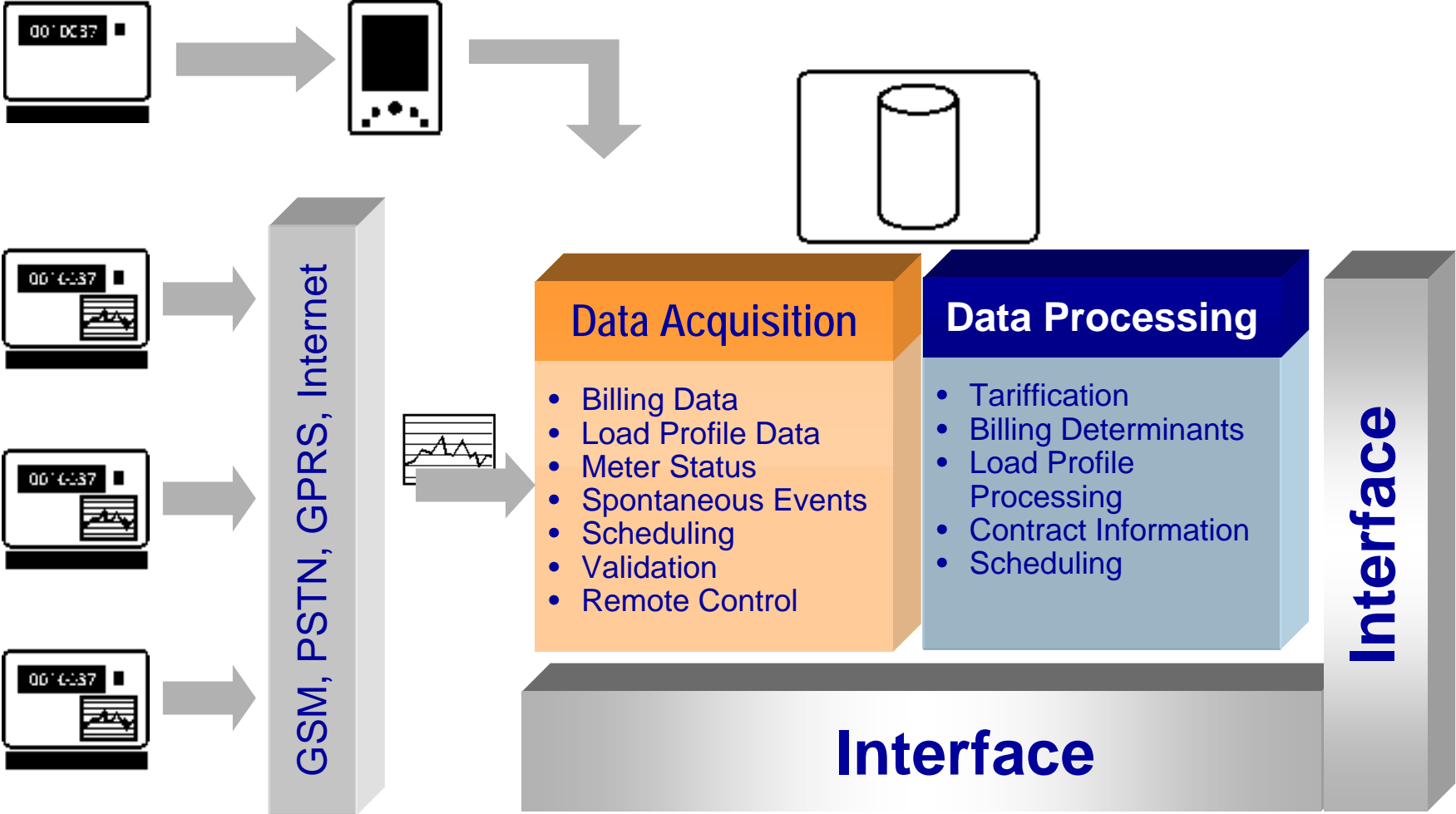




**meter2cash AG**

# Converge Short Presentation

- **Converge System Overview**
- **Converge High- Lights**
- **Data Validation**
- **Data processing**
- **Scalability of Converge**
- **Market Segmentation**



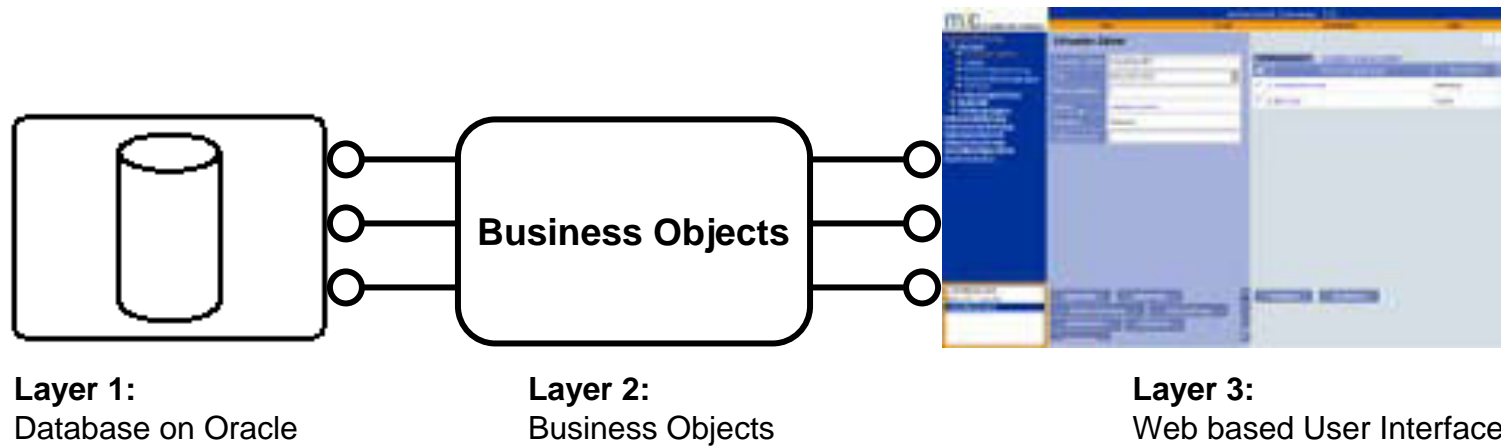


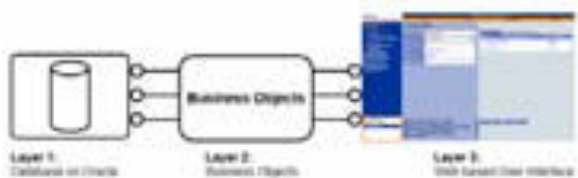
# Supported communication protocols

Protocol	Meter type / family	Meter Producer	Real time profile	Real time data	Time operation	Real	Real historical values	Meter Study	Real current register values	Real previous register value	Functions	Support Numberless Events
Datacon	FW900/ FW1600	Datacon										
DIN 19244	POREG 2 (P25)	Iskraemeco										
DLMS	Z D4xx	Landis+Gyr										
	E600	Enemtel										
	E700	Enemtel										
DSFG	ZMQ	Landis+Gyr										
	SL7000	Actaris										
	MRO2200	Karl Wieser										
DSFG	MRO21000	Karl Wieser										
	MRO2201	Karl Wieser										
	RMG Messtechnik 9104T											
DSFG	RMG Messtechnik ERZ2200											
	RMG Messtechnik GC9000 Stream											
	EDM Genus	EDM Mx5	EDM									
FNP	ENC200	Görlitz										
	ENC400	Görlitz										
IEC1107	Z B4xx	Landis+Gyr										
	Siemens 7E 62/63	Siemens										
	LZM	EMH										
	K302 Volume Corrector	Tritschler										

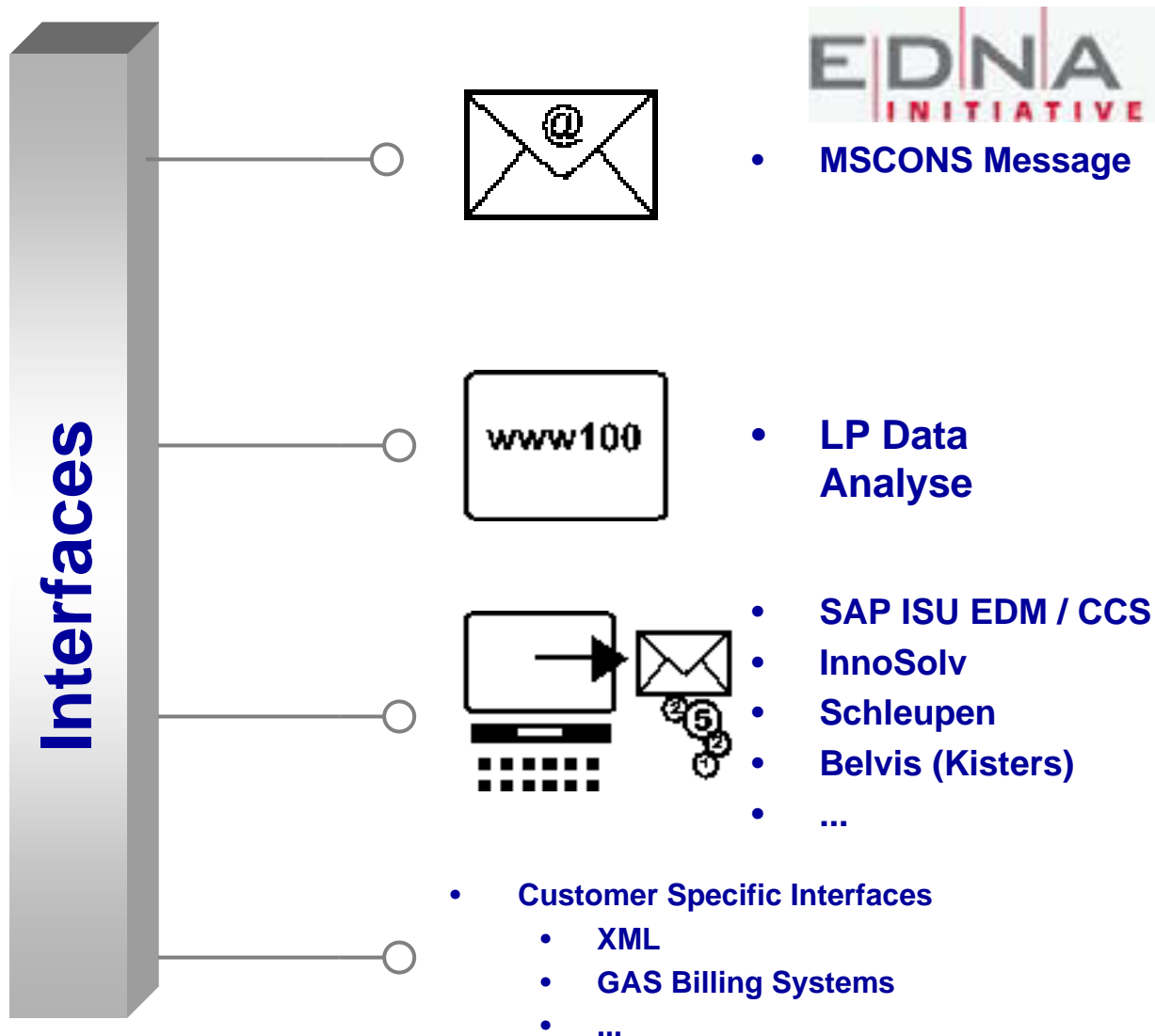
  

Protocol	Meter type / family	Meter Producer	Real time profile	Real time data	Time operation	Real	Real historical values	Meter Study	Real current register values	Real previous register value	Functions	Support Numberless Events
VDEW-2 (IEC62056)	ABB AEM 500	ABB										
	Siemens 7E 62/63	Siemens										
	Dialog Z-D	Landis+Gyr										
	DZD											
	Schlumberger DC3	Actaris										
	A1500	Elster										
	A1350	Elster										
	A2500	Elster										
	MT851	Iskraemeco										



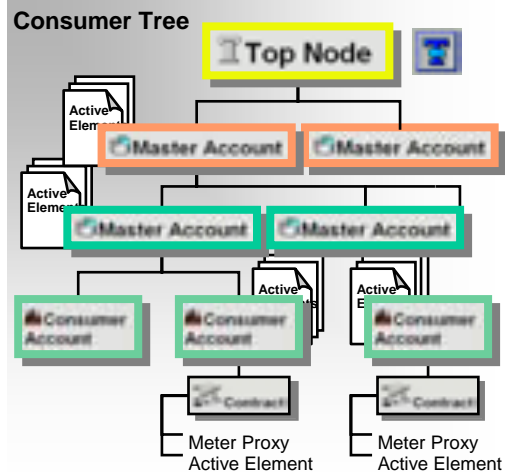
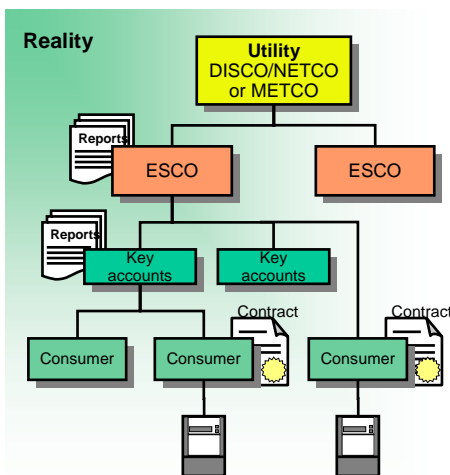


- **State of the art...**
- **Highly flexible**
  - Distributed system (LAN WAN)
  - D-COM objects are also accessible from 3rd Party programs
- **The business objects are the interfaces to the database**
  - 3rd Party programs don't need any information about the database architecture.
  - Interfaces



**Converge includes a highly flexible Application interface. It allows to exchange data with different other systems**

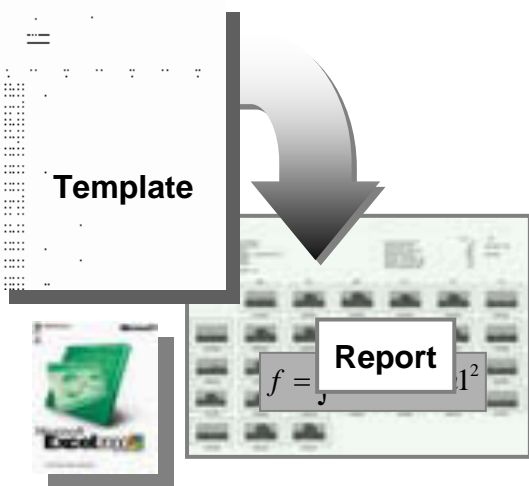
Consumer Tree



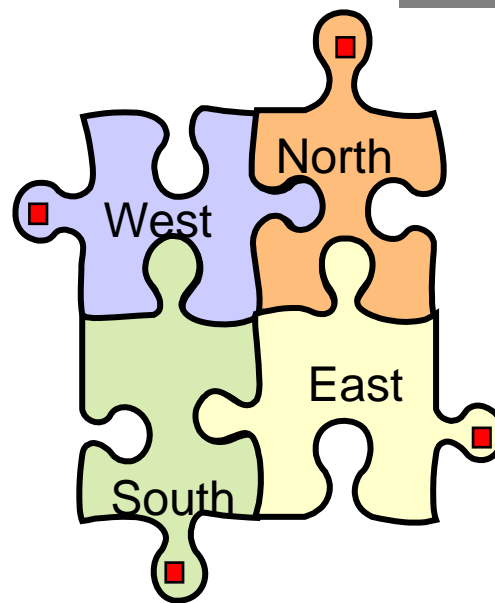
Tariff Agreements



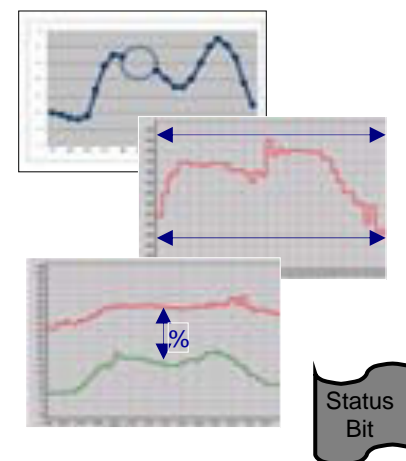
Template Management



Data Segmentation

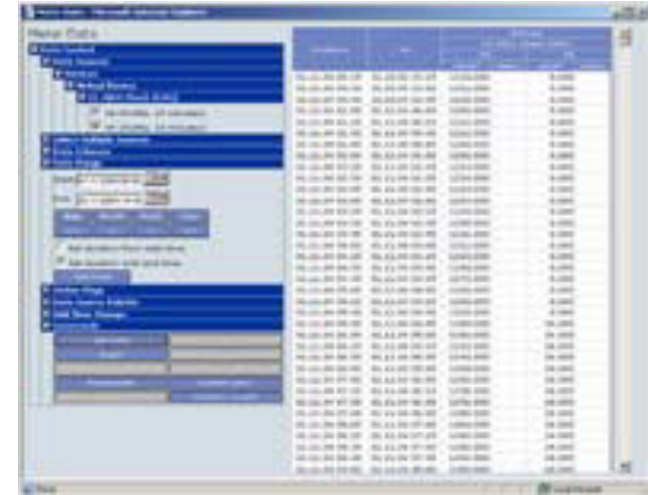


Data Validation





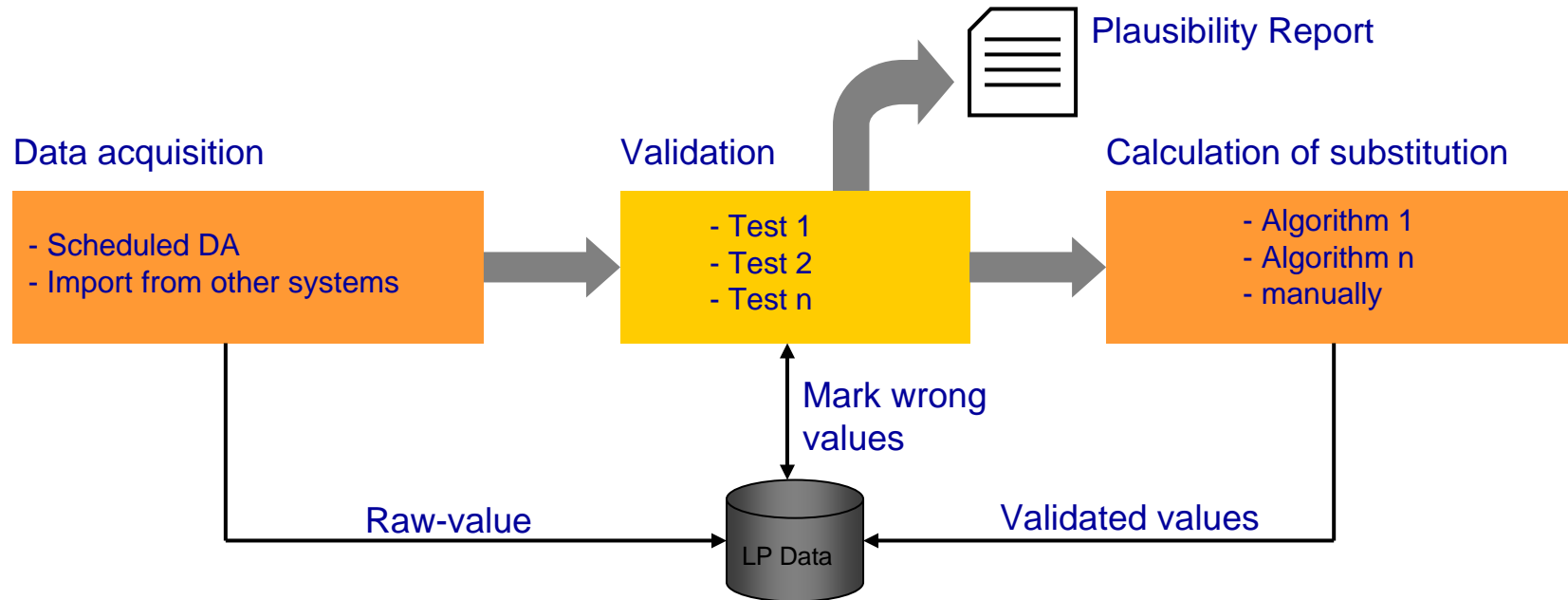
- Data collection through different communication channels and different meter protocols
- Plausibility check
- Possibility for automatic substitution of not valid data
- Scheduler with dependencies
- Meter check and meter register construction
- EDM functionalities for measured load profile data



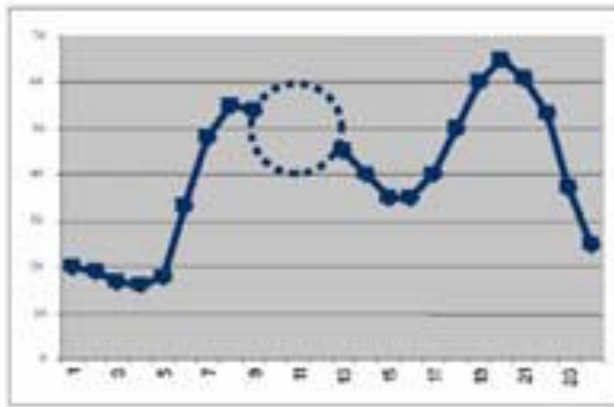
The screenshot shows a software window titled 'Meter Data' with a tree view on the left and a data table on the right. The table contains multiple columns of numerical data, likely representing meter readings over time.



## Concept:



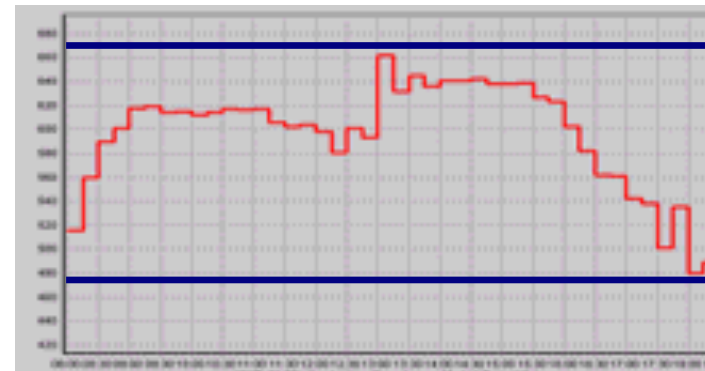
## Gap check



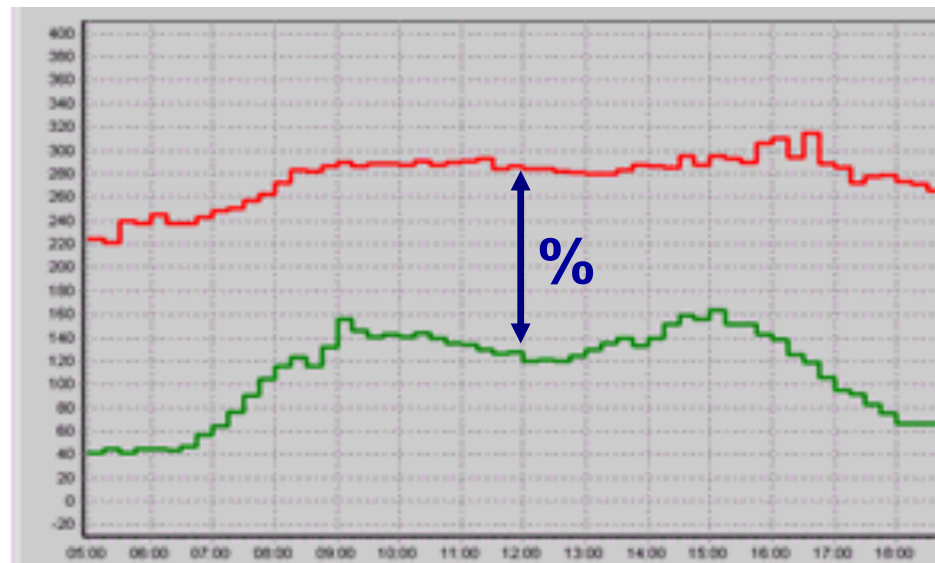
## Status check

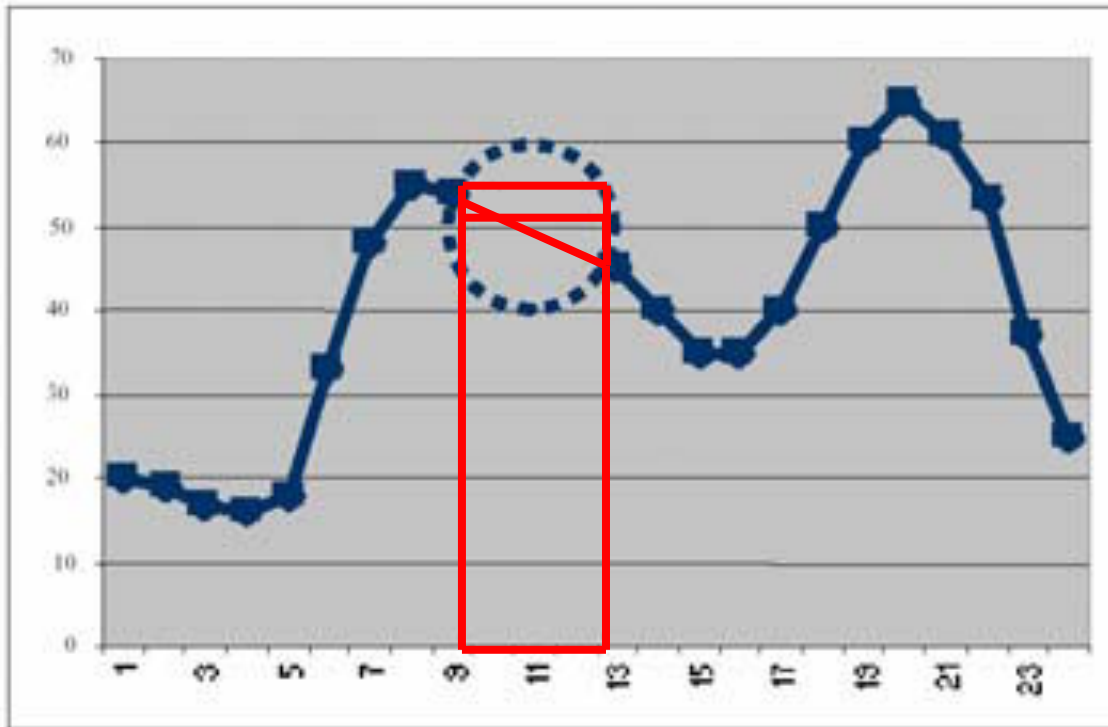


## Limit check



## Main and check meter





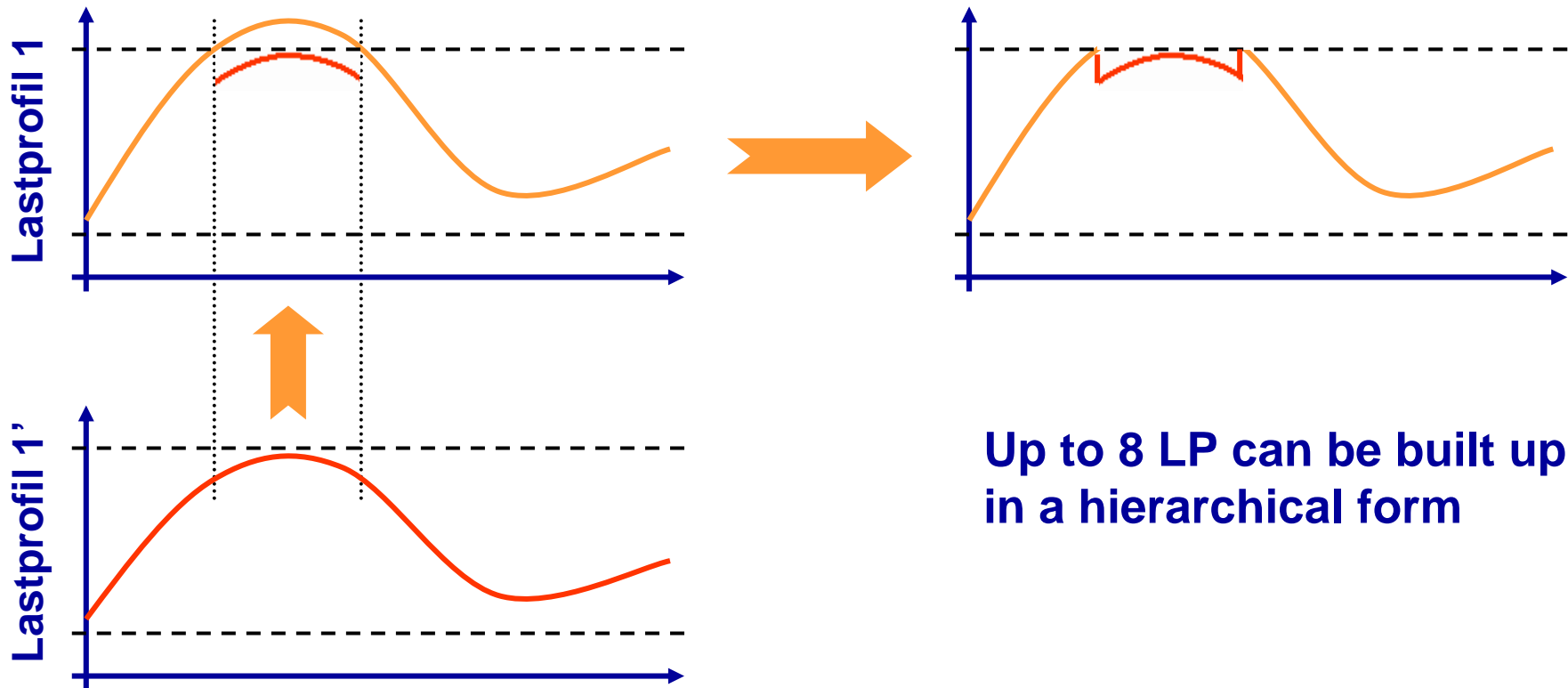
➔ Last valid Value

➔ Mean Value

➔ Linear Interpolation

➔ Zero Values

Wrong values can be replaced through a value from another Meter. Here an example from a limit check



**Up to 8 LP can be built up in a hierarchical form**

### Zählerdaten

- Daten anzeigen
  - Daten Quellen
    - Virtuelle Zähler
      - Datenkanal
        - LC 16kV Main
          - ActiveEnergy (Lastprofil, 15 Min.)
          - ReactiveEnergy (Lastprofil, 15 Min.)
  - Mehrfachselektion
  - Datenfelder
  - Datenbereich
 

Start:

Ende:

TagMonatWocheJahr

------

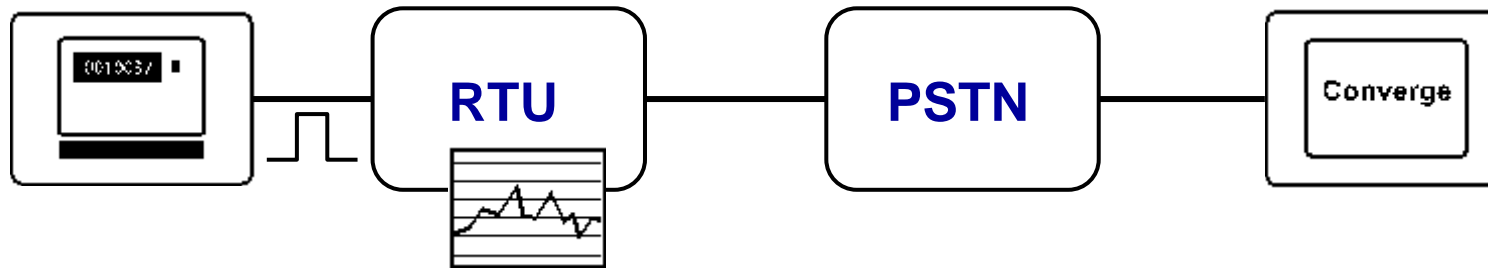
Berechne Dauer ab Startzeit  
 Berechne Dauer bis zur Endzeit
  - Status Bits
  - Datenquellen zusammenstellen
  - Füge Zeitstempel hinzu
  - Befehle
 

Daten holen	Zustimm
Graphische Darstellung	Gibstanz ändern
Kopieren	Kolligen
Neu Berechnen	Prev. bestätigen
Änderungsgeschichte	Ungültige bestätigen

Lokalzeit	Zeit UTC	Virtuelle Zähler	
		LD 16kV Main	ActiveEnergy
		Formwert	Status
08.05.2005 00:15	07.05.2005 22:15	1044.000	
08.05.2005 00:30	07.05.2005 22:30	1032.000	
08.05.2005 00:45	07.05.2005 22:45	1044.000	
08.05.2005 01:00	07.05.2005 23:00	1056.000	
08.05.2005 01:15	07.05.2005 23:15	1056.000	
08.05.2005 01:30	07.05.2005 23:30	1068.000	
08.05.2005 01:45	07.05.2005 23:45	1020.000	
08.05.2005 02:00	08.05.2005 00:00	1044.000	
08.05.2005 02:15	08.05.2005 00:15	1044.000	
08.05.2005 02:30	08.05.2005 00:30	1044.000	
08.05.2005 02:45	08.05.2005 00:45	1056.000	
08.05.2005 03:00	08.05.2005 01:00	1032.000	
08.05.2005 03:15	08.05.2005 01:15	1056.000	
08.05.2005 03:30	08.05.2005 01:30	1008.000	
08.05.2005 03:45	08.05.2005 01:45	1056.000	
08.05.2005 04:00	08.05.2005 02:00	1056.000	
08.05.2005 04:15	08.05.2005 02:15	1044.000	
08.05.2005 04:30	08.05.2005 02:30	1037.000	CS
08.05.2005 04:45	08.05.2005 02:45	1044.000	
08.05.2005 05:00	08.05.2005 03:00	1032.000	
08.05.2005 05:15	08.05.2005 03:15	1044.000	
08.05.2005 05:30	08.05.2005 03:30	1044.000	
08.05.2005 05:45	08.05.2005 03:45	1068.000	
08.05.2005 06:00	08.05.2005 04:00	1080.000	
08.05.2005 06:15	08.05.2005 04:15	1068.000	
08.05.2005 06:30	08.05.2005 04:30	1044.000	
08.05.2005 06:45	08.05.2005 04:45	1056.000	
08.05.2005 07:00	08.05.2005 05:00	1032.000	
08.05.2005 07:15	08.05.2005 05:15	1056.000	
08.05.2005 07:30	08.05.2005 05:30	1044.000	
08.05.2005 07:45	08.05.2005 05:45	1068.000	
08.05.2005 08:00	08.05.2005 06:00	1068.000	
08.05.2005 08:15	08.05.2005 06:15	1032.000	
08.05.2005 08:30	08.05.2005 06:30	1044.000	

# Meter check and register construction

- The meter check function is another data validation form.
- The result of cumulated load profile values has to be the same like the register value from the meter itself.

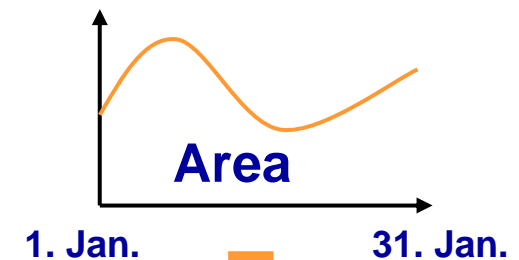


Date:	Register
1. Jan.	: 1000kWh
31. Jan.	: 2000kWh



**Consumption : 1000kWh**

=



**Area**



- Definitions of metering points, communication path etc. can be added by additional attributes.
- So Converge can be exactly adapted to the requirements from the customers
- Search and filter functions on these new attributes are included.

Virtueller Zähler

Virtueller Zähler	FAG Haupt Nord P001
Typ	FAG Haupt Nord
Messpunkt-Code	
Zähler	FAG Haupt P001
Standard	Beleg
Zählername	

Zählergruppen: Variation

1\_FAG

2\_Einst

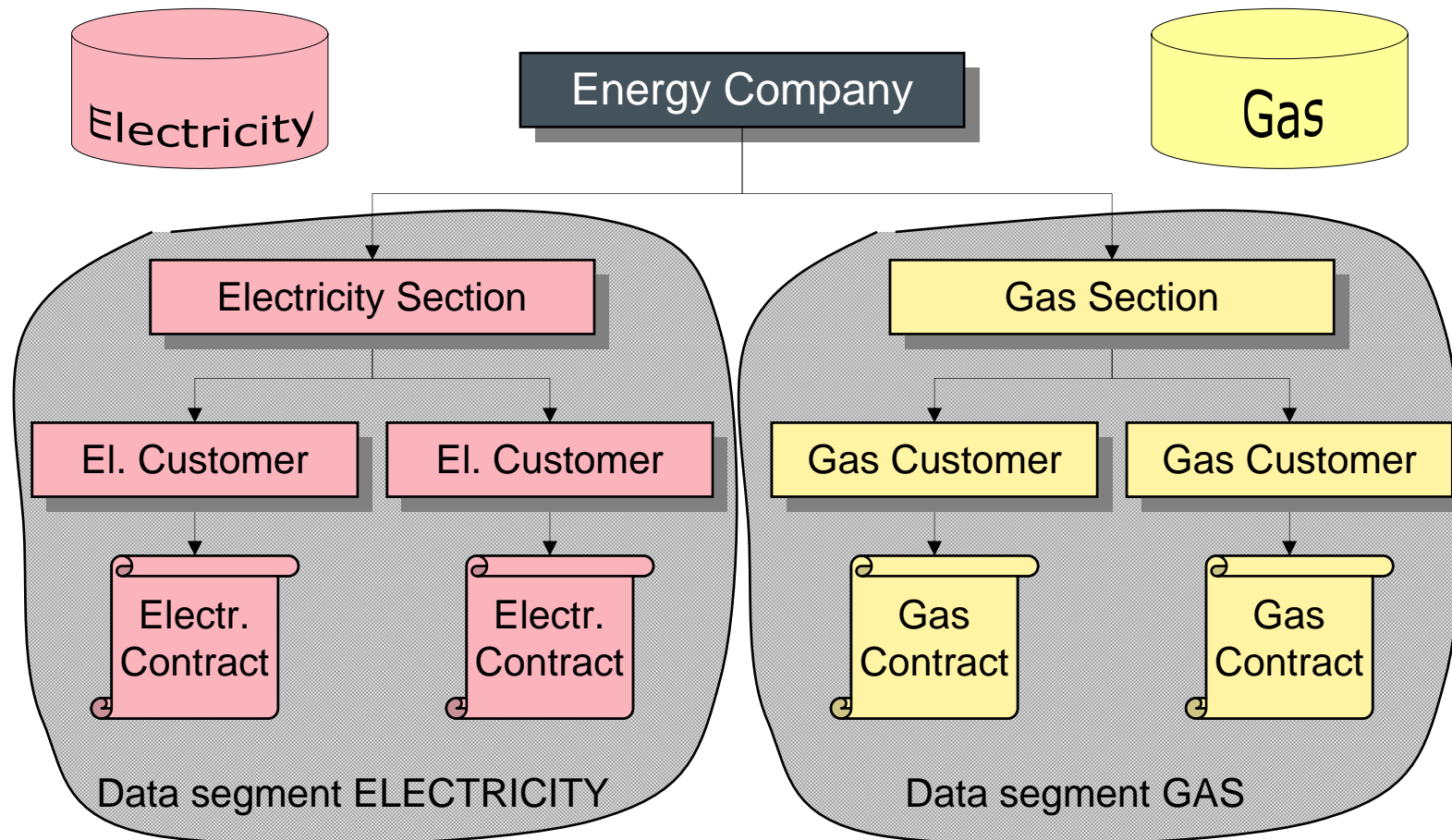
**Example: New additional attributes for a virtual meter.**

Following functions includes the EDM module:

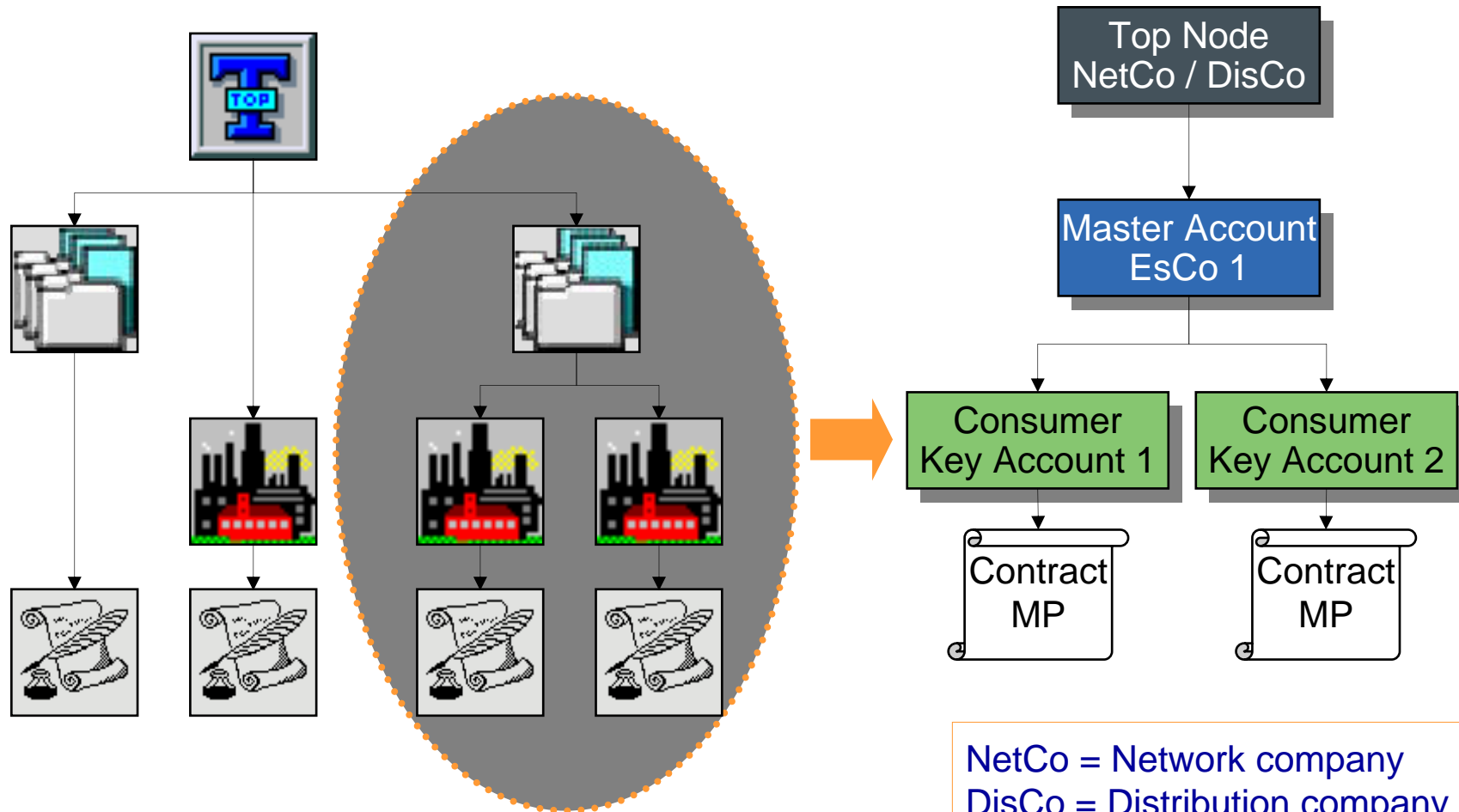
- Supplier model
- Assignment of metering points to suppliers
- Aggregation of each supplier
- Aggregation of all suppliers
- History of all assignments and metering data.

The screenshot displays a software interface for managing suppliers. On the left, a tree view under 'Lieferanten (3)' shows 'Buchkriterien', 'Buchresultate', and 'SupplierTotal'. Under 'SupplierTotal', three suppliers are listed: 'Supplier 1', 'Supplier 2', and 'Supplier 3'. An orange callout box points to 'Supplier 1' with the text 'Supplier with assigned metering points'. On the right, a detailed view for 'Supplier 1' is shown with tabs for 'Eigenschaften', 'Vrt. Zahler', and 'Aggregation'. The 'Eigenschaften' tab is active, showing fields for Name, Referenz, Email, Zeitzone (Mittleuropäische Zeit), Gültig von (01.01.2003 00:00), Gültig bis (01.01.2010 00:00), Aktiv (checked), Total-Aggregation (checked), and VZ-Ausgang.

**Supplier with assigned metering points**



**Build up a customer tree Create contracts and assign meterpoint on it  
Create different customer segments**



NetCo = Network company  
 DisCo = Distribution company  
 EsCo = Energy supply company  
 MP = Metering point

- Billing Determinants
- Load Profile Processing
- Analyses of the load profiles
- Tariffication

- Reports are based on Excel (highly flexible)
- Reports can be sent automatically by email as HTML, Excel, CSV
- Scheduled Execution

