# AusgabenAtlas namespace

## A separate namespace in the MOTUS platform

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Part of the SSI Consortium

# European funded project to leverage Smart Surveys Implementation (SSI): 8 countries



**Energy usage**
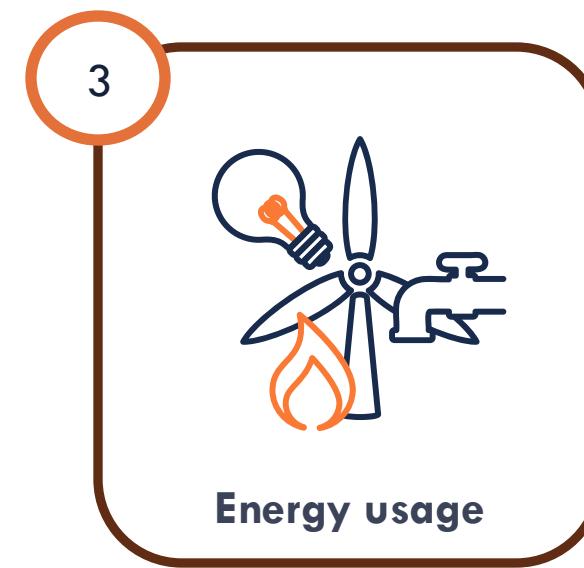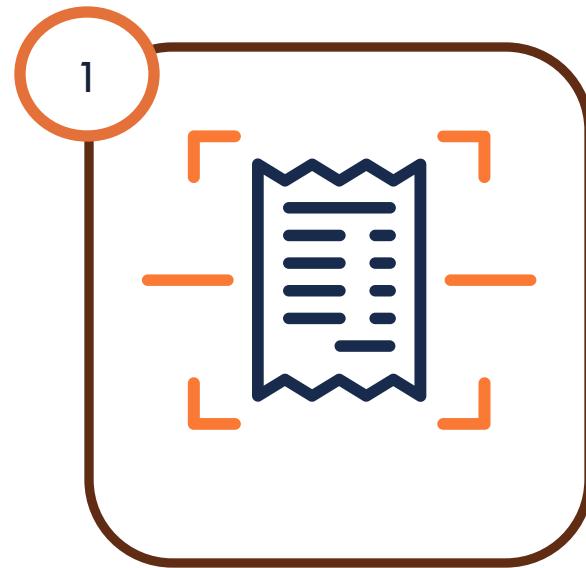
3 developments, one reusable and shareable architecture

# Microservices – Qualities & Requirements

**4 qualities: plug and play**

One task, one microservice

Platform independent components

Platform integration via API

Reusable & shareable

**4 pillars via container technology**

Deployment

Scalability

High Availability

Privacy

Cooperation model

# What is MOTUS? What are Microservices?



6 components

Back office
- Back office
- Webserver

Front office
- Webapp
- Webserver

Mobile devices
- iOS
- Android

API (s)

MOTUS core
- Back office API
- Respondent API
- Database
- Adapter API
- Adapter API

External services
- Sensor data
- Admin. data
- Derived data
- Simulated data

Analysis server
- API
- Database
- Backup server

TUS

HBS

# How to distribute?: Operationability + deployability



#containers on prem
#namespaces

Geotracking

TUS

Receipt Scanning

HBS

API (s)

Core + Back-office

Microservice

UI/UX
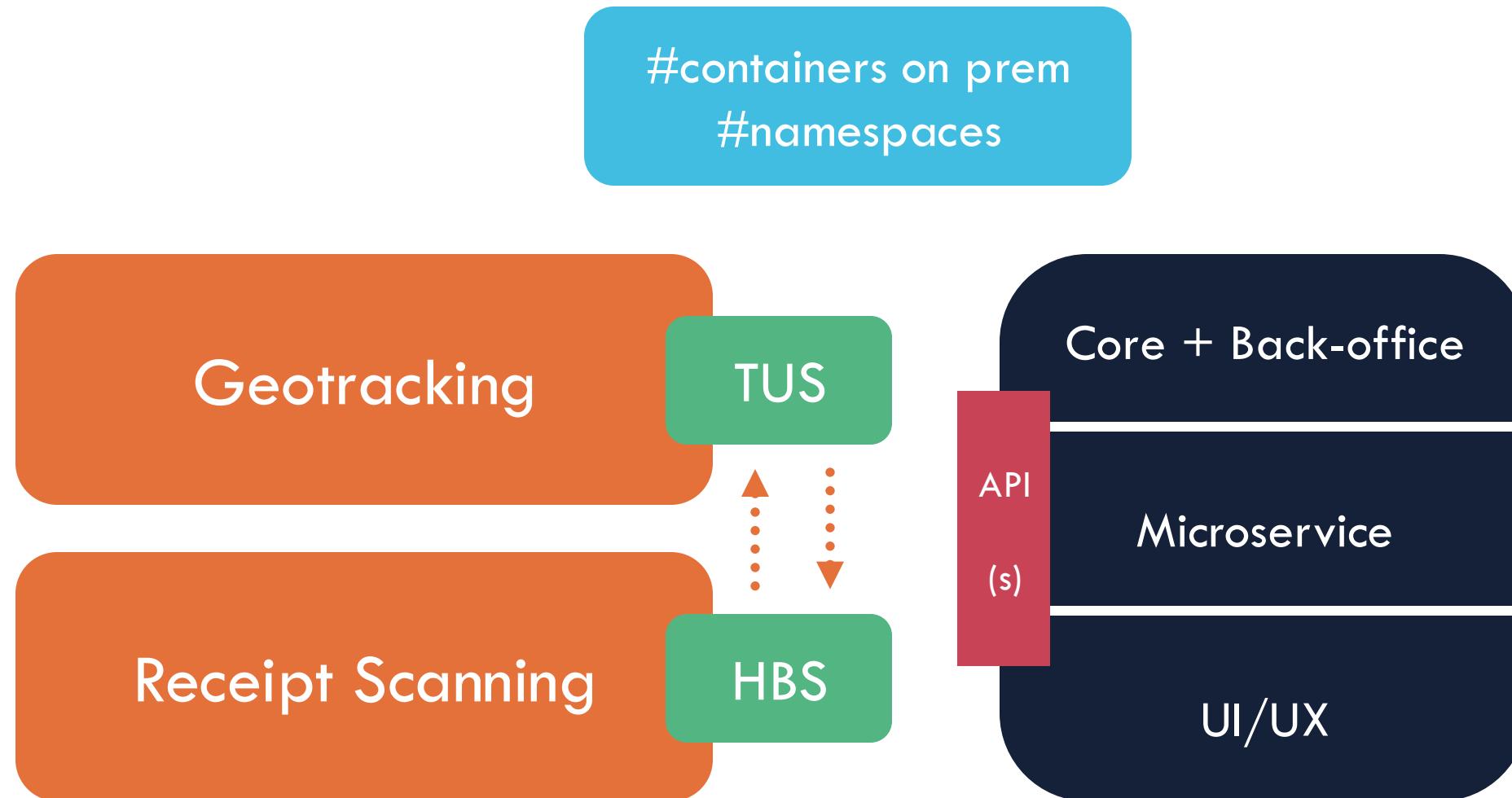
# Namespace architecture: AusgabenAtlas
## [backoffice.ausgabenatlas.de]

### Edge router
Domain name mapping
+ https ssl certificates

backoffice.ausgabenatlas.de
core.ausgabenatlas.de
app.ausgabenatlas.de

Motusbuilder domain names

Motusdemo1 domain names

### Kubernetes cluster

Ausgabenatlas namespace

Motusbuilder namespace

Motusdemo namespace

### Storage server

Ausgabenatlas storage

Motusbuilder storage

Motusdemo1 storage

### Database server

Ausgabenatlas db

Motusbuilder db

Motusdemo db

Information meeting
SSI - 22.11.24
.......

**Operationability & deployability ➔ Reusability, Shareability – Enhanced Security & Privacy**

6

# Architectural added value (on platform shareability level)



backoffice.ausgabenatlas.de
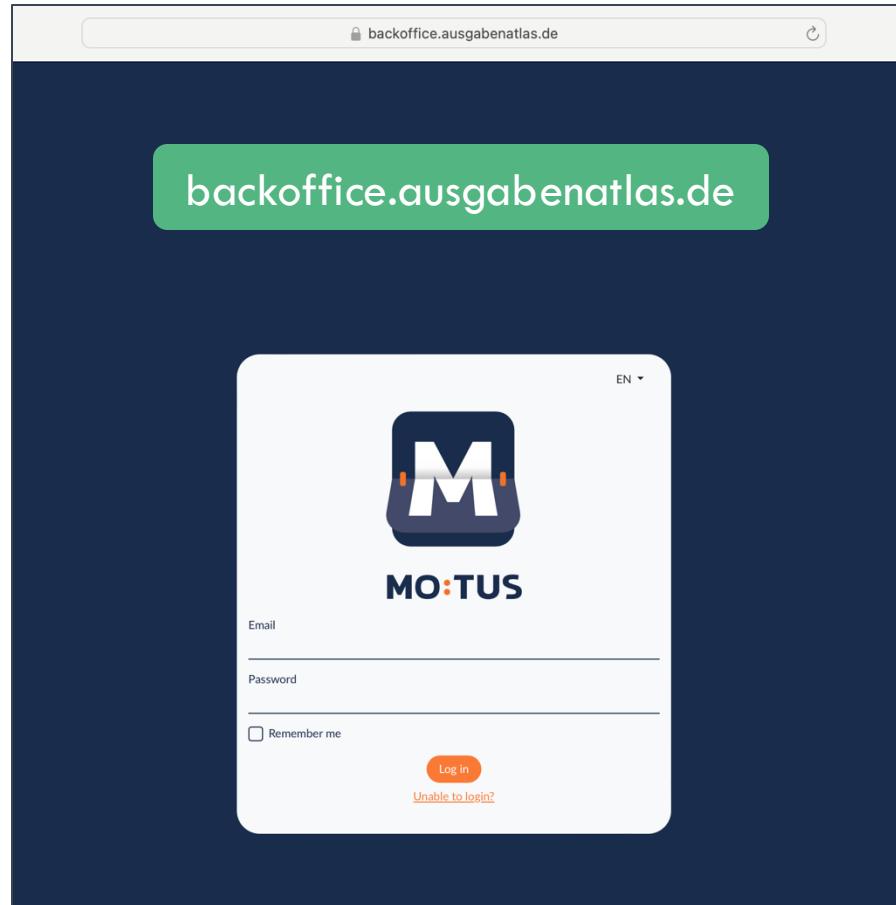
Own namespace is linked to an own domain

Administrator role

Separated database

Harmonised software support

Stability (update strategy)

• • •

# End-to-End flow creation in MOTUS
## [backoffice.ausgabenatlas.de]

### 1. Angaben zur Person
Edit

**Actions**
- Action: Go to next stage: wenn fertig
- Action: E-Mail (Warnung): 3 Tage vor cut-off am 17.12.24
- Action: E-Mail (Info): Cut-off am 17.12.24 --> Erhebung beendet
- Action: E-Mail (Reminder): nach 4 Tagen
- Action: Push (Reminder): nach 2 Tagen
- Action: Cut-off am 17.12.24 --> Erhebung beenden
- Action: E-Mail (Willkommen): mit Kennung

### 2. Persönliche Einnahmen & Ausgaben
Edit

**Actions**
- Action: Go to next stage: wenn fertig
- Action: Cut-off am 17.12.24 --> Erhebung beenden
- Action: E-Mail (Info): Cut-off am 17.12.24 --> Erhebung beenden
- Action: E-Mail (Reminder): nach 4 Tagen
- Action: Push (Reminder): nach 2 Tagen
- Action: E-Mail (Warnung): 3 Tage vor cut-off am 17.12.24

### 3. Angaben zum Haushalt
Edit

**Actions**
- Action: Go to next stage: wenn fertig
- Action: Cut-off am 17.12.24 --> Erhebung beenden
- Action: E-Mail (Info): Cut-off am 17.12.24 --> Erhebung beendet
- Action: E-Mail (Reminder): nach 4 Tagen
- Action: Push (Reminder): nach 2 Tagen
- Action: E-Mail (Warnung): 3 Tage vor cut-off am 17.12.24

### 4. Ausgabentagebuch
Erfassung der täglichen Ausgaben
Edit

**Actions**
- Action: Push (Reminder): nach 2 Tagen, wenn keine Einträge
- Action: Timeout Tagebuch: nach 17 Tagen
- Action: E-Mail (Reminder): nach 7 Tagen
- Action: E-Mail (Info): 2 Tage bis Abschluss diary (nach 14 Tagen)
- Action: Push (Info): 2 Tage bis Abschluss diary (nach 14 Tagen)
- Action: Push (Warnung): 3 Tage vor cut-off
- Action: Cut-off 17.12.24
- Action: E-Mail (Warnung): 3 Tage vor cut-off
- Action: E-Mail (Info): Cut off am 17.12.24 --> Erhebung beendet
- Action: E-Mail (Info): Tagebuch automatisch abgeschlossen
- Action: Zum nächsten Abschnitt
- Action: E-Mail (Reminder): nach 4 Tagen, wenn keine Einträge

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**EXPENSE SUNDAY 20TH OF OCTOBER 2024**

Store description
Not specified

Store category
Unknown

Store location
de

Kind of expense
☐ professional expense

Payment method
☐ expenses paid with credit card
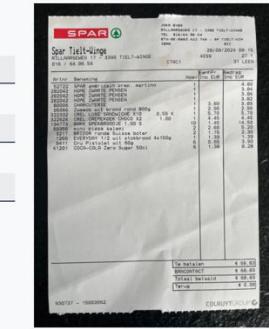
**EXPENSE ITEMS**

Gesamtsumme: SPAR

Name of expense item
Gesamtsumme: SPAR

Type of expense item
010 - Lebensmittel & Getränke (z.B. Supermarkt & Discounter)

| Return or expense item | Price | Discount | Quantity | Price |
|---|---|---|---|---|
| ☐ return item | 68.83 € | 0.00 € | 1 | 68.83 € |

Keep item private
☐ discard item from household budget

Close

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**Inclusion of microservice(s) — can be configured.
(Smart) tasks, actions and communication.**

# End-to-End solution: architectural, operational, privacy & security by design

Shareability

Security

Privacy

Respondent

Researcher

NSI

**CROSS DOMAIN STATISTICS**

**+**

**EUROPEAN STATISTICAL SYSTEM**

TUS

HBS

... (Surveys)

Standardisation

Harmonisation

...

# WP3 – MOTUS – WP2

#AusgabenAtlas

WP3

#UMA fieldtest
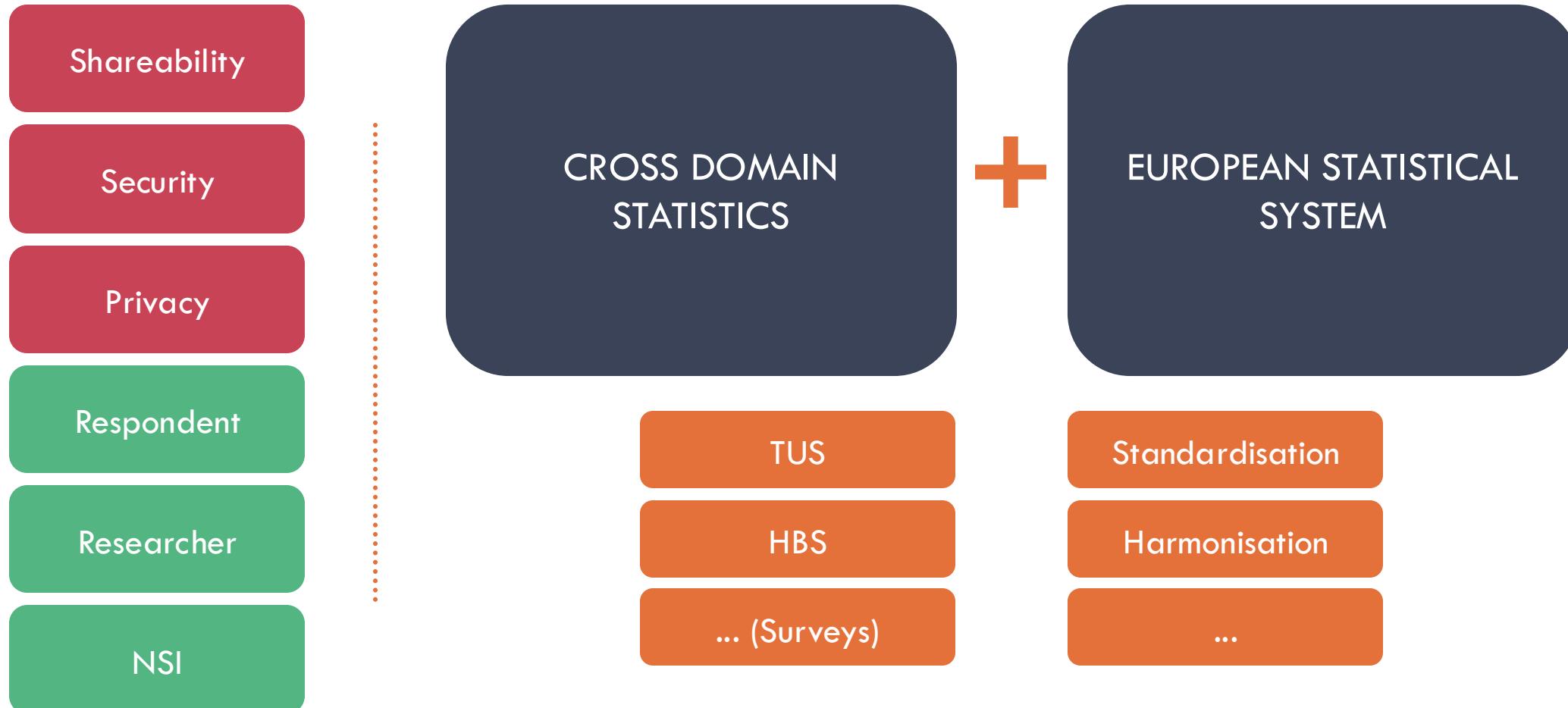
WP2
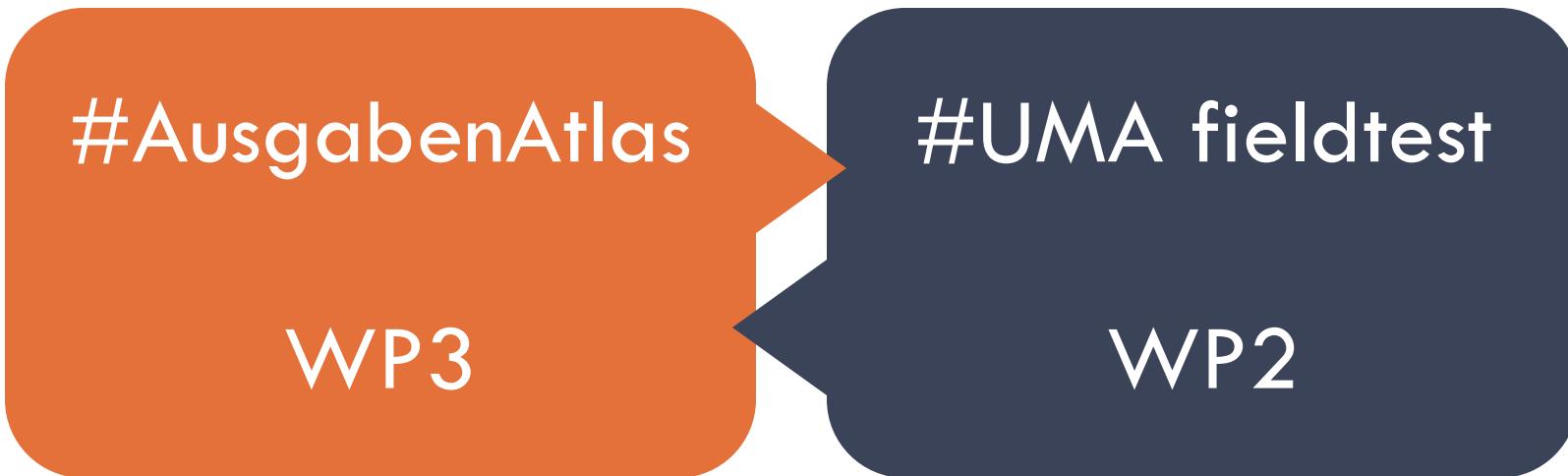
# Thanks for your attention!

Questions?

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