



innovations  
for high  
performance  
microelectronics

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# **PLASMADS: Smart mobiles meet intelligent environments**

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## Outline

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- **Design Goals**
- **The PLASMADS Architecture**
- **Ad hoc and Infrastructure Mode**
- **Concluding remarks**

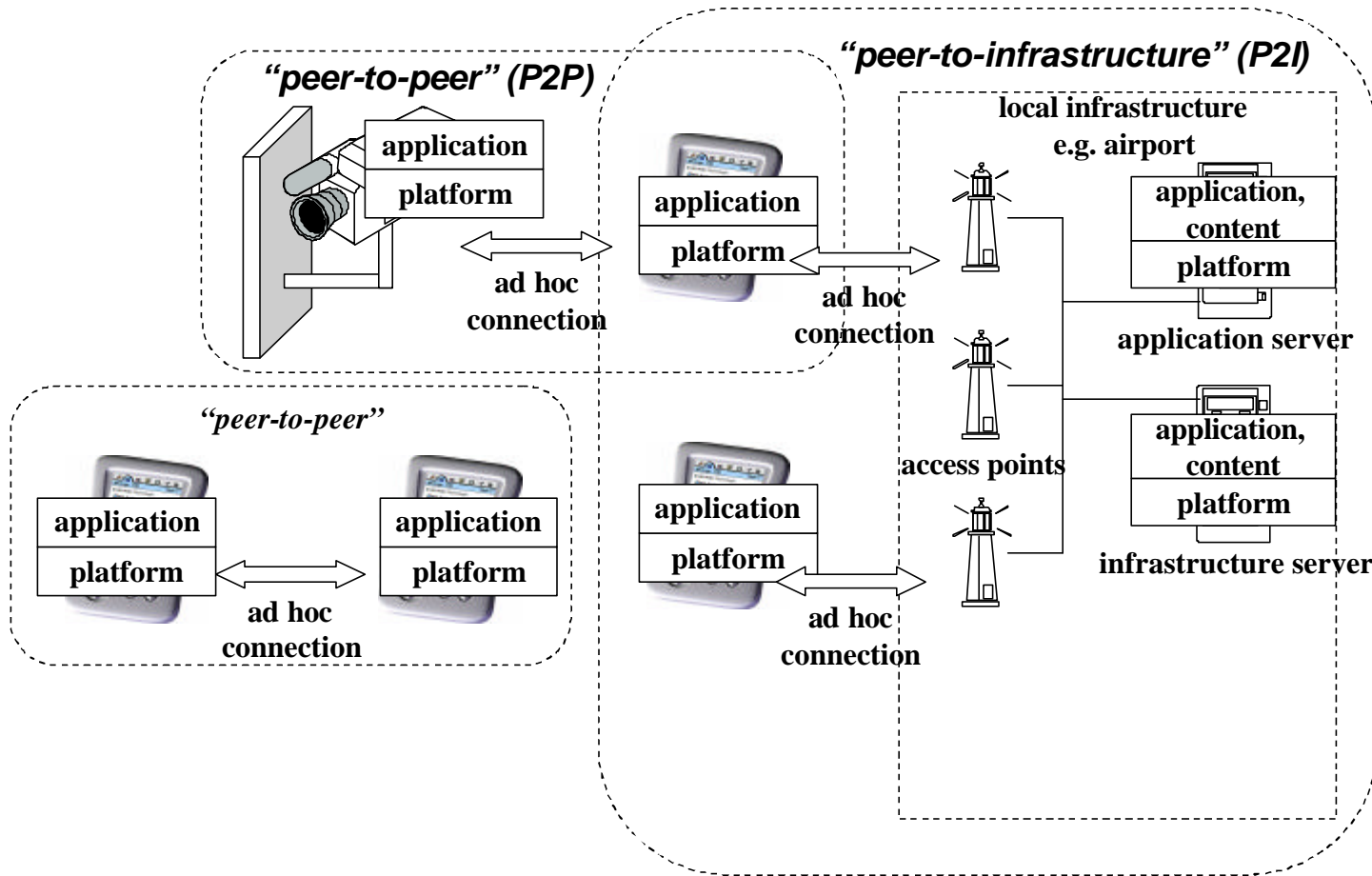


## Design Goals from User Perspective

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- **Anytime/Anywhere**
- **Open/JustPlay**
- **Situation-aware**
- **Timely**
- **Trustworthy**

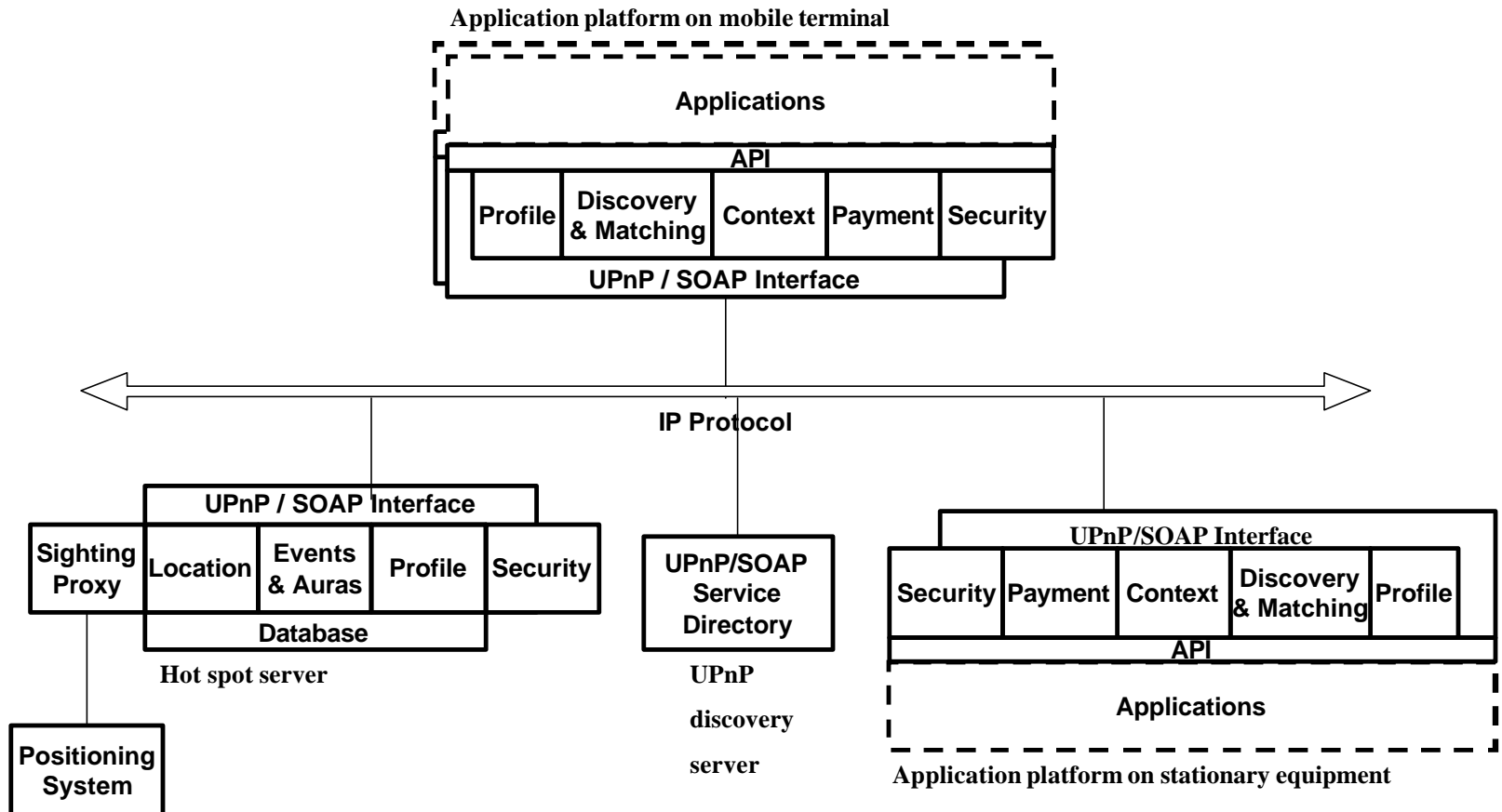
# Architectural Design Space





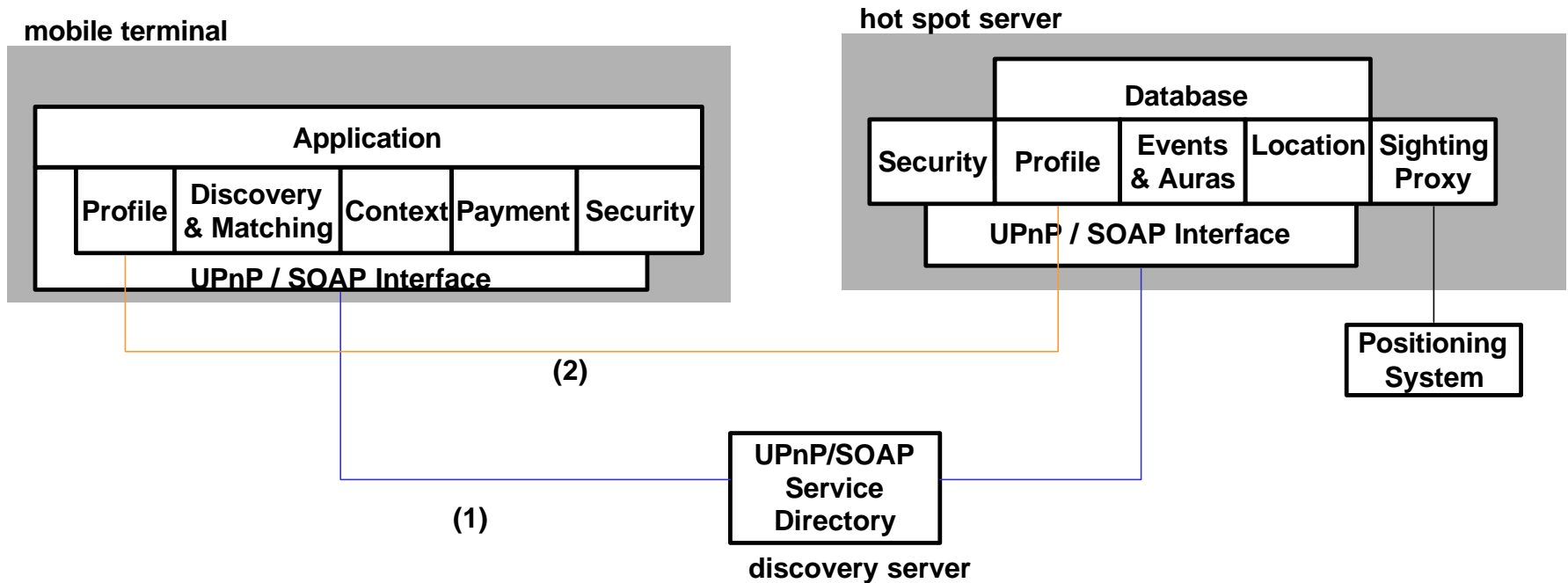
- **Considering ad hoc approach only**
  - What about sparsely populated areas
  - What about infrastructure services
- **Considering infrastructure approaches only**
  - What about not equipped areas
  - What about additional services and applications provided by other mobiles
- **Diversity of platforms**
  - How to achieve interoperability

# Overall Architecture

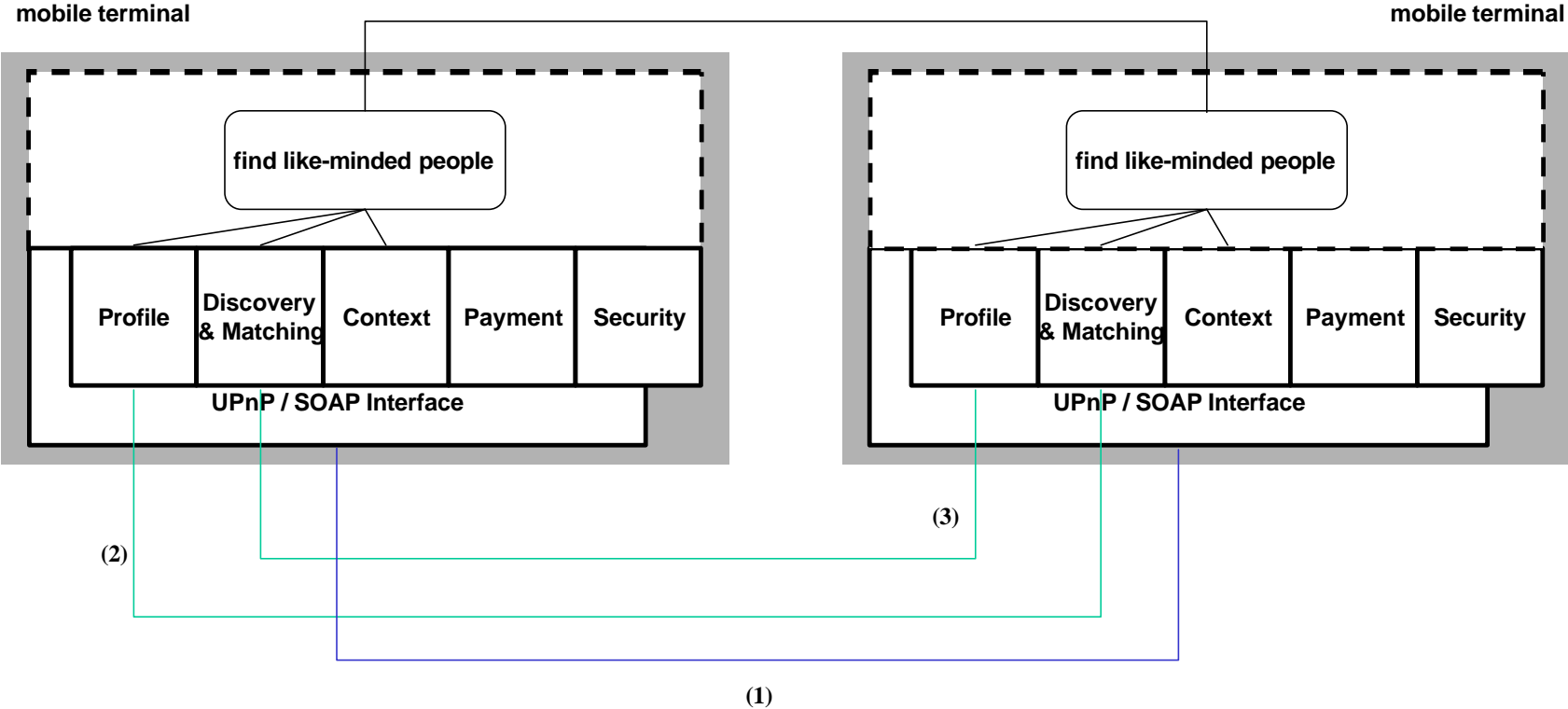




# Initial set-up



# find-like-minded people: ad hoc mode



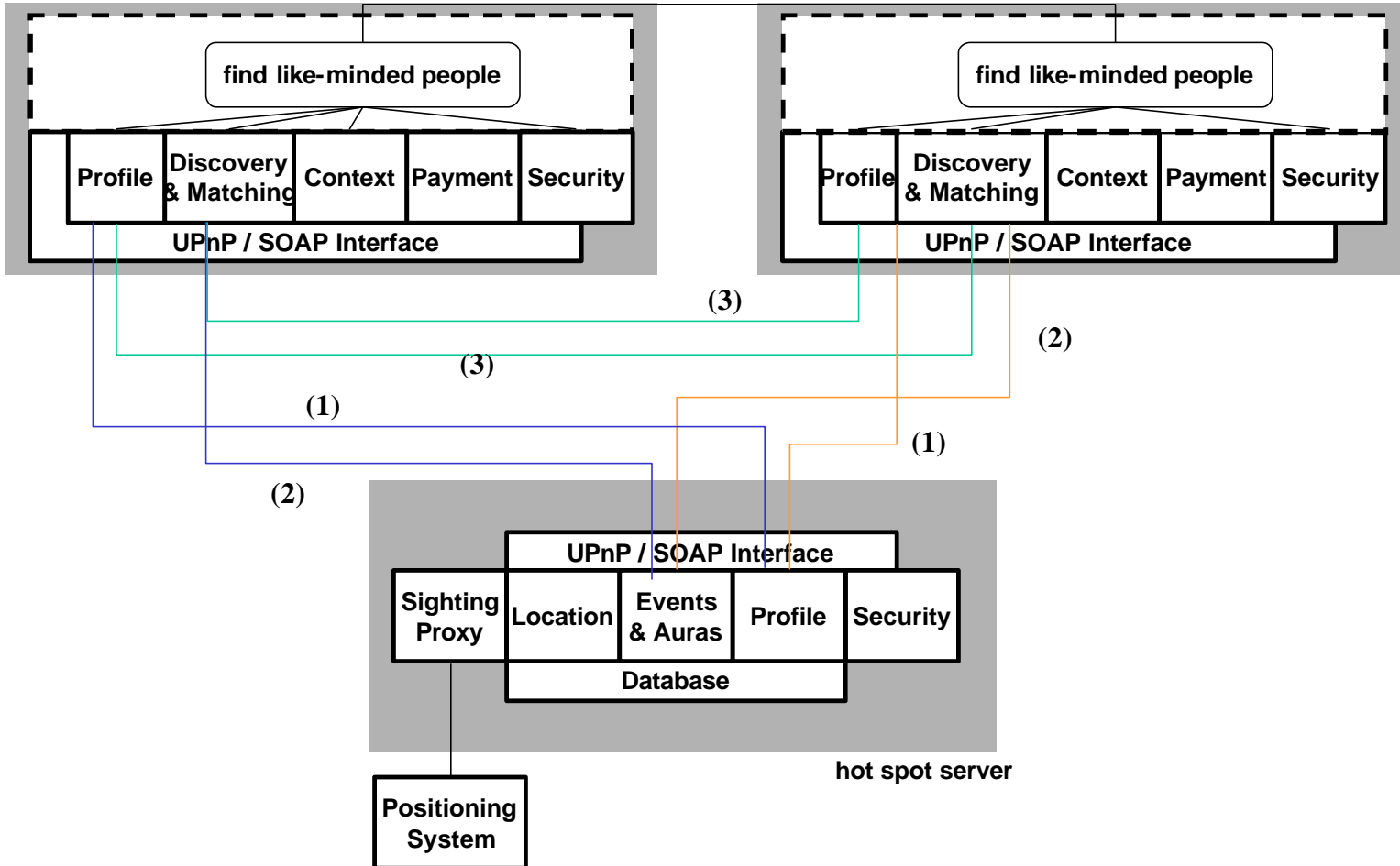


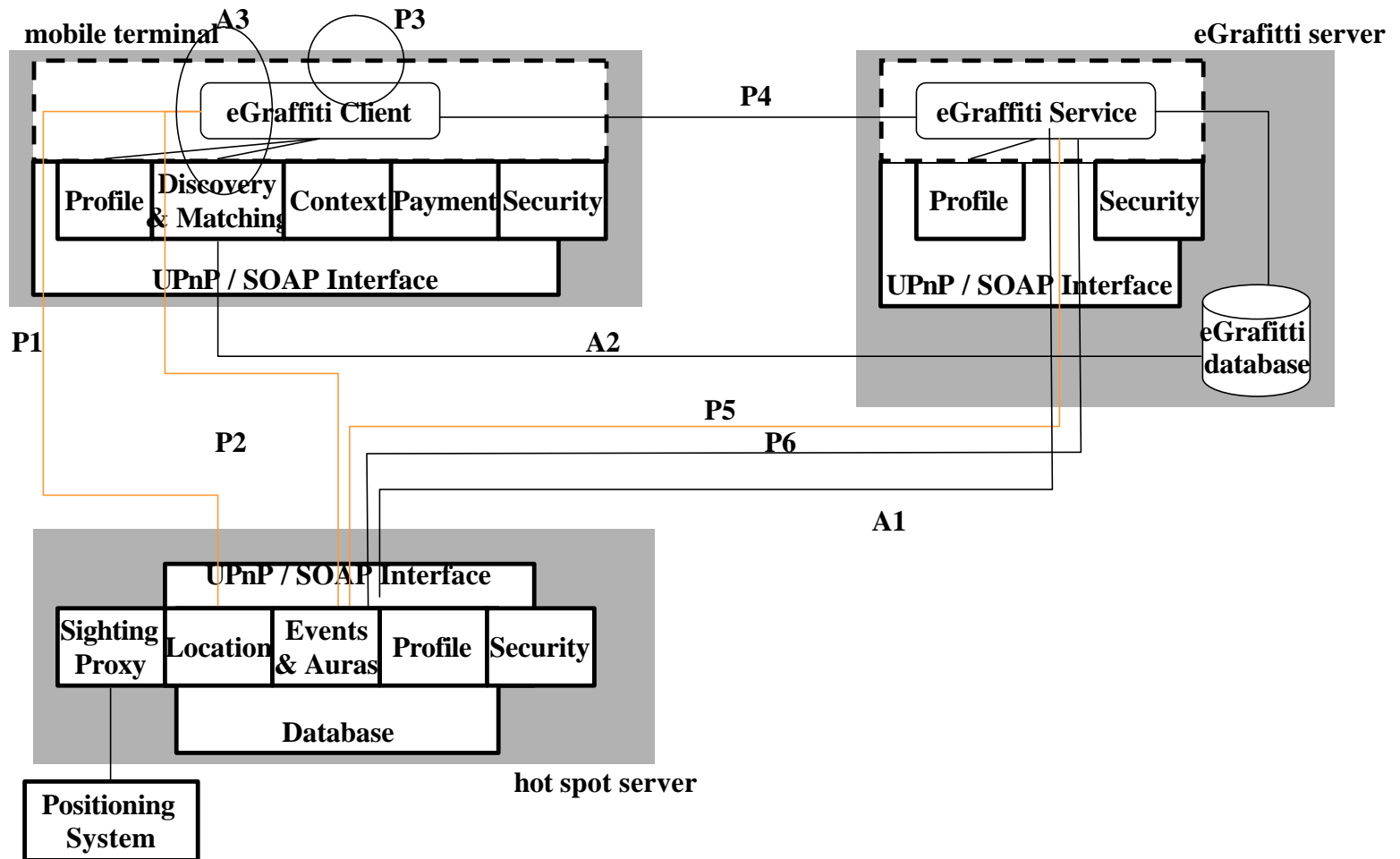
# find-like-minded people: infrastructure mode



mobile terminal

mobile terminal





## Concluding remarks

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- **Benefits**
  - Reduced privacy concerns
  - Dual mode for services possible
  - Exploitation of ad hoc and infrastructure features possible
  - Programming language and platform independent
- **First prototype expected in September 2004**
- **Further work**
  - More sophisticated matching algorithms
  - Service adaptation
  - Measurements