



EG3: Roles and Responsibilities of Actors in Smart Grids Deployment - Status Report -

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EG3: Expected Results

- The development of **recommendations on the roles and responsibilities** of all involved actors in the implementation of the Smart Grids
- The definition of **criteria and recommendations for funding** of Smart Grid deployment
- **Key issues from the individual inputs by the EG3**
 - Expected benefits from Smart Grids for the own organisation;
 - Smart Grids features provided by the own organisation;
 - Smart Grids features needed from other players;
 - Decision criteria for the deployment of specific Smart Grids features
 - Own organisation roles & responsibilities in the Smart Grids deployment;
 - Interfaces and interaction with other players
 - Funding options
- **Deliverable = Synthesis of the detailed information from above**

Ongoing Work & Timetable

- **Key questions and compilation of results: February / March 2010:**
 1. Activities, Roles and Responsibilities - Status Quo
 2. Benefits, Criteria and Recommendation for Funding of Smart Grids
 3. Interfaces and Interaction
 4. Roles and Responsibilities – Recommendations on Scope, Policy and Regulatory Directions
- **First draft deliverable April / May 2010**
- **Review, finalization and delivery to the EC: May / June 2010**

1. **Introduction, Tasks and Scope of WG3**
2. **Roles and Responsibilities – Status Quo**
3. **Benefits, Criteria and Recommendations for Funding of Smart Grids Deployment**
4. **Interfaces and Interaction**
5. **Roles and Responsibilities – Recommendations on Scope, Policy and regulatory Directions**
6. **Glossary and Abbreviations**
7. **List of References**

Roles & Responsibilities – Status Quo

- **Groups of Actors described in terms of their roles, duties, activities and responsibilities**
- **Grid providers**
 - TSOs
 - DSOs
 - Control area managers
 - Ancillary services providers
 - Grid communications providers

Roles & Responsibilities – Status Quo *(cont'd)*

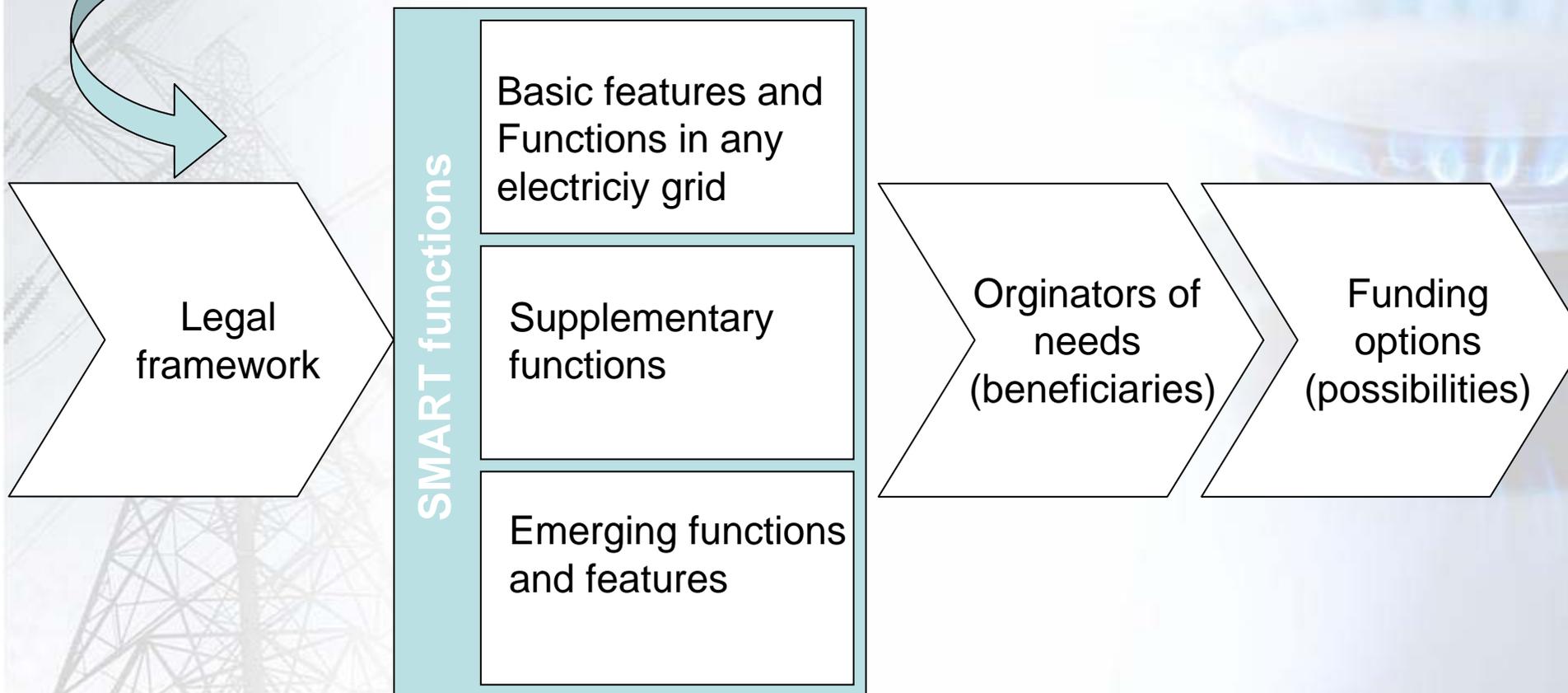
- **Grid users**
 - Generators
 - Industrial customers
 - Transportation undertakings
 - Commercial / buildings
 - Home / retail customers
 - Prosumers
 - Metering service providers
 - Metering point operators
- **Energy market place**
 - Energy transactions handler
 - Balance Responsible Party
 - Clearing & Settlement
 - Trader
 - Supplier

- **Suppliers of technology, products and services**
 - Electric power grid equipment industry
 - Ancillary services
 - Metering & billing
 - ICT
 - Home appliances, automation and energy management
 - Building energy management
 - Electric transportation / vehicles / solutions
 - Academia
- **Influencers**
 - Regulators
 - Standardization bodies
 - EU Commission and MS governments
 - Environmental policy and Social policy
 - Financial sector



Benefits, Criteria & Recc. for Funding - Process

Benefits / Criteria



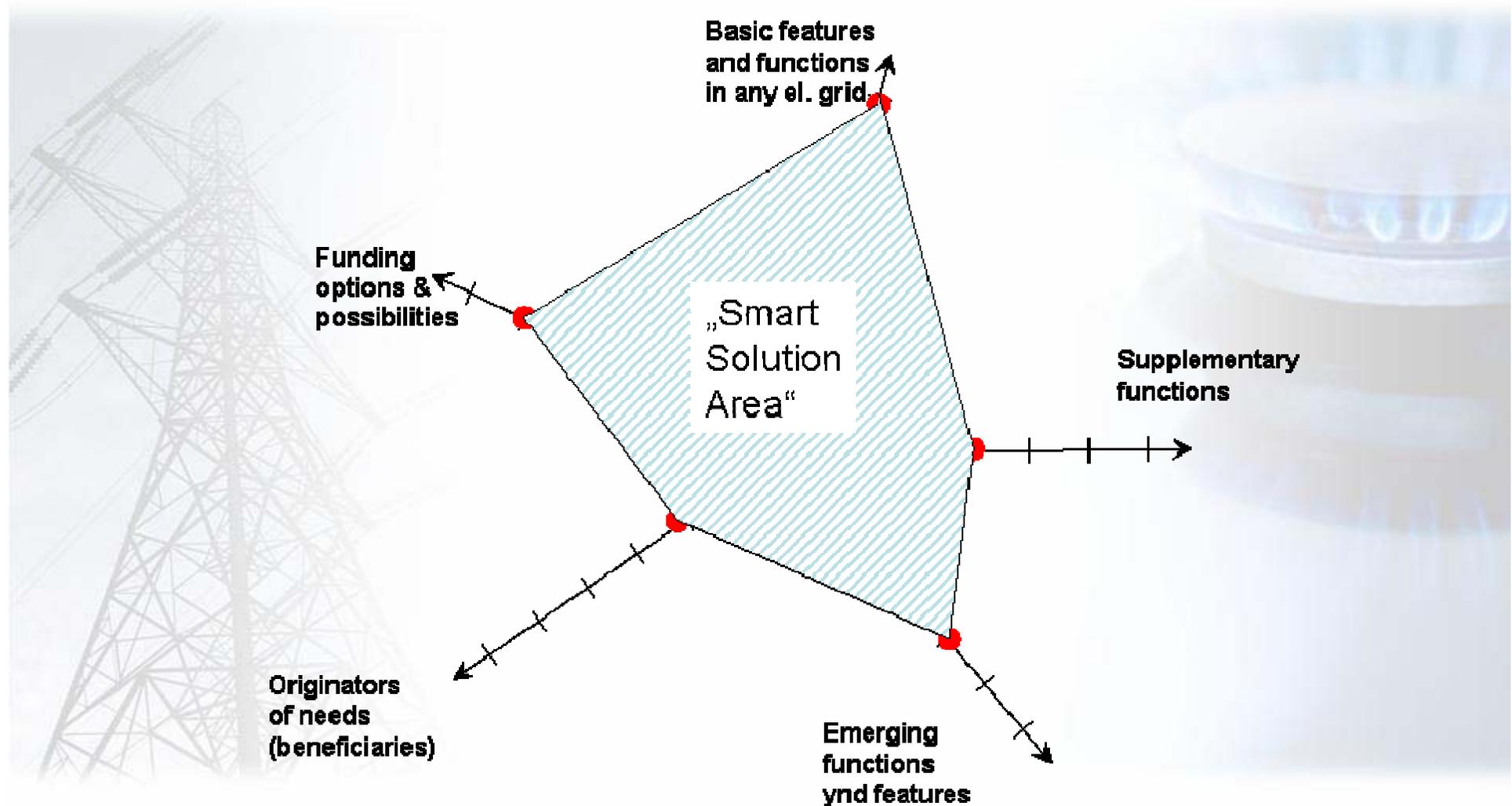
Originators of Needs / Beneficiaries

- **Single / small (groups of) grid users**
 - Large generation
 - Large (off/on) shore wind generation
 - ...
- **Large groups of grid users / communities**
 - Distributed / micro generation
 - ...
- **New technologies / economies**
 - Electromobility (cars)
 - Energy efficiency service providing companies
 - ...
- **Society / economy as a whole**
 - 20/20/20 targets
 - ...

Funding Options / Possibilities

- **Private funding by industry, private investors, etc.**
- **Public funding and tax incentives at the national and EU (FP's) level**
- **Private-public partnerships**
- **Investment incentives coupled with obligations and reward / penalties in regulation (i.e. incentive & quality regulation)**
- **Socialization within the grid tariffs**

„Smart Solution Area“ Maximization



- For each function / feature, search the maximum „area“
- Possibly additionally weight the various parameters
- Key users: grid users + grid operators
- Approach: external / output oriented (rather than internal / detailed / prescriptive)
- Building upon incentives for investments and criteria for the (expected) outcome
- Ex ante decision / ex post evaluation / continued process



Interfaces and Interactions

- Electricity supply value chain
- Regulation
- Cooperation of TSOs and DSOs with focus on bi-directional power flows
- Interfaces between DSOs and prosumers
- Interfaces between DSOs and storage owners
- Interfaces of DSOs and Smart Metering
- Flexible Energy Pricing and Grid Tariffs
- Regulated vs. non-regulated issues
- Required further analysis of interfaces and interactions

Roles and Responsibilities - Recommendations

- DSOs
- TSOs
- Generation
- Wholesale trade
- Retail supply
- Customers / prosumers
- Metering
- Energy market place
- Regulators
- Law and Policy makers in the EU and Member States



Thank you for your attention!

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