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Bucharest  
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# bPINs e-Government System

## E-Government Act

eID

identity-  
link

mandates

source PIN

branch  
specific  
eID

source PIN  
REGISTER

Supplementary  
REGISTER

official  
signature

Register  
queries

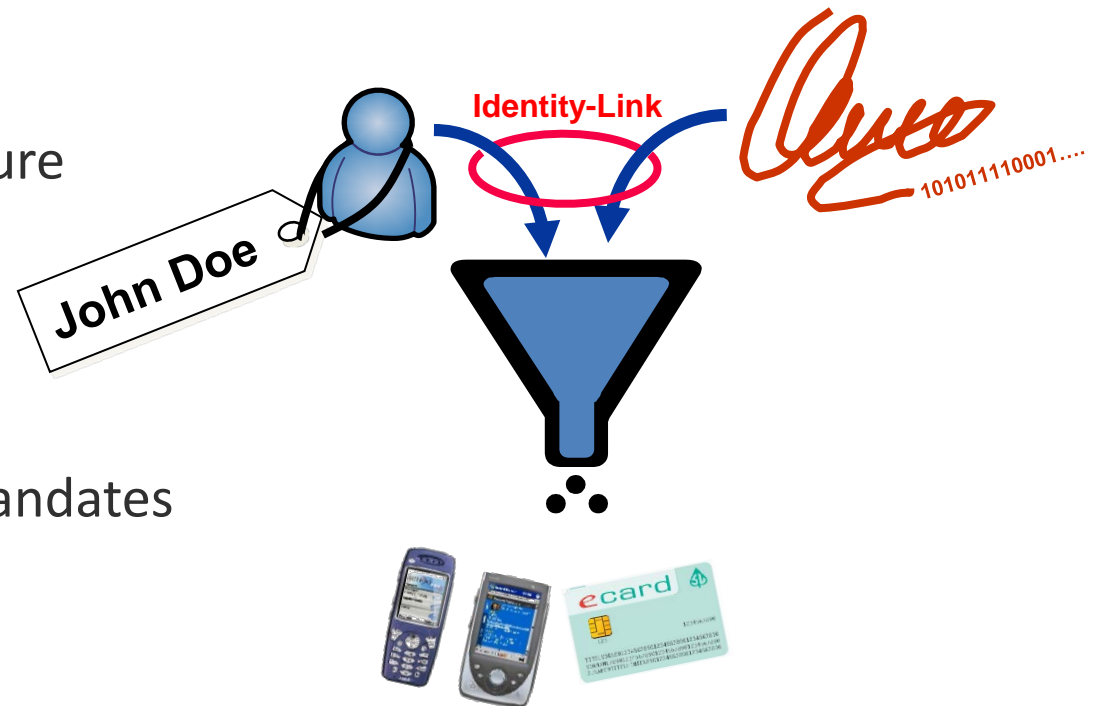
## E-Government Act

eID

The Austrian citizen card is a concept, not a specific technology

The Citizen Card combines

- Qualified electronic signature  
→ **Authentication**
- electronic identity  
→ **Identification**
- data on representation, mandates  
→ **Representation**



# Features of mobile phone signature

- Platform- and location independent
- important step towards usability and dissemination of modern eGovernment services because
  - no software installation on the local PC, just the browser,
  - no special computer skills and
  - no card readers are needed for use.
- No requirement on the mobile phone or SIM
  - Just receiving SMS
- High-potential also in private sector applications
- App as alternative



**Login mit Bürgerkarte**

Mobiltelefonnummer:  
+436768009634

Signatur Passwort:  
●●●●●●

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**Bürgerkarten-Integration**

Vergleichswert: 93prOZtC1e

Signaturdaten

TAN: uaw4gf

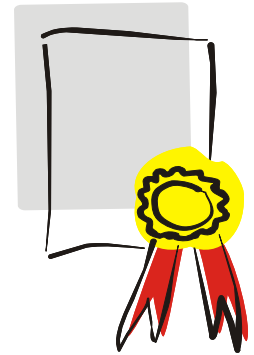


Benötigen Sie Hilfe?  

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## § 4 Abs. 2 E-GovG:

The unique identification of a natural person results of his/her **Source-PIN (= encrypted Number of the Central Population Register/CPR)**; responsible: Source PIN Register Authority

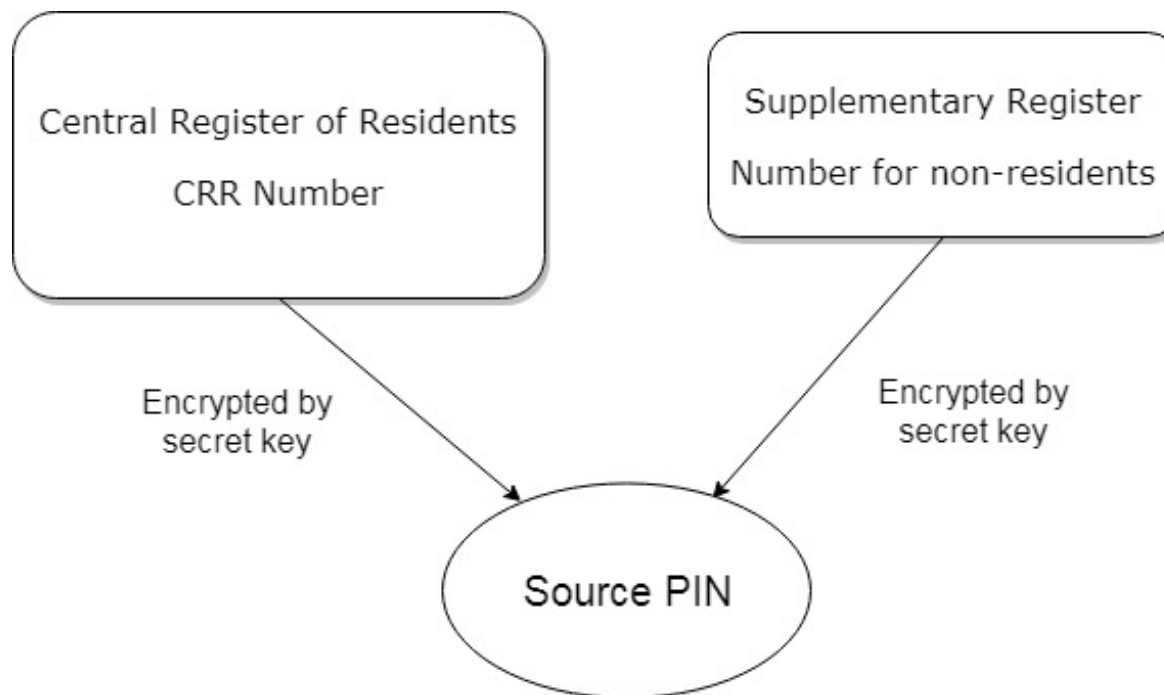


## § 4 Abs. 4 E-GovG:

The authenticity of the electronically submitted application is provided by means of the **electronic signature**; responsible: Source PIN Register Authority

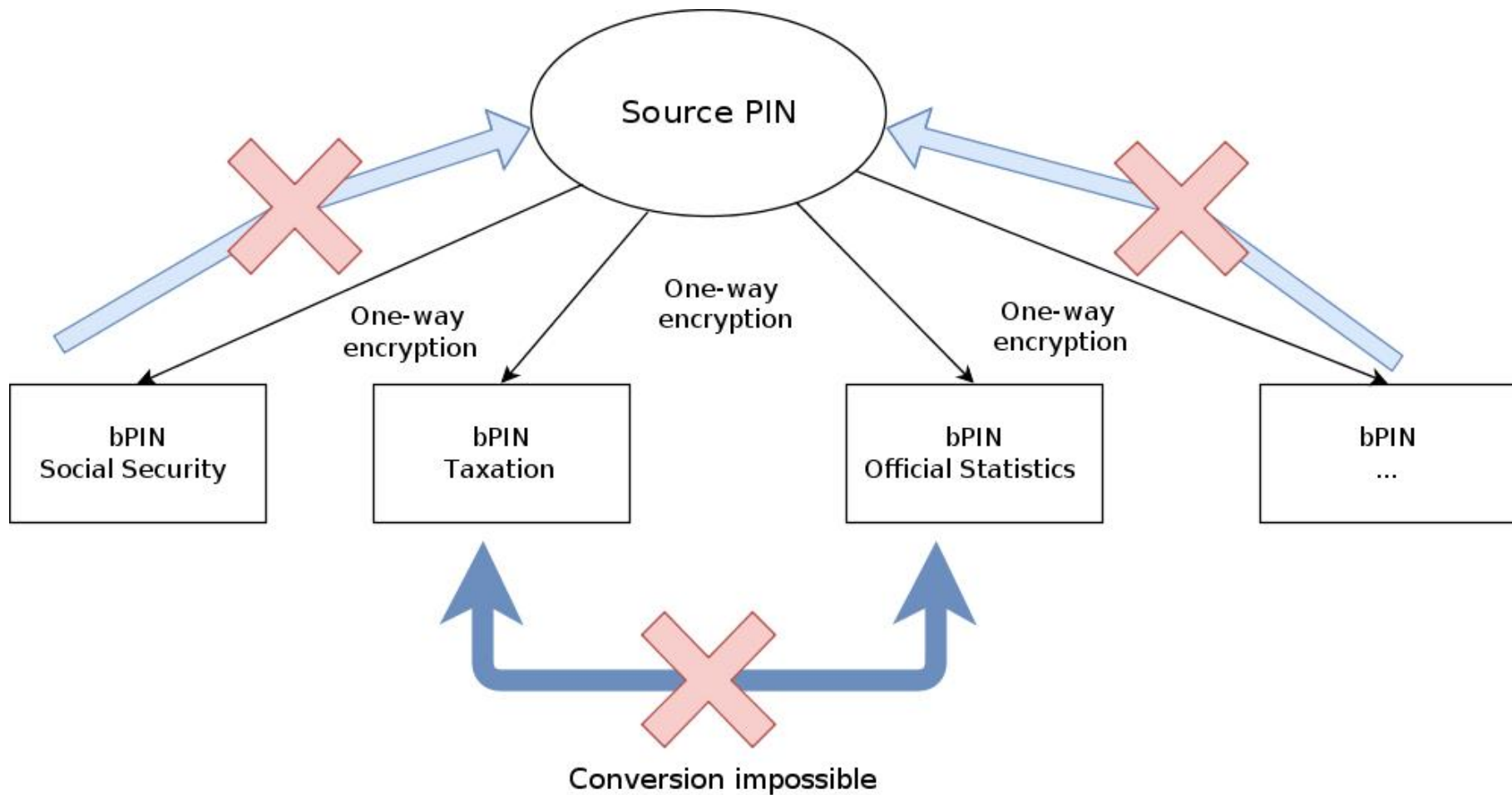
## E-Government Act

branch  
specific  
eID





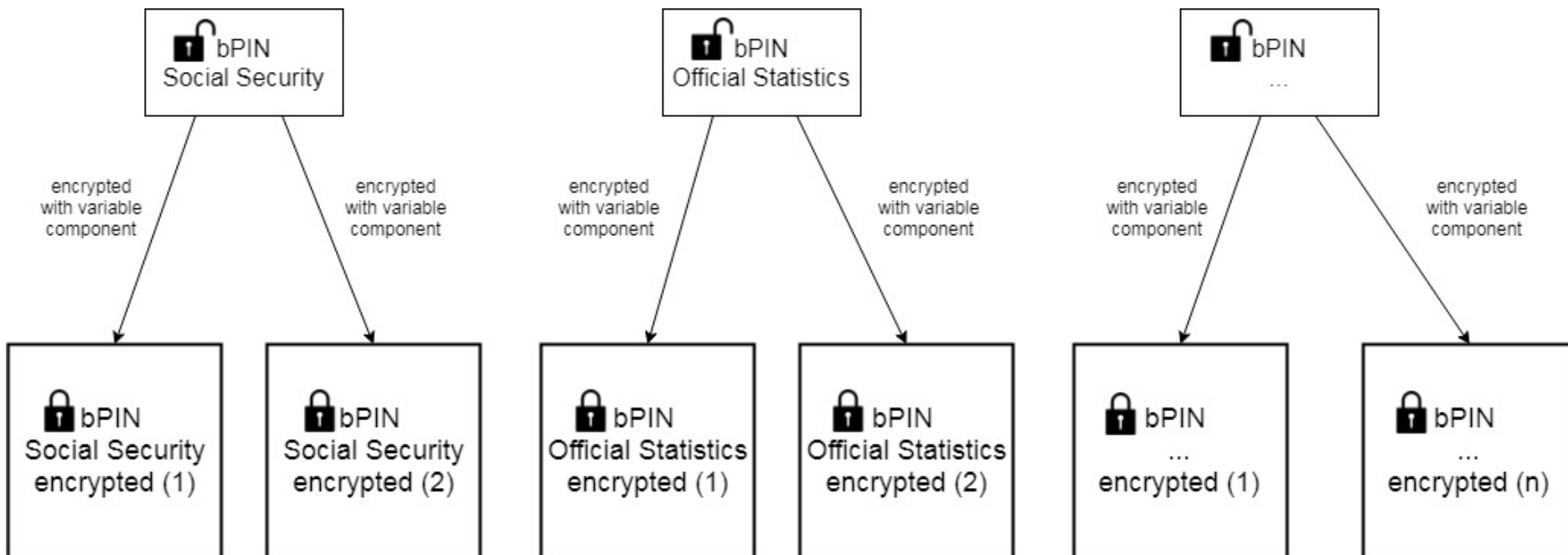
- Source PIN is not used directly
  
- Further encryption using branch value
  - 28 alphanumeric digits
  
- Example: bPIN\_OS
  - bPIN\_OS always the same value for the same person



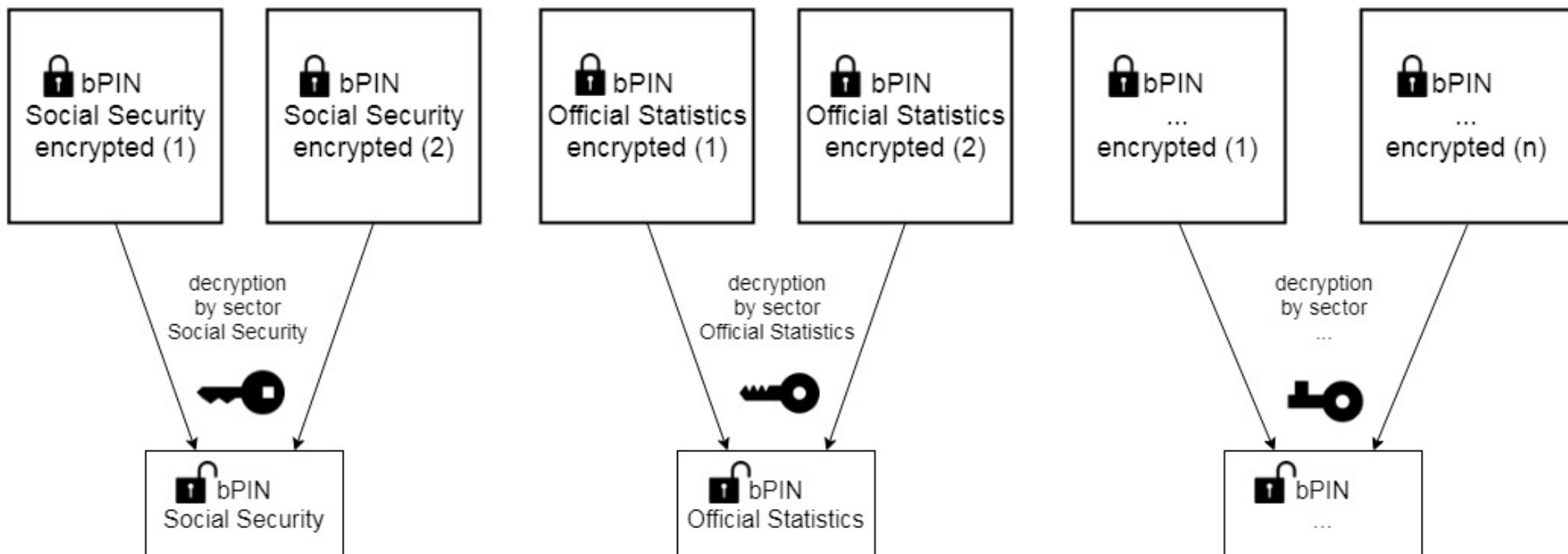
- For data transmission further encryption necessary
- Time-stamp included
  - 172 alphanumeric digits
  - Each time generated a different value
- Example:

Base Number	000247681888
SourcePIN (base 64)	Qq03dPrgcHsx3G0IKSH6SQ== (24 digits)
bPIN	j/NxdRQhp+tNyE9WhHdBSYuy3hA= (28 digits)
Encrypted bPIN	qX4/Mf2bMeop0/8tjHqS+OWox03/TViPmP6DoB+Z/h2gDtMQE99xuBhfzy Cy6jXgVEbuFGIqYSU1qxMeReQd4bbJzhekXvcrFAAn6mO1ZClokZnmRekidH l6bHnmR0cQjUywgHjnpbGJIzqBOOXmdFEi2mZ59yKKdMW7yfwQviAs (172 digits)

# Branch specific approach in Austria



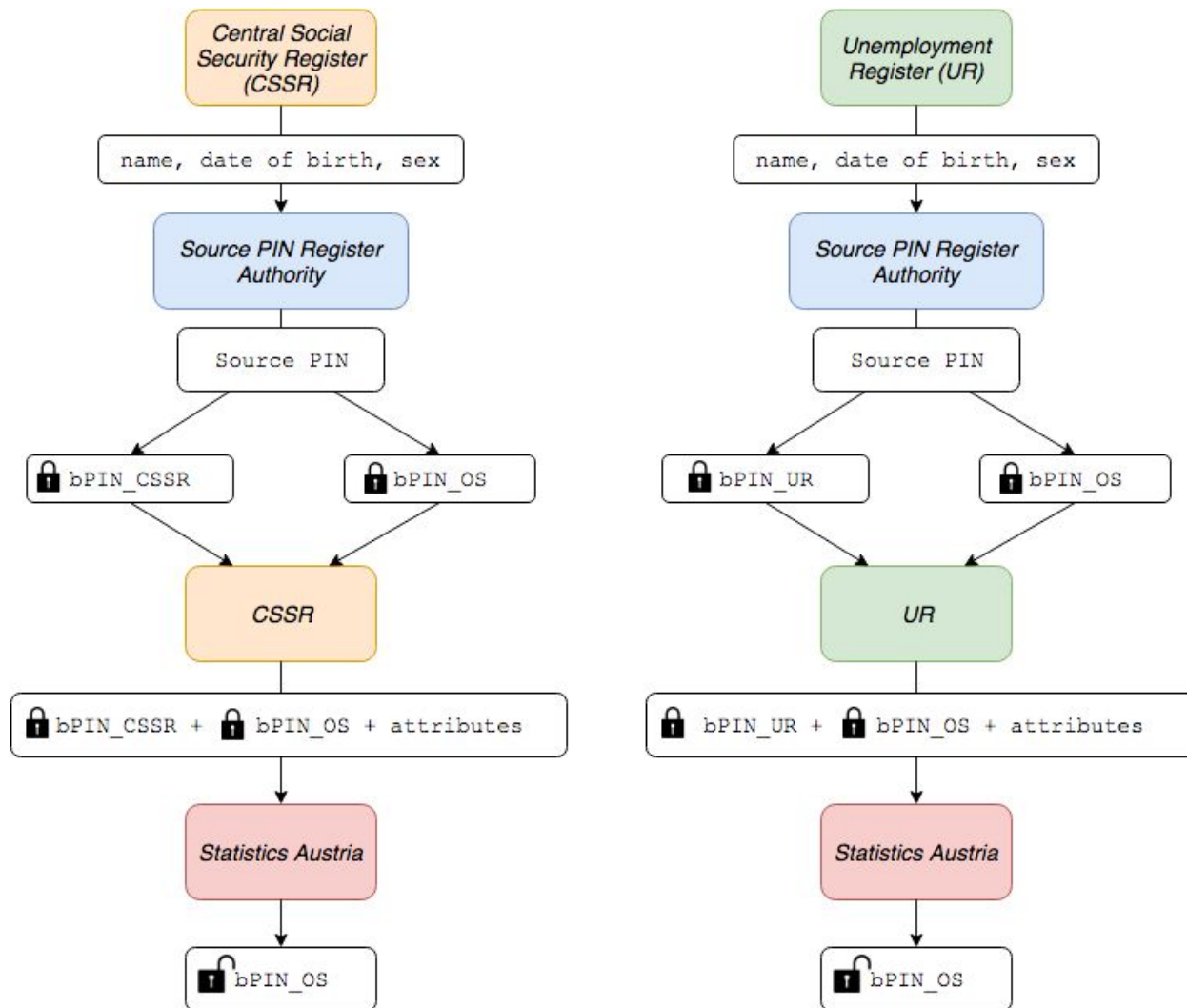
# Branch specific approach in Austria



## Matching of register data

- By bPIN OS (bPIN official statistics)
- Produced by the Source PIN Register Authority due to name, date of birth, birth place mainly via CPR (central population register)
- Registrar has to order this bPIN in an encrypted form for his data, which he has to transmit to Statistics Austria
- Statistics Austria decrypts (deciphers) these PINs and uses this PIN as a common matching variable
- Encrypted bPINs: 172 digits
- Decrypted bPINs: 28 digits

# bPIN Using for statistical purposes



- Richframe: Regularly updated sampling frame with a rich collection of information about the sampling units.
  
- Available information:
  - Age, gender, citizenship, ...
  - Family, Household size, type, ...
  - Regional information: grid location, degree of urbanization...
  - Education, Employment status, Income



- Example Adult Education Survey
- Goal: Increase efficiency of the sample
- New stratification variable: 3 groups with different participation probabilities for non formal education activities based on:
  - Age
  - Gender
  - Degree of urbanization
  - Employment status
  - Income
- Approx. decrease of sample size from **5700** => **5100** (compared to SRS)

- bPIN for respondents not readily available
- Search for bPIN (via Source PIN Register Authority), mainly with name and birth date (smart corrections necessary to have a sufficient coverage with bPINs)
- With bPIN register information can be used for various purposes:
  - Calibration / post-stratification
  - Non-Response analysis/modelling/weighting
  - Substitute survey questions with admin data (e.g. part of SILC income)

## PROS

- data protection is guaranteed
- easy communication between citizen and administrative authorities as well as between register authorities
- Improvement of identification variables in sources
- data matching possible

## CONS (especially in the beginning)

- bPIN implementation took time
- new processes, databases had to be implemented
- costs
- Register authorities did not have a well known routine
- KIT/SPLIT

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