




# **Experiences of Electronic data interchange for waste management in Germany**

**EUDIN - European Data Interchange for waste Notification System,  
April 12, 2002 in Cologne**

# Agenda

- **Situation of German national hazardous waste shipment**
- **The start of EDI for waste management in Germany**
- **Electronic data processing system of waste management - ASYS**
- **Communication via IKA**
- **The second BUDAN-guideline**
- **Converter-programmes**
- **Are the experiences helpful for the Project of EUDIN?**

# Situation of German hazardous waste shipment

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- **Participants of commercial side:** numbers of firms
    - generators of hazardous waste app. 280.000
    - carriers of hazardous waste app. 12.000
    - waste disposal operators app. 8.500
  - **Situation of hazardous waste shipment:** numbers of paper-document
    - before shipment app. 60.000
    - after shipment app. 1.500.000
    - permits of transports app. 12.000
  - **Domestic movements between the 16 federal states (Bundesländer) of Germany**
    - It is different from state to state in Germany and it is a lot of paper-based activities

# Start of EDI for Waste Management in Germany (I)

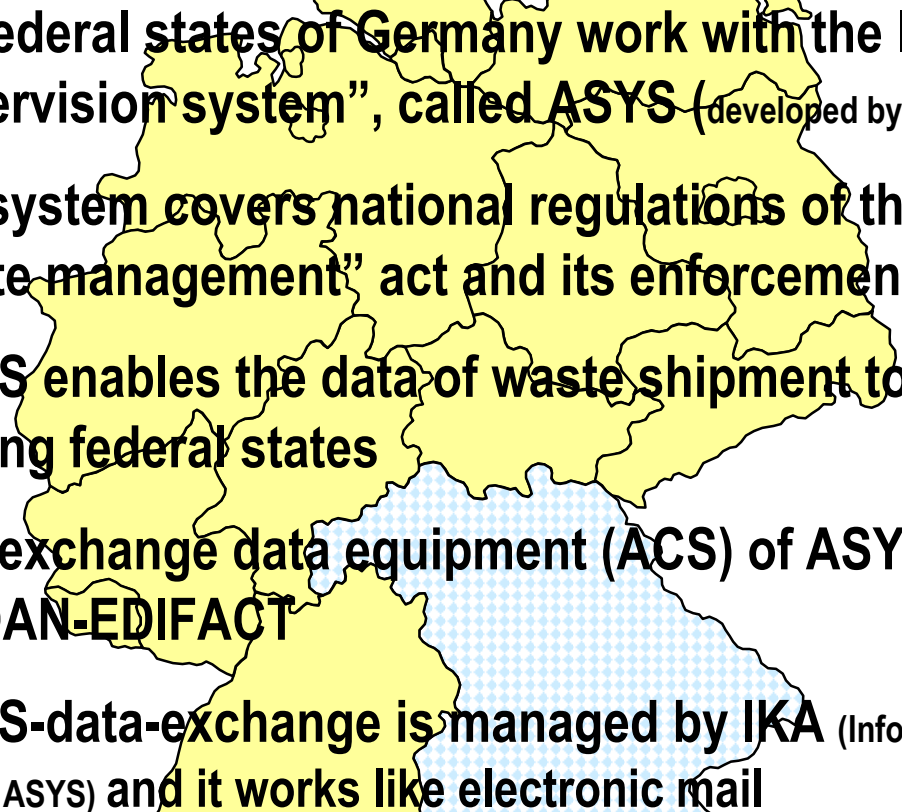
- **Cause: a new recycling and waste act**
- **commission: council of the federal states (Bundesländer) of waste (LAGA)**
- **aim: Definition of interface for structured messages**  
The structure of messages are developed by uniform standard of EDI  
The data exchange will be used between authorities and between companies and authorities
- **reason: The economical demands to save costs for both sides - companies and authorities**

# Start of EDI for waste management in Germany (II)

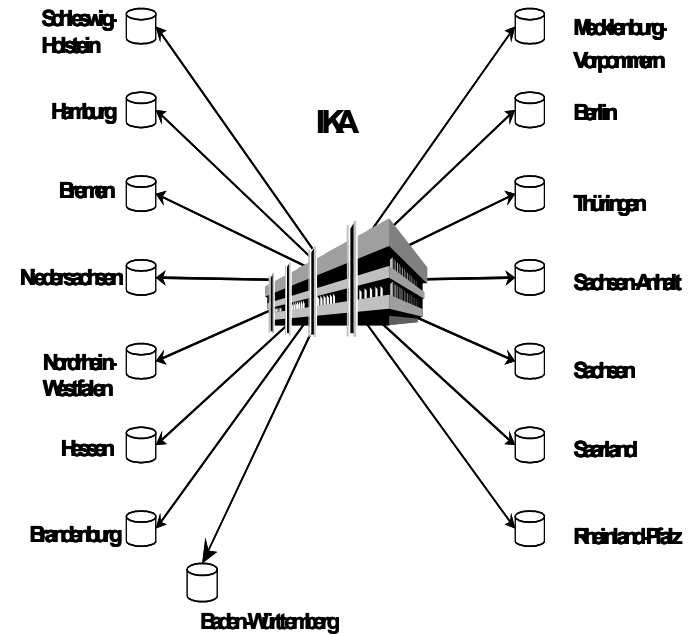
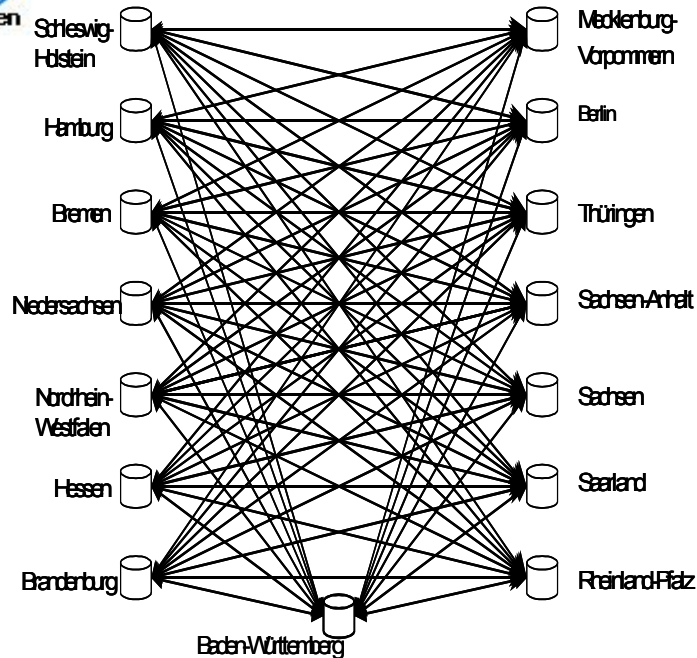
- Workgroup: started in summer 1996, the workgroup is called BUDAN
- decision: First we discussed and heard experts for the „possibly best“ standard - finally the decision was made for the standard of UN/EDIFACT  
we want to have
  - a world wide standard
  - a standard used by the companies
  - a standard independent from soft- and hardware of different users
- Finally: The first “BUDAN-guideline” finished in March 1998 and published it by LAGA, Heft 29, Erich Schmidt Verlag

# Electronic data processing system of waste management

## ASYS - Abfallüberwachungssystem

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- All federal states of Germany work with the IT-based “waste supervision system”, called **ASYS** (developed by condat)
  - the system covers national regulations of the “recycling and waste management” act and its enforcement decrees
  - **ASYS** enables the data of waste shipment to be exchanged among federal states
  - The exchange data equipment (ACS) of **ASYS** is based on **BUDAN-EDIFACT**
  - **ASYS-data-exchange** is managed by **IKA** (Information-co-ordination Office ASYS) and it works like electronic mail

# Communication via IKA



- The communication via IKA\* works like a hub or a star
  - \*IKA (Informationskoordinierende Stelle ASYS)
- Left side: everyone communicates with everybody else, 15 times 16 connections
- right side: only 16 connections

# The second guideline BUDAN

- This year the BUDAN definition has been revised
- The definition and documentation was made with help of the software-tool **EDIFIX** (developed by GEFEG)
- EDIFIX offers the opportunity to generate multiple interface definitions (e. g. EDIFACT and XML) from a single source
- The second BUDAN- guideline was finished in May, 2001

# Converter-programmes

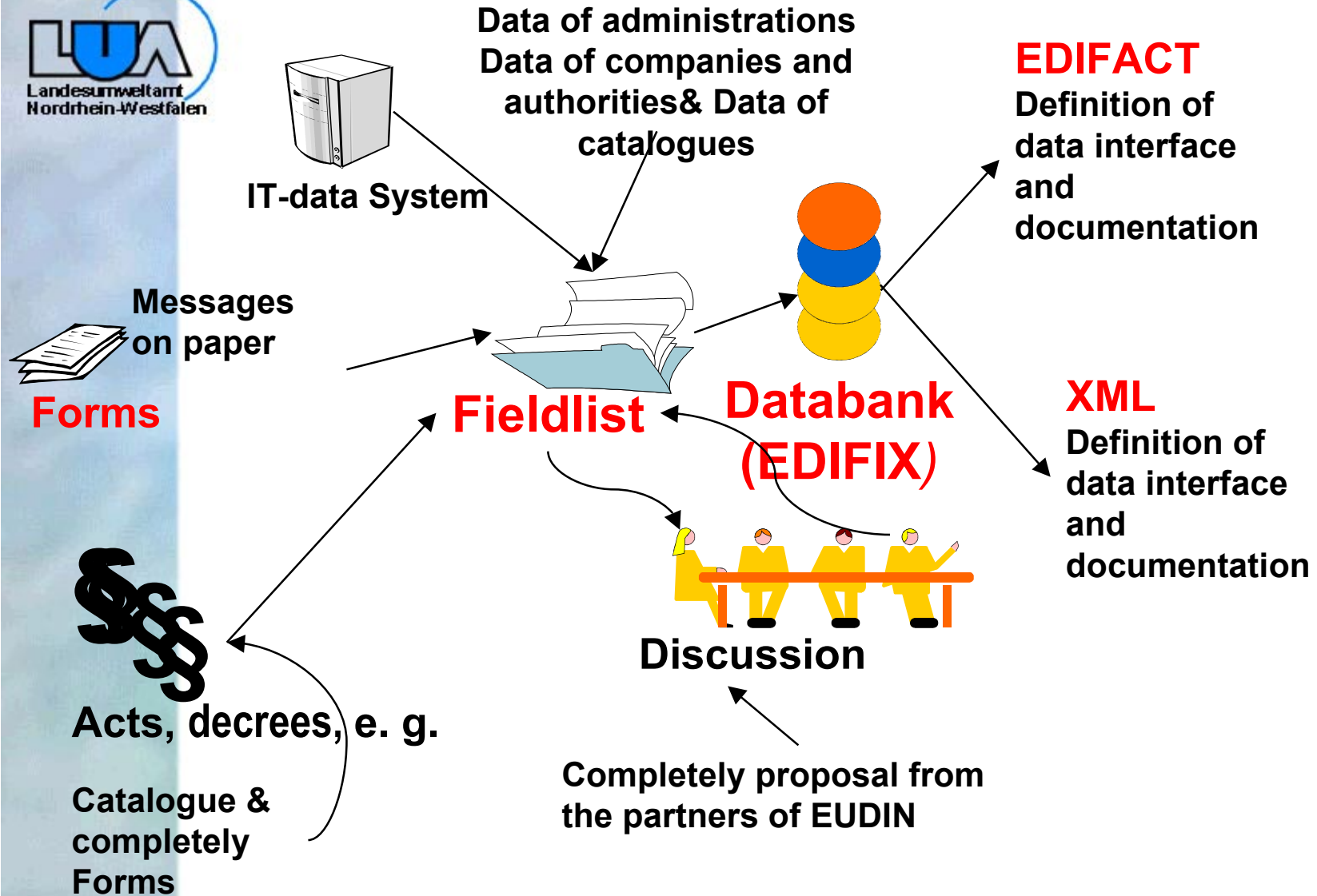
- Today we are testing the electronic data interchange between companies and authorities
  - with small converter-program and
  - a provider based on BUDAN-EDIFACT
- The participants are very interesting, because it will be
  - cheaper and
  - fasterto get data directly instead of paper-documents

# Are the Experiences helpful for the Project of EUDIN?

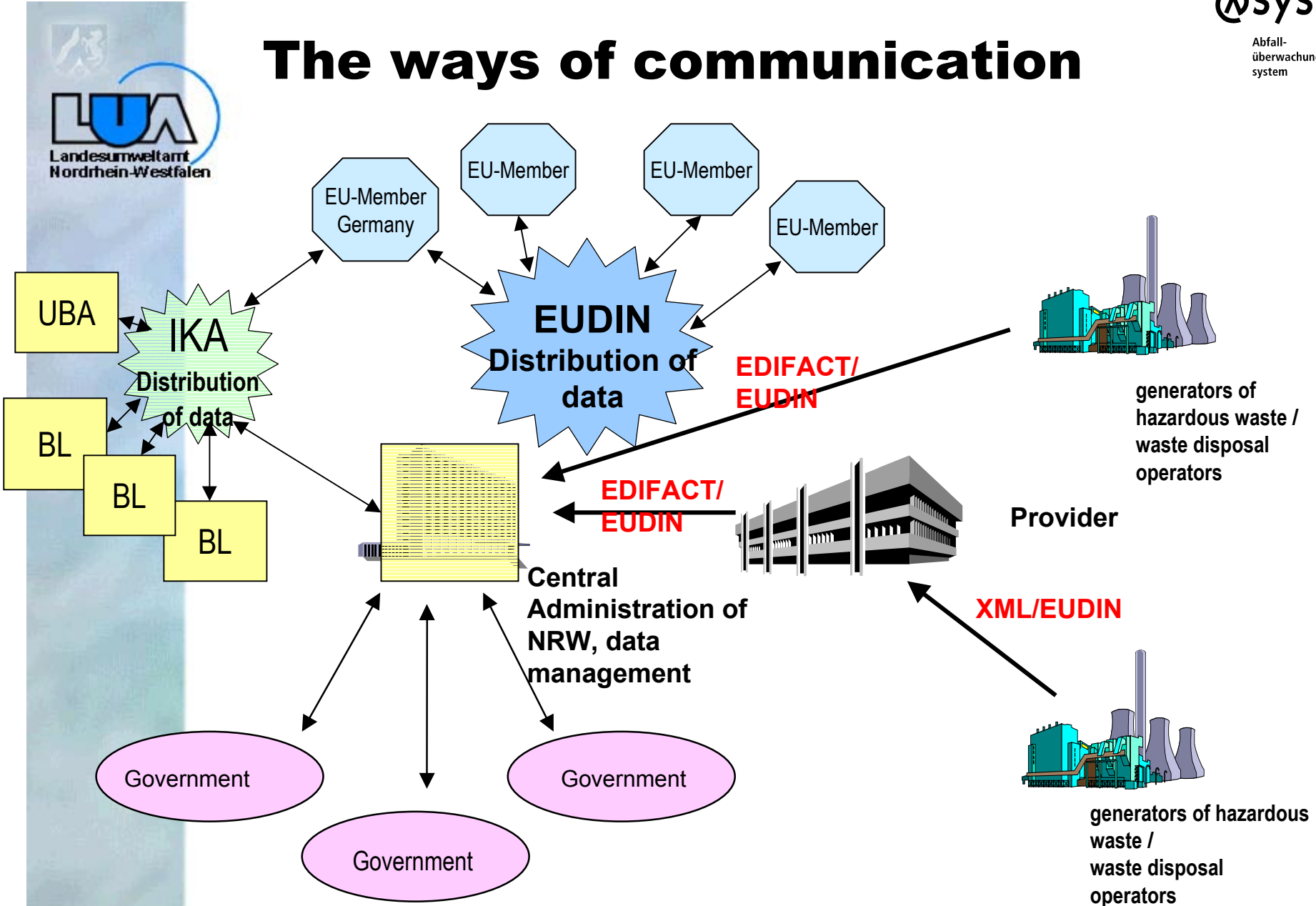
## ■ We have Experiences about:

- to define a standard of data interchange with help of the software tool **EDIFIX** (developed by GEFEG)
- to made overview over all data and their characteristic in a fieldlist
- to develop a standard based of **EDIFACT**
- to test the applicability of this standard to data interchange between authorities and companies
- to test ways of communication **System**
- different Fieldtest between the companies and the authorities

# Development of data interface of EUDIN



# The ways of communication



# Thank you for listening

