

Information - Services

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Nomadic Usage of telecommunication

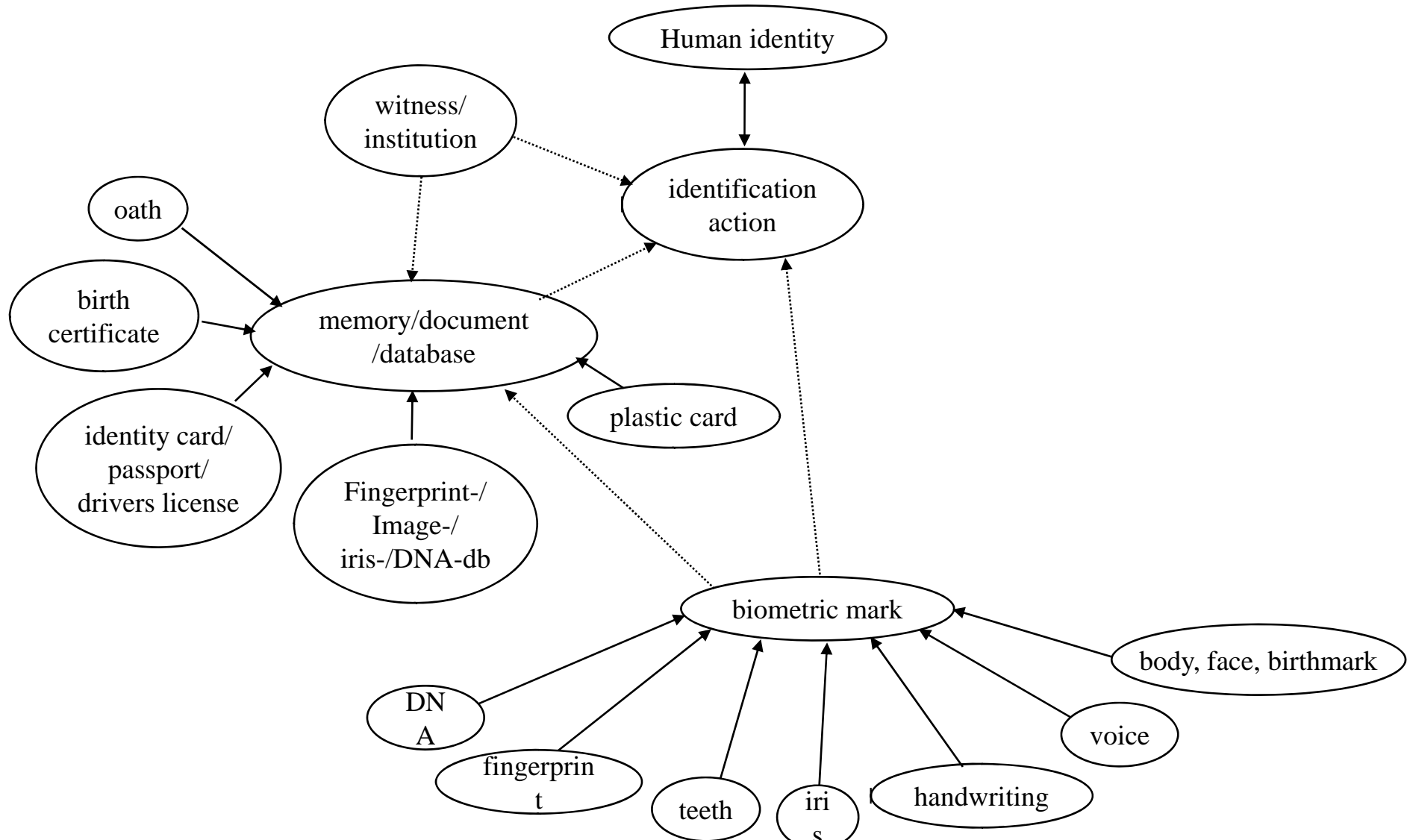
- A phone call between a German accused and a UK-call partner results in two requests for assistance in official matters and a rather complex case.



Information analysis

- Surveillance of an accused with known phone number
- Phone partner in UK
- investigation of his phone number relates to a VoIP provider and usage of a temporary IP-address
- IP-address area is used by a Norwegian mobile phone provider
- Investigation in Norway shows that this IP-address was temporary used by an Internet connection within an UMTS connection
- This UMTS connection was established for a Norwegian cell phone number, via roaming in Germany in a given broadcaster cell-ID.

Modelling the Identity of a Person



Information Analysis complete

Event

Role

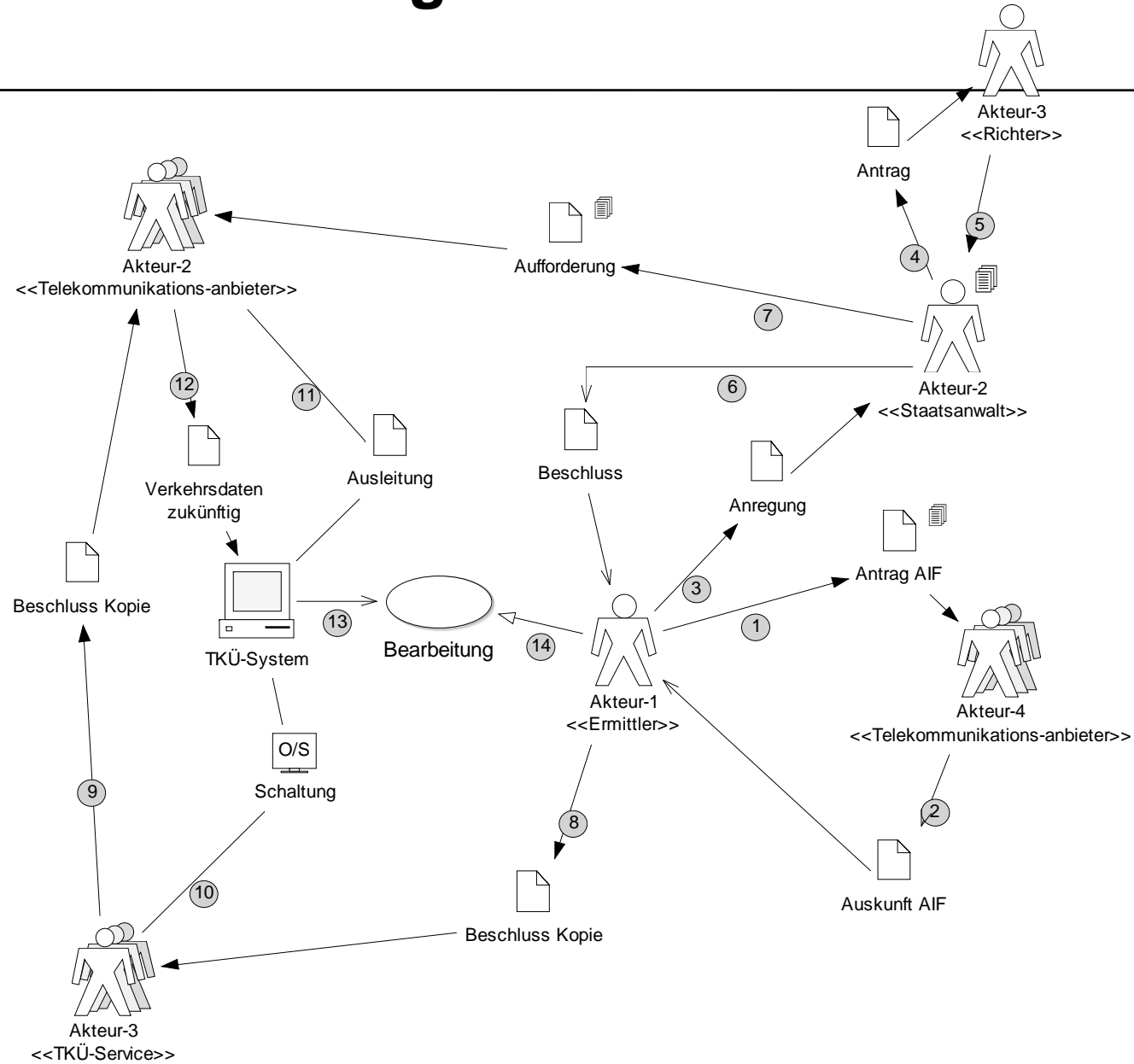
Product

Location

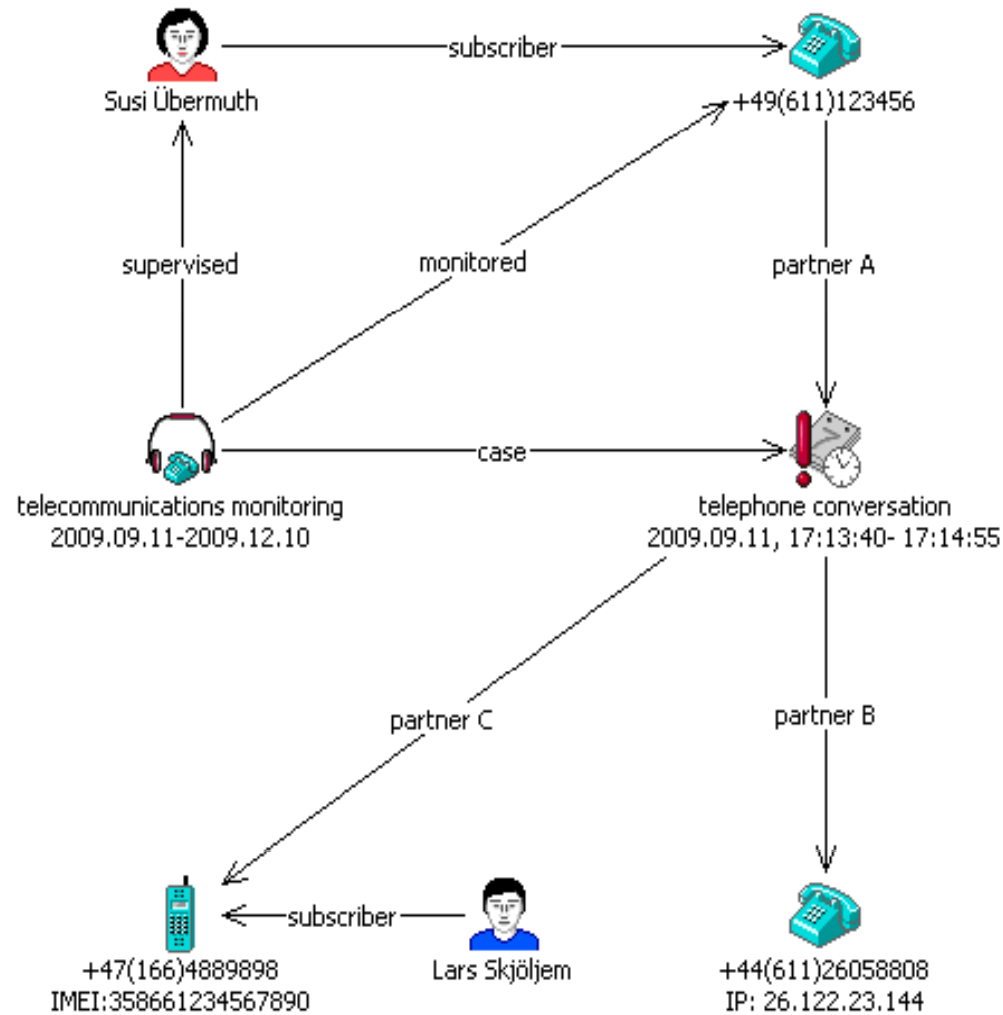
Institution

- [Event] of an [Role] with known [Product]
- [Product] in [Location]
- [Event] of his [Product] relates to a [Institution] and usage of a [Product]
- [Product] is used by a [Location] [Institution]
- [Event] in [Location] shows that this [Product] was temporary used by [Institution] within an [Institution]
- This [Institution] was established for a [Location] [Product] [Product], via [Event] in [Location] in a given [Institution]

Modelling the Business Process



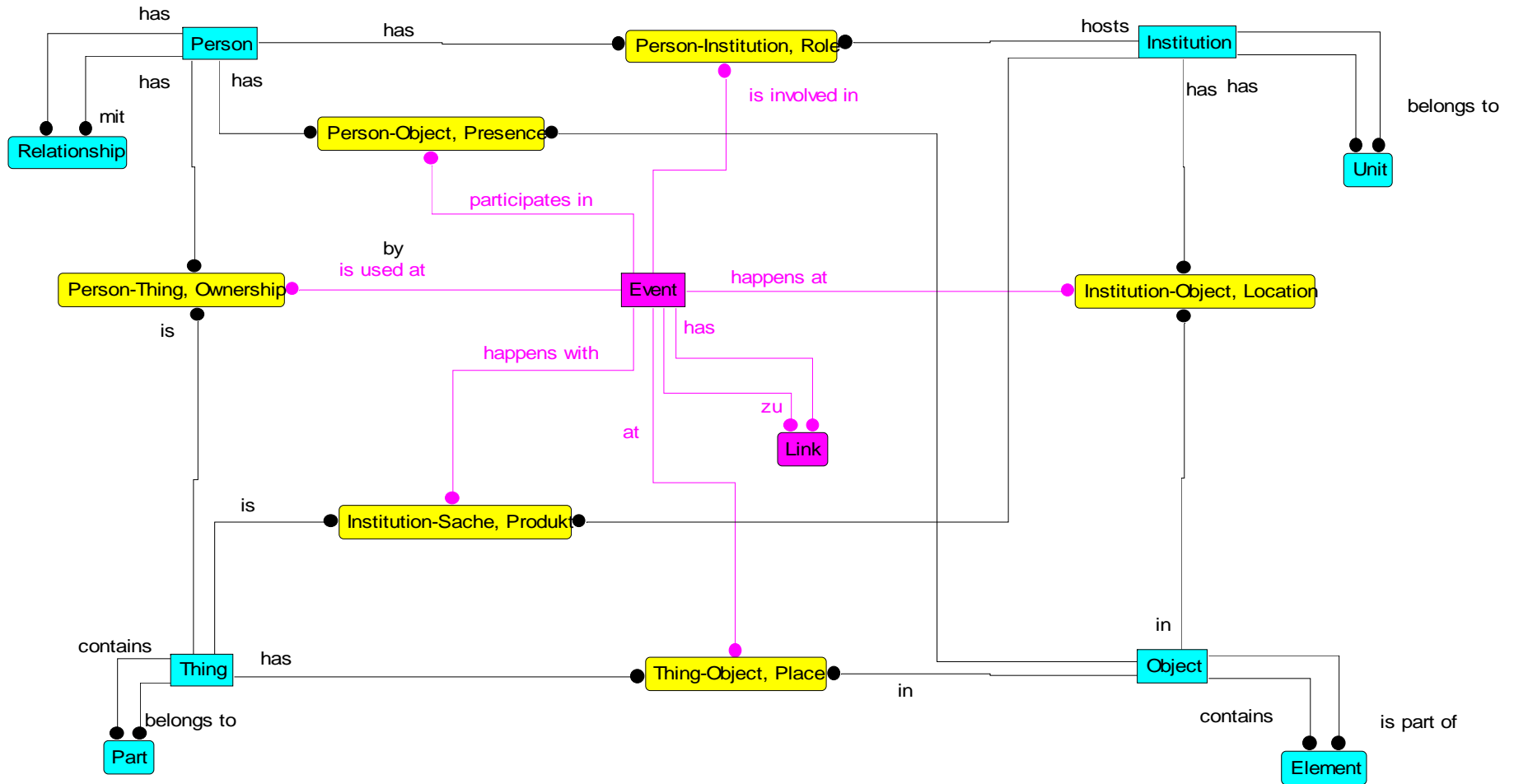
Modelling the Case



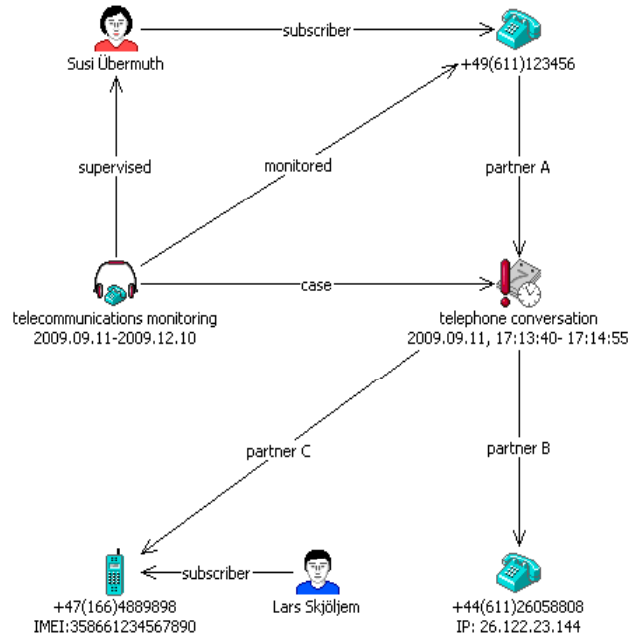
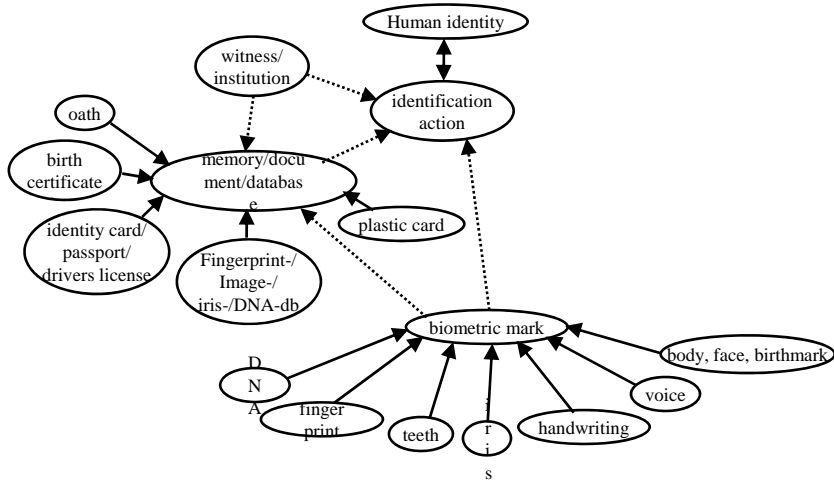
Modelling the Data

- conceptional business data model
- includes events to take time dimension into account
- Taxonomies for independent entities „Person“, „Institution“, „Object“ and „Thing“
- Ontology with dependent entities like “Ownership”, “Product”, “Role”, “Presence”, “Place” and “Location”

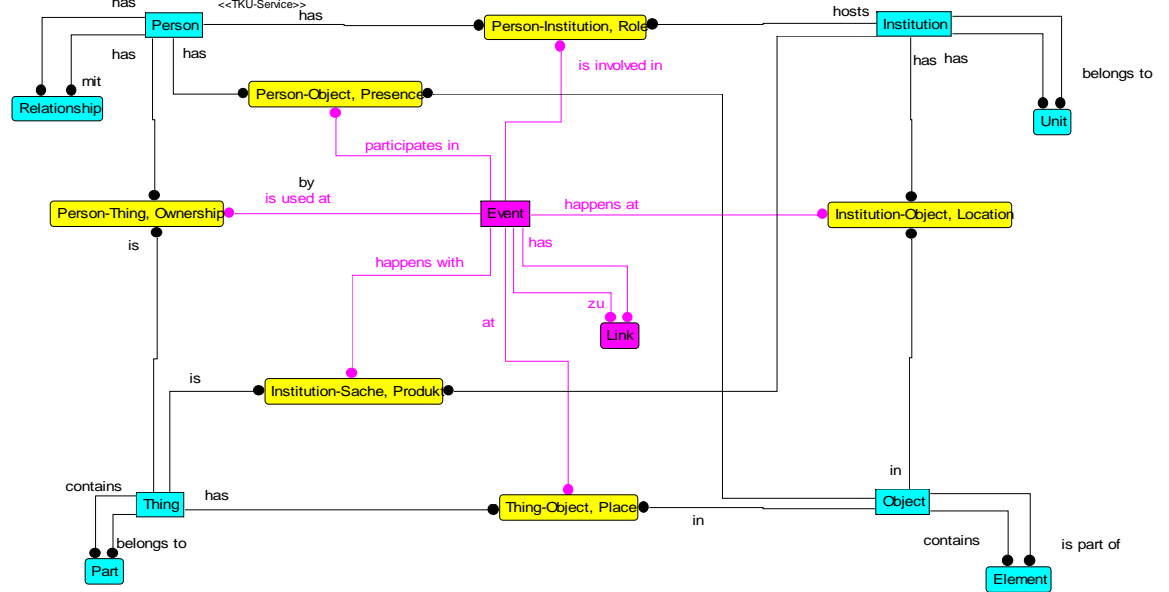
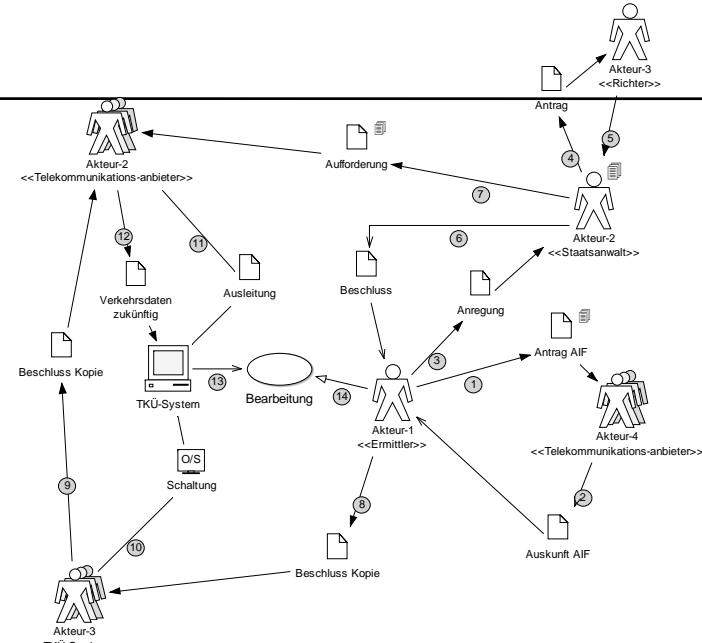
Data Model



Knowledge documented in Models



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From Models to Services

See Next presentation!

Questions?