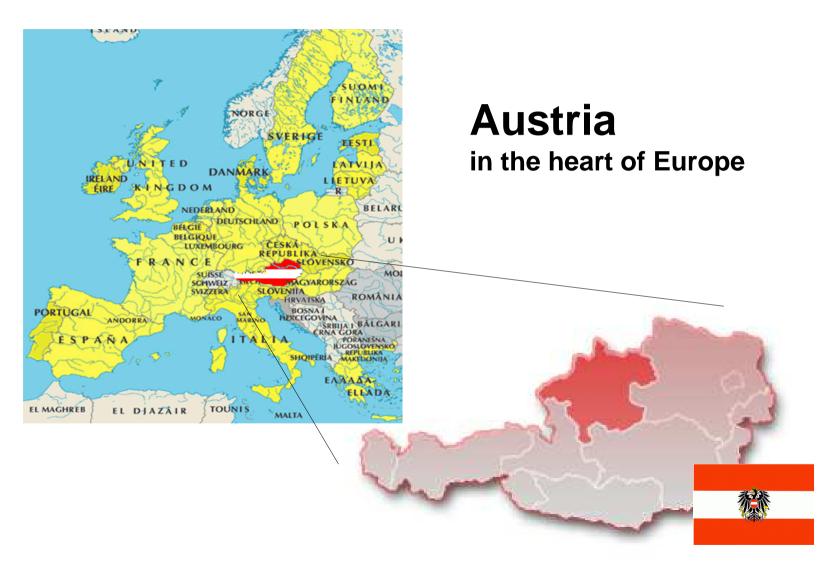
LIMZAG

Future Internet Forum
Session 1: EU cities becoming "internet-ised"

Rossegger Karl





LINZAG



Infrastructure Services for Upper Austria 2600 Employees € 639 Mio turnover



Power generation
Transmission&distribution
Telecommunications

LINZAG

MANAGEMENTSERVICE Administration

Finance



Waste disposal Water supply



Public Traffic



Gas Supply
District Heating



ELECTRICITY

NATURAL GAS

DISTRICT HEATING

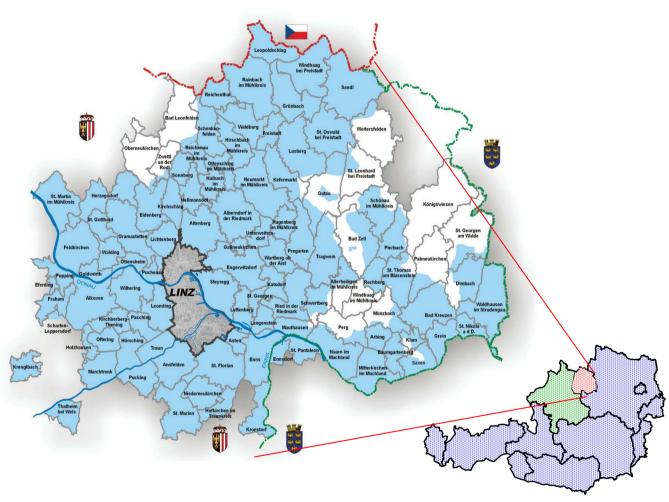
WATER

SEWAGE

TELECOM

PUBLIC TRANSPORT

Supply and disposal for 400.000 inhabitants





10 years ago

our vision

every point in our supply – networks has his own IP address

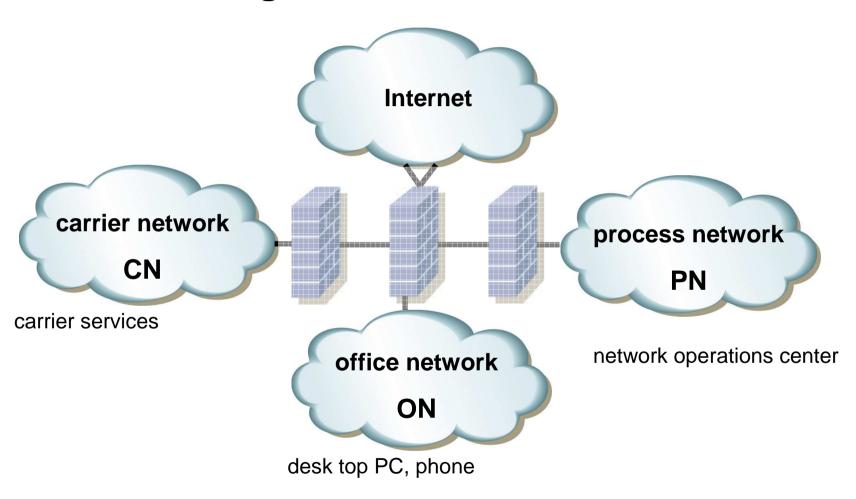


up to now

- ► investments in telecommunications infrastructure
 - optical fiber
 - IP networks
 - human resources



IP network migration





2010, smart services, water and electricity, telecontrol engineering







2010, smart services, public transport, video, alarming and info-points



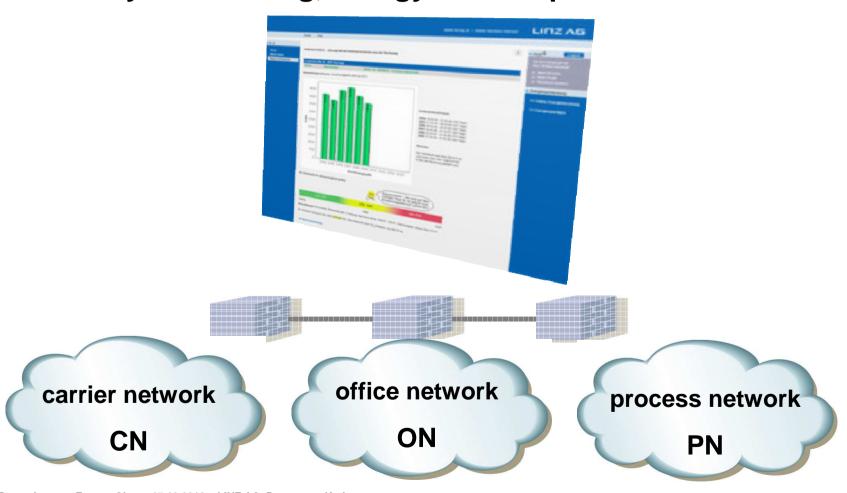
carrier network
CN

office network
ON

process network
PN



2010, smart services, electricity and heating, energy consumption





smart functions running

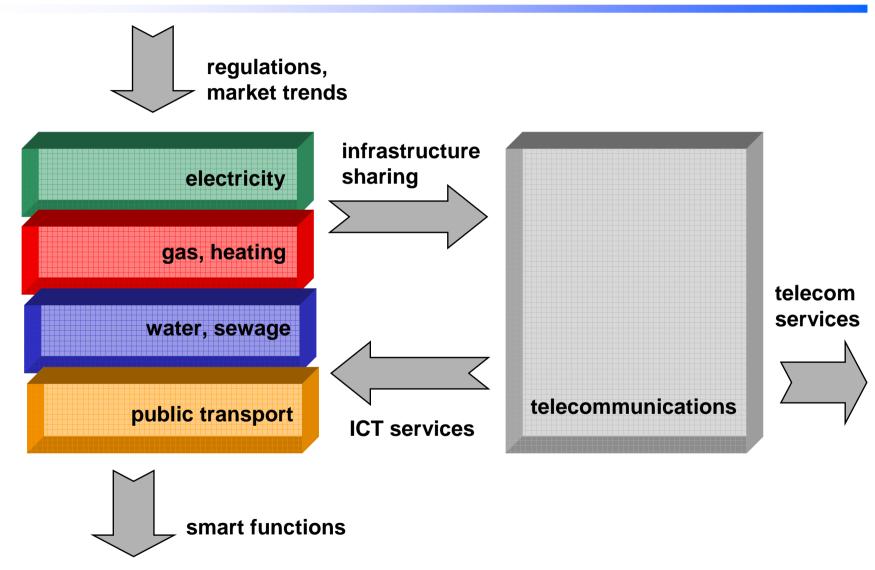
- smart metering electricity 50.000 meters running
- smart metering district heating 2.500 meters running
- smart switching 4.000 load management moduls running
- smart process 15.600 telecontrol items connected
- smart customer information (energy information system)
- smart security 550 video surveillance



smart functions in the future

- ► IRON (Integral Resource Optimization Network Concept)
 - Concept for new, innovative services for the power market based on the latest advances in the field of modern information- and communication technologies
- eSESH (European PSP ICT)
 - energy saving in social housing with ICT
- clean motion (Austrian R&D program, proposal)
 - e-mobility
- PRECYSE (European, FP7 proposal)
 - ICT security in critical infrastructure environment
- NETQUEST (Austrian R&D program)
 - mathematical model to optimize infrastructure development
- EIS (LINZ AG program)
 - energy information system

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experiences

- ► future internet a quantity of smart functions
- ► ICT information and telecommunications technology a core task of utilities
- ► future internet a lot of market participants
- challenge is ICT security

from a supplier to service provider



Linz – the European capital of culture 2009



thank you