



GES 2007

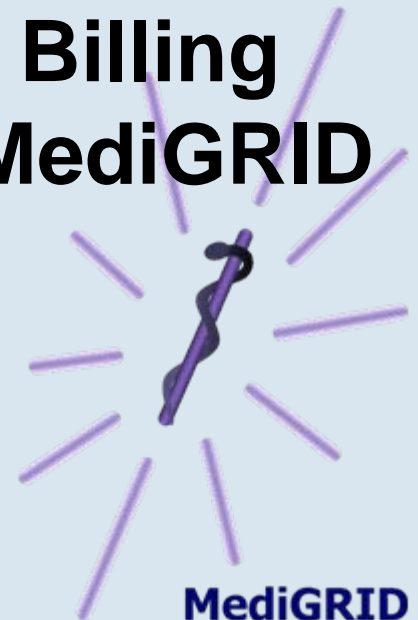
Requirements to Accounting and Billing within MediGRID and Services@MediGRID

Baden-Baden, May 2, 2007

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MediGRID



Bundesministerium
für Bildung
und Forschung

- IT infrastructure based in institutes not professional, no IT-center-know how
- Medical computing centers and university ccs move slowly to integrative solutions (DFG Initiative „Integriertes Informationsmanagement“)
- **Missing controlling- and billing processes prevent:**
 - Adequate resource discussion
 - industry cooperations



Similarities to product development in Industry

- It has to work (Technology, Licences, Pricing).
- „Where is the beef“ for providers and for clients?

Necessary preconditions:

- Academic und industrial Grid Service-users have to be able to use relevant Grid Services (threshold!)
- Billing with respect to heterogeneous funding agencies
- Support with the development of business models
- Relevant law (privacy, archiving, finances)



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Research

- Basic equipment via HBFG- (bis Ende 2006!)
- Gap financing via BMBF
- Operating cost via grant money or Länder

Health Care

- Basic equipment via Länder, Uniklinik ca. 150 Mio. davon 5 Mio IT/anno
- Operating cost health care via health insurances, University Medical Center app. 250 Mio€; 10 Mio IT/anno



Requirements to next Generation networked Research

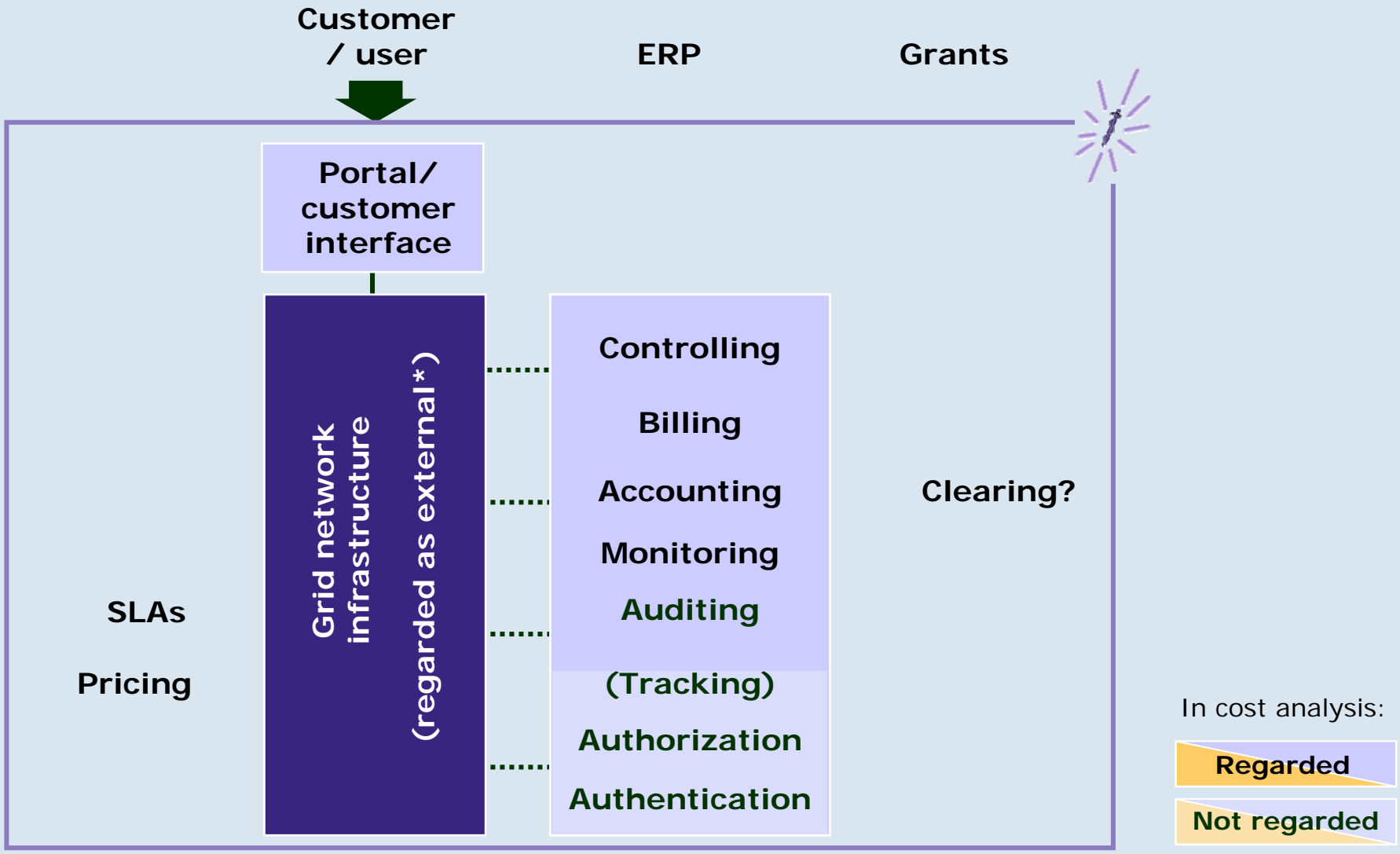


- Research Networks need to develop **business plans** – even with 100% funding
- IT-cost and management cost have to be made transparent
- Adapted **Service-Level-Agreements**
- Adequate controlling abilities
- **Separation** in research share and healthcare part
- Standardized contracts between actors
- **Scalability**





Framework



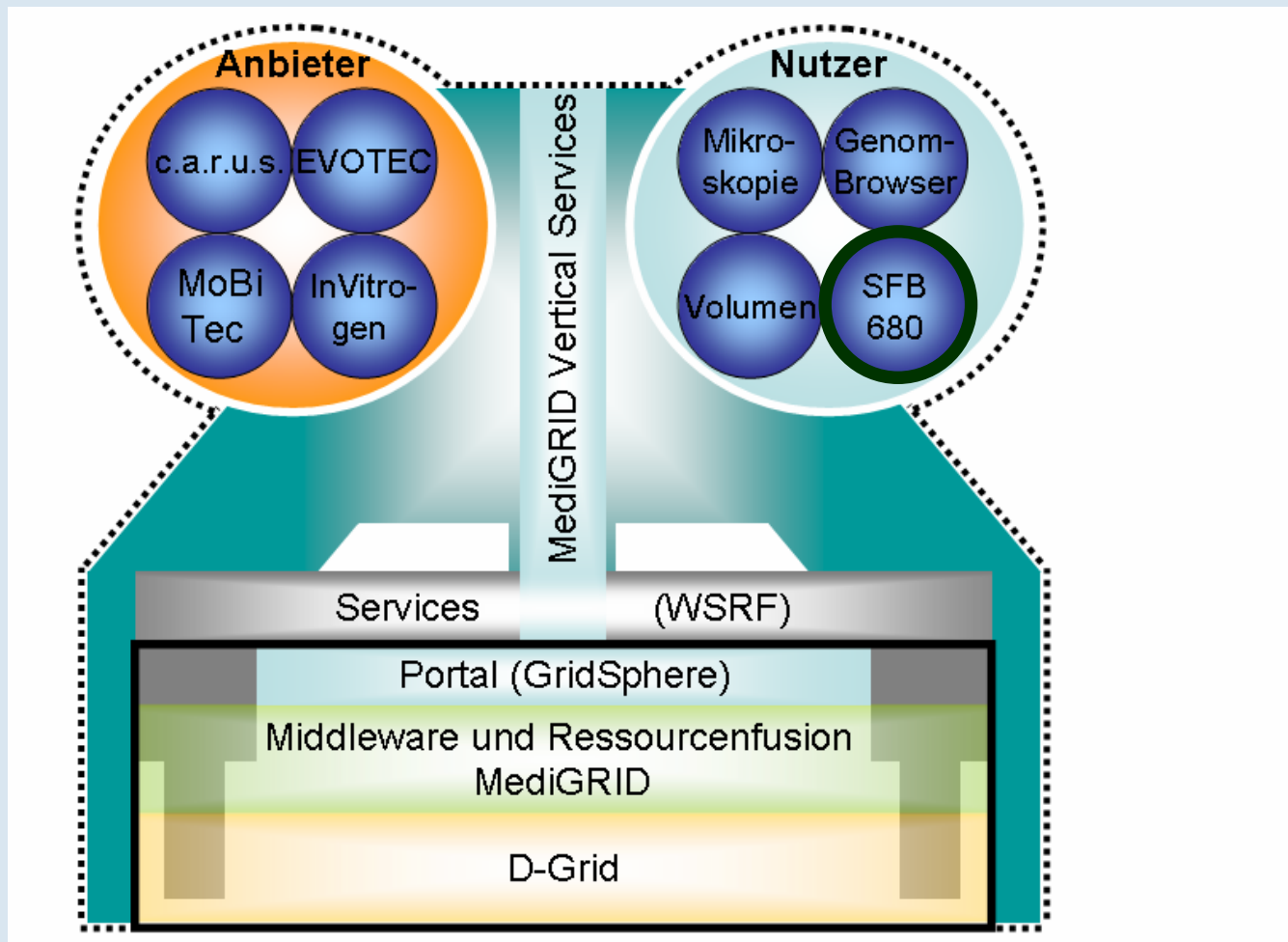
* Cost approach based on DFN-Grid infrastructure and its respective prices



Use cases (Services@MediGRID)



University and industrial Research



Services@MediGRID

AP1: Grid Coaching

- 1.1 Integration der Projekte
- 1.2 Grid Services Coaching
- 1.3 Migration einer Kundenanwendung ins Grid

AP2: Business enabling

- 2.1 Service Engineering
- 2.2 Geschäftsmodelle
- 2.3 Grid Service-Portal

AP3: Kundenprojekte

- 3.1 Selektion (SNPs)
- 3.2 Evolutionäre Analyse
- 3.3 Mikroskopbildanalyse
- 3.4 Genom-Browser

AP4: Faktura

- 4.1 Grid Accounting Shell
- 4.2 Integration in ERP-Systeme
- 4.3 MediGRID in kommerziellen Grids
- 4.4 Volumenorientierte Fakturierung genetischer und HTS*-Analysen

Expensive infrastructure more and more not included in life science funding

→ **The grant applicant is asked to shop this service at a provider**

• Example: SFB680 in Köln and at Kirchhoff Institut for Physics in Heidelberg → money for Grid-Services via DFG



Use Case: Industry



Similar facts for (pharmaceutical) industry:

→ **need for shopping / offering Grid Services**

- Example: HTS drug screenings (HTS=high-throughput screening) at c.a.r.u.s

- s. PharmGrid

Research controlling (not only) in Medicine (user)

- Impact
- Teaching
- Grant Money (so grid credits would be sub-optimal...)

Specific calculation of cost (provider)

- Business model
- IT/Management cost
- Refuse underfinanced projects

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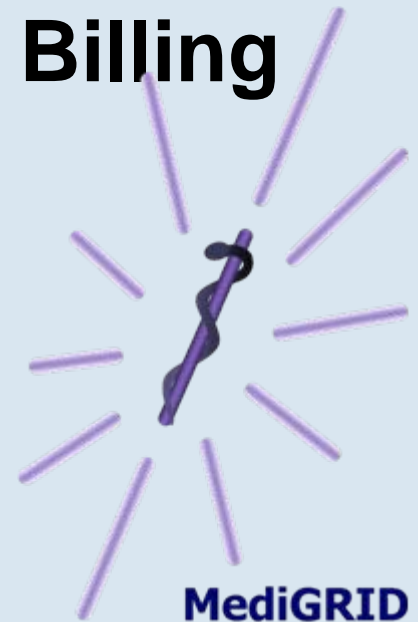
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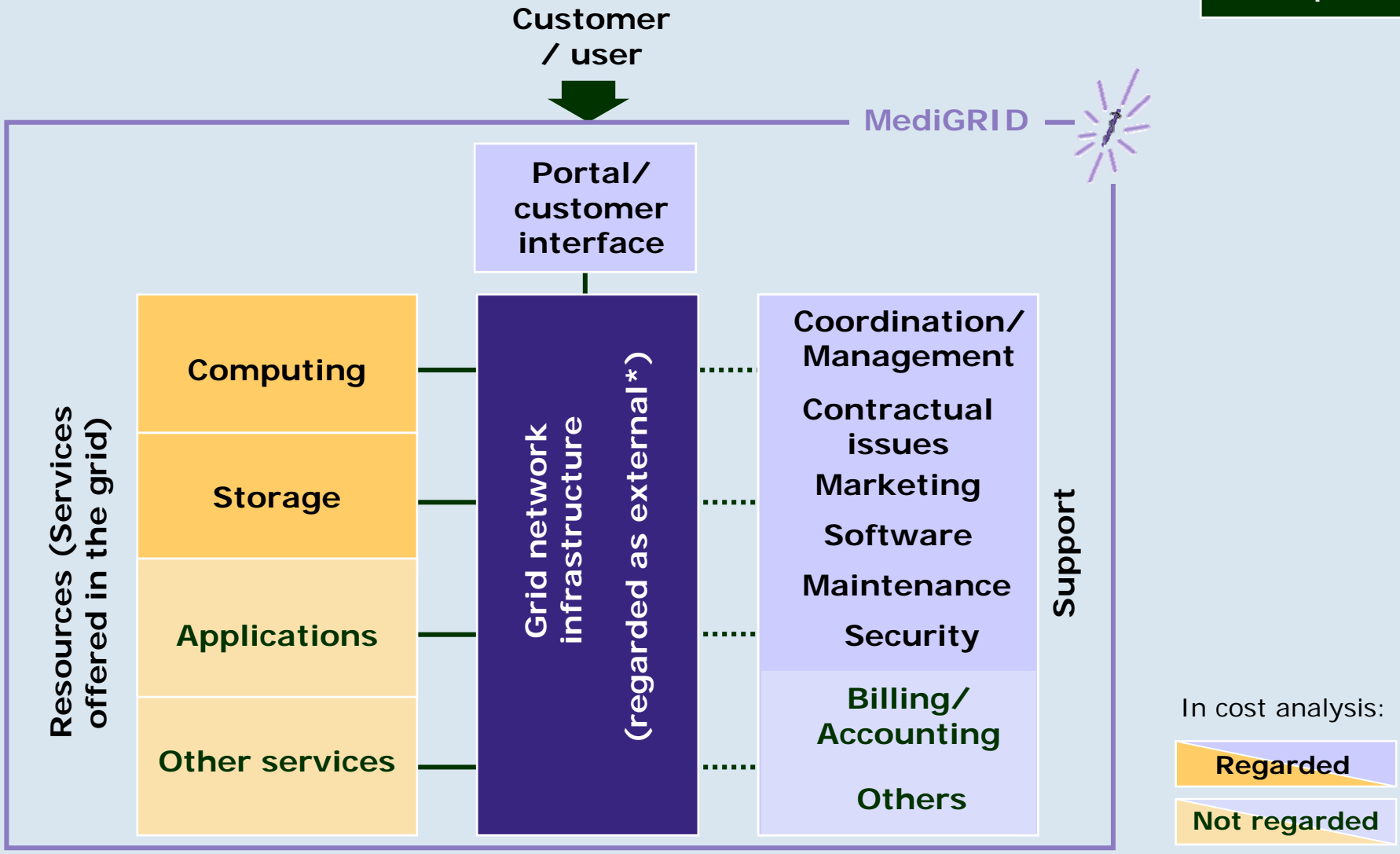
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Analyzing the cost structure of MediGRID, not all functional units could be considered



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