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## Opportunities for ENUM

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# Opportunities for ENUM

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- ENUM as an enabler
- Caller / Called party models two Views
- Examples of ENUM usage with
  - IP PBX's
  - VoIP Providers
  - Mobile
- Summary
- Questions

## ENUM as an Enabler

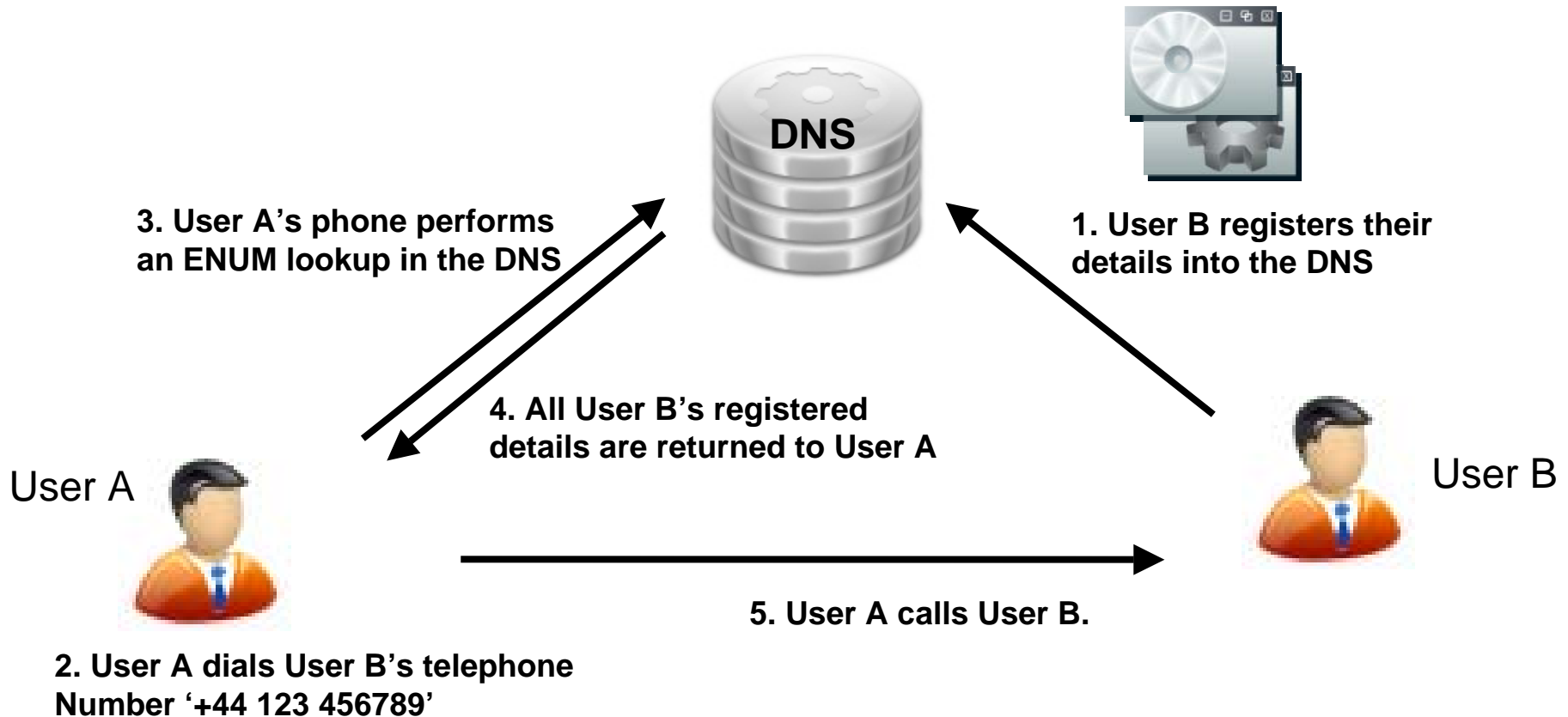
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- Public ENUM is an enabler to IP communications
- None of the communication technologies are dependent on ENUM
- As a product ENUM takes a lot of explanation
  - The technical aspects of the protocol
  - The Registration process
  - The many players involved in the different solutions, System Integrators, Communications providers and hardware manufacturers
- Much better to describe a service and include ENUM as the enabler
- Services include bypassing the PSTN & communication applications

# Two approaches to ENUM Calling party Model



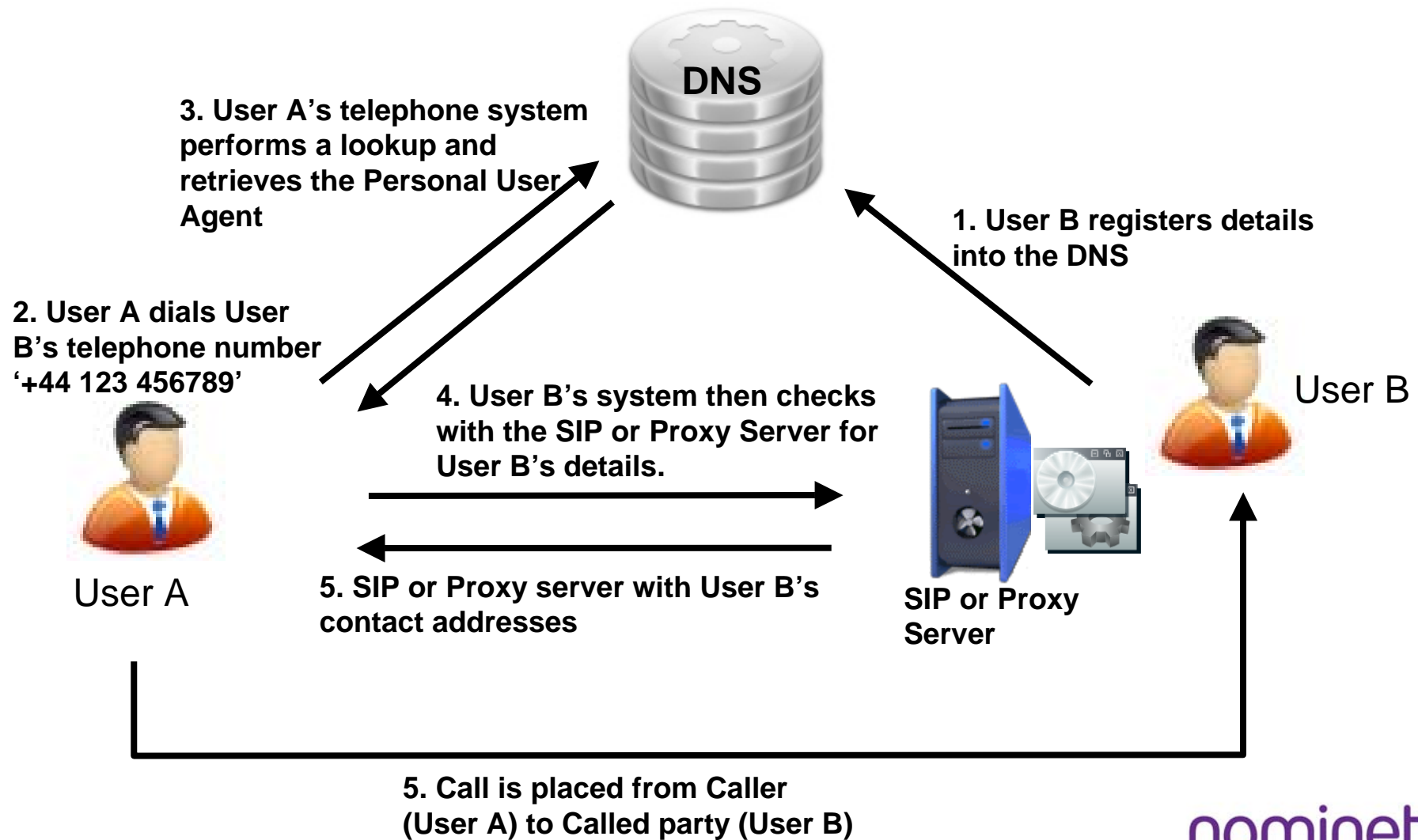
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# Two Approaches to ENUM Called Party ENUM



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## Examples of ENUM - IP PBX peering

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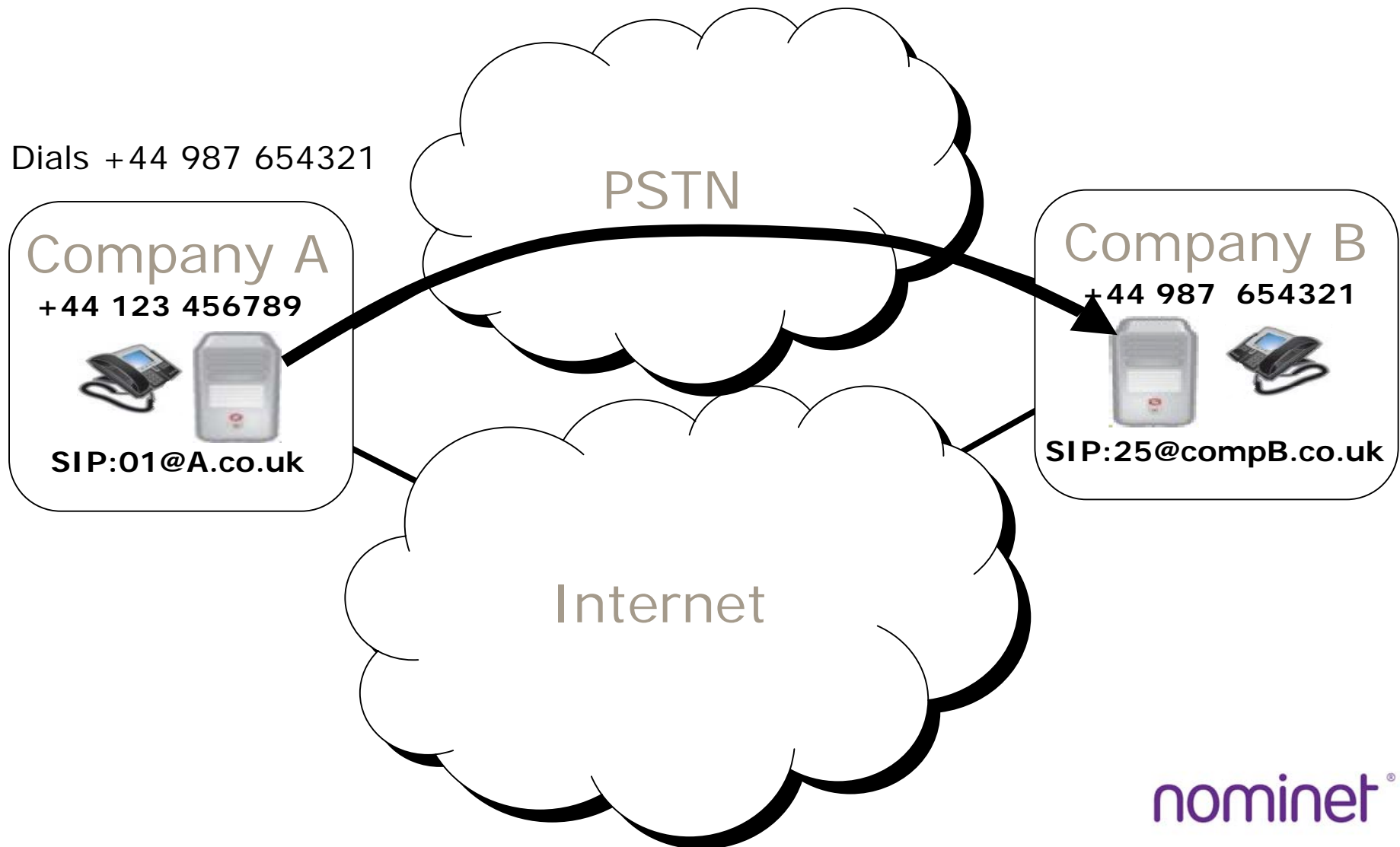
- Companies are replacing traditional PBX's as they come to the end of their life
  - The IP PBX's offer many features and benefits to businesses
  - However often they are still connected solely to the PSTN network
- Benefits of ENUM enabling
  - Companies can bypass the PSTN and associated costs
- Opportunities
  - Include it in the deployment as part of the service
  - Provide it as value add post deployment, offering benefit for little extra investment.
- The key targets for this service are
  - Large supply chains such as the Automotive industry
  - Retailers with many suppliers
  - Financial groups with many independent agents
  - Government departments e.g. NHS
- Who is likely to provide these services
  - Communication providers, Systems Integrators, End user businesses

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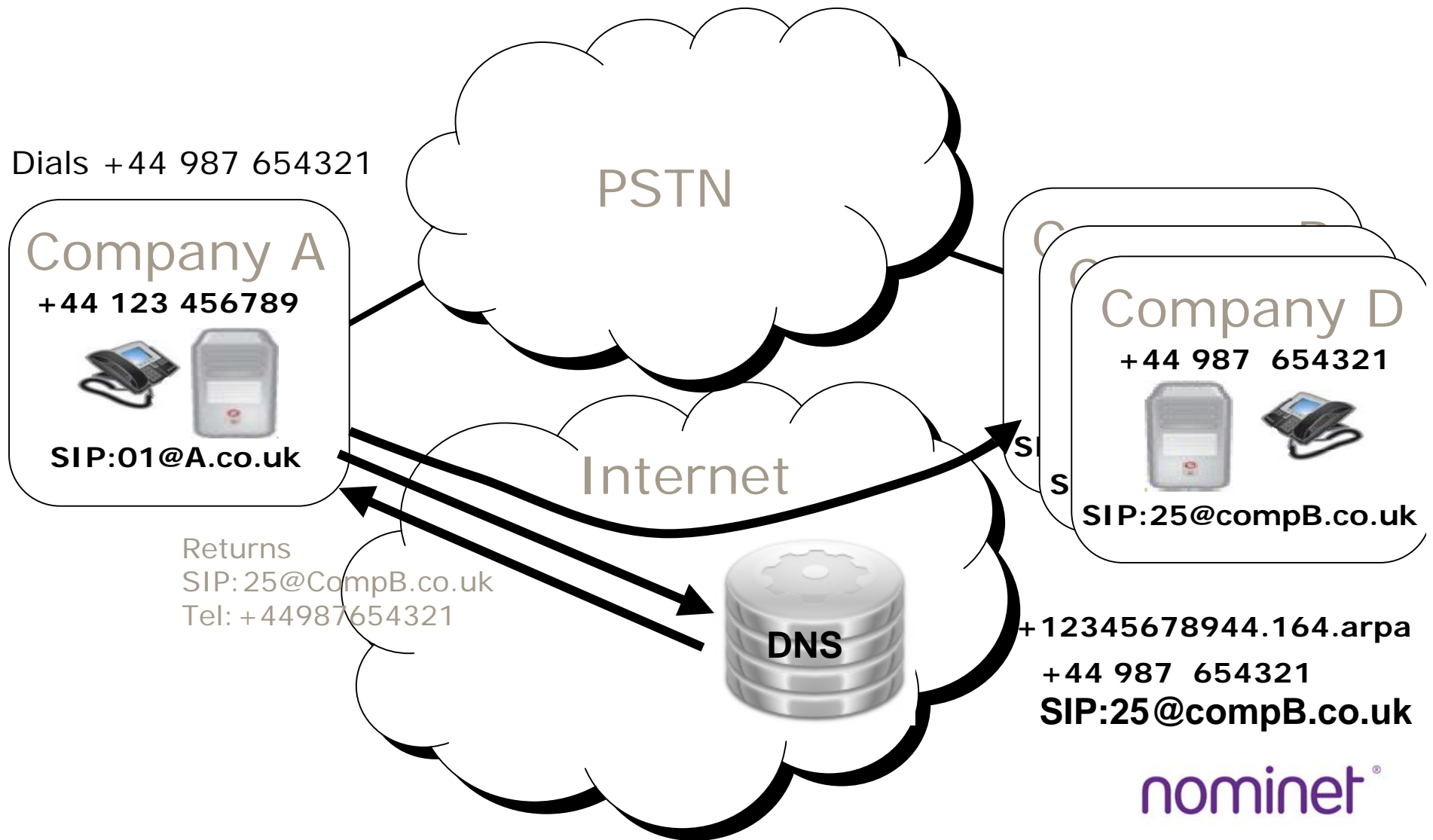
## VoIP PBX without ENUM – IP PBX peering





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# VoIP PBX with ENUM - IP PBX



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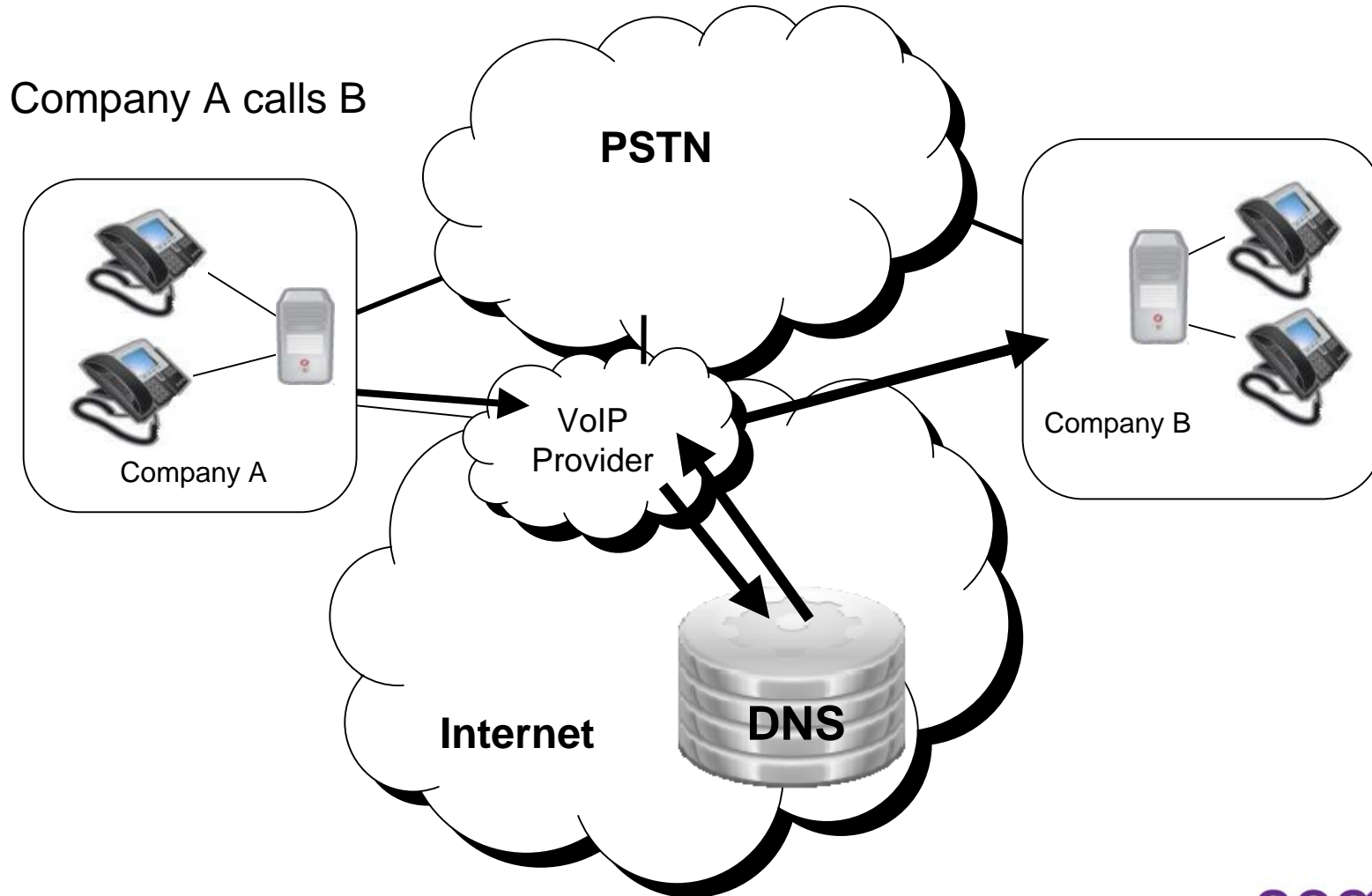
# VoIP communications provider

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- Single neutral registry best solution
- Use Public ENUM to extend On Net experience
  - Include ENUM in the subscription for the service offer Free On Net + ENUM numbers
- Most importantly it presents the opportunities to the service provider to offer value add services
  - Applications that allow users to manage all their communications
  - Charging for value based service rather than per min
  - + more ?

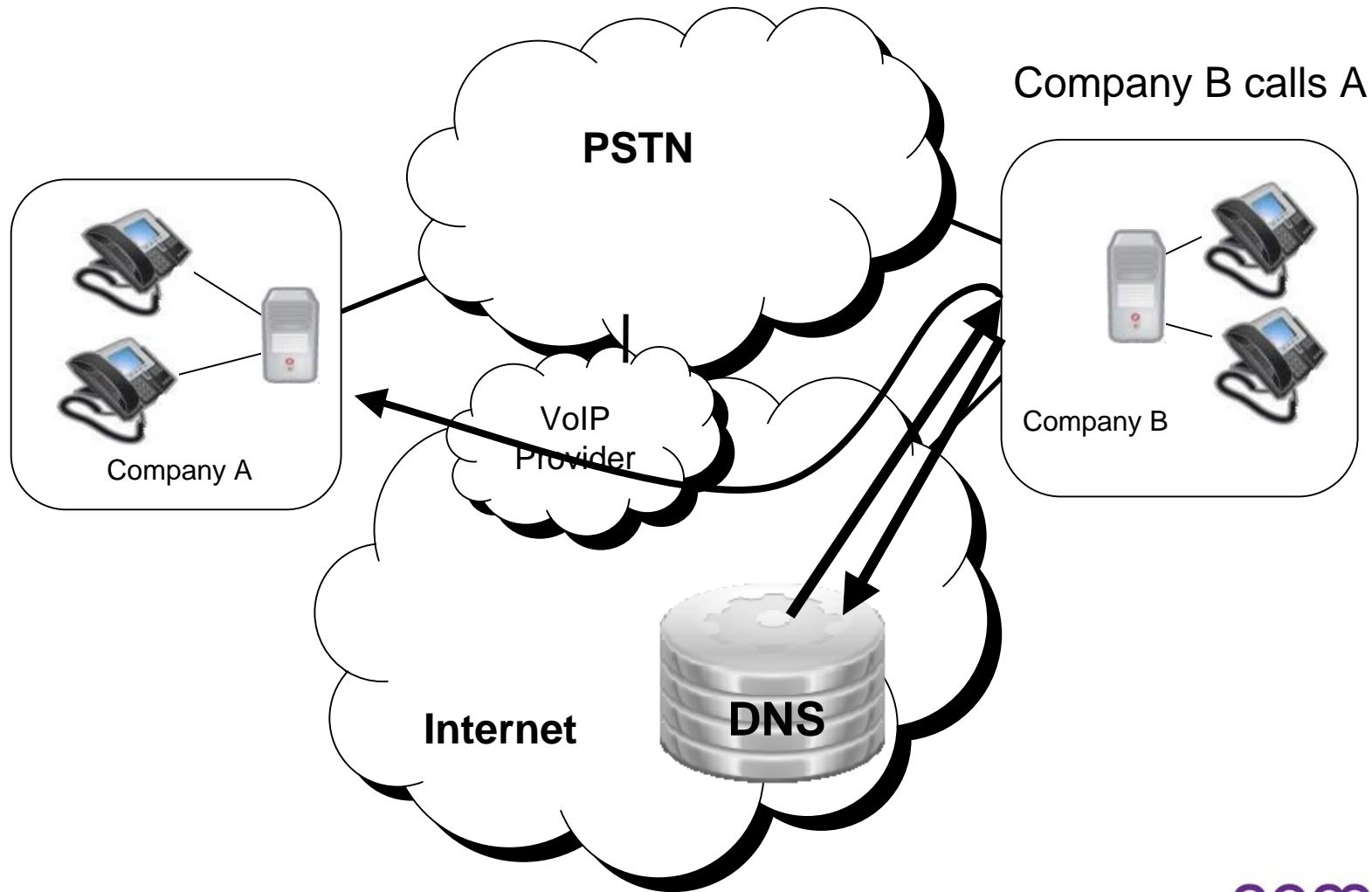
# ENUM the Enabler VoIP Communications Provider



# ENUM the Enabler VoIP Communications Provider



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## Fixed to Mobile

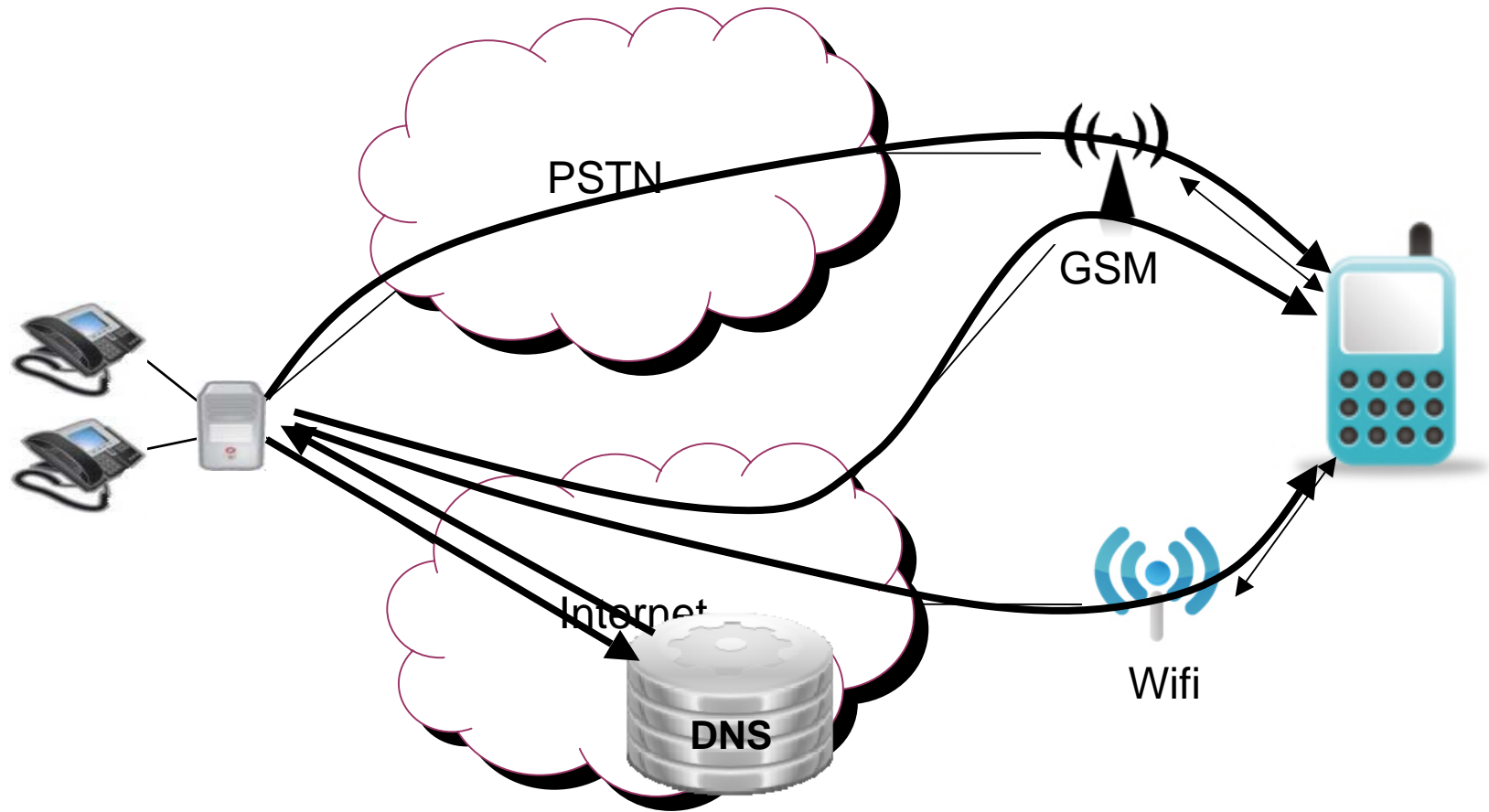
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- Companies face large challenge for fixed line to Mobile charging
- Mobile providers control what services they allow via their data connections
  - Have either blocked the SIP protocol restricting VoIP
  - Prohibited use of VoIP in their T&C's from all but their most expensive data tariff's
- Mobile phones now also have WiFi
  - Muddy's the water of what service you are using.
- Traditionally the user experience is very hard to manage even for the Mobile operators.
- Mobile to Fixed is less of an issue due to the inclusive minutes in call packages.

# ENUM the Enabler Fixed line to mobile



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# Smart phones

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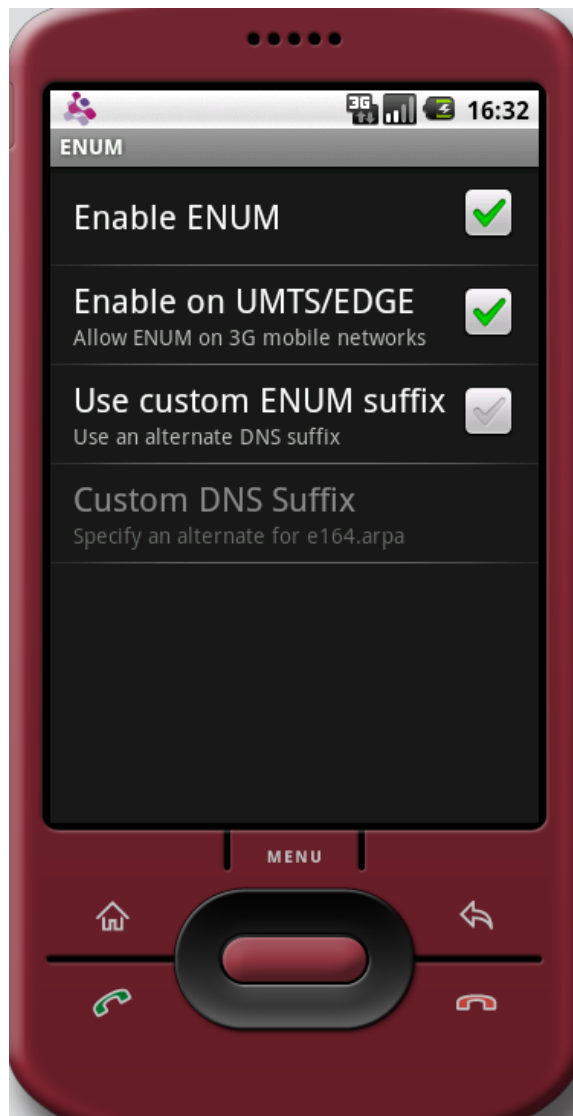


- Smart
  - These have the capability to manage multiple communication types via applications on the phone
  - They have clients for PSTN diallers, email, instant messenger, VoIP calls
  - This makes them a prime target for ENUM powered applications
- Mobile phones are generally smart phones.
  - Application developed by Ray Bellis at Nominet



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## Ray Bellis's ENUM application for the android



- Available on the Android Marketplace
- Has flexibility to turn off GSM if necessary
- Dial the number of your contact
- App performs an ENUM query
- Presents the user the options available
- Caller make decision of call method and places the call.
- 18 Android handsets set to launch this year

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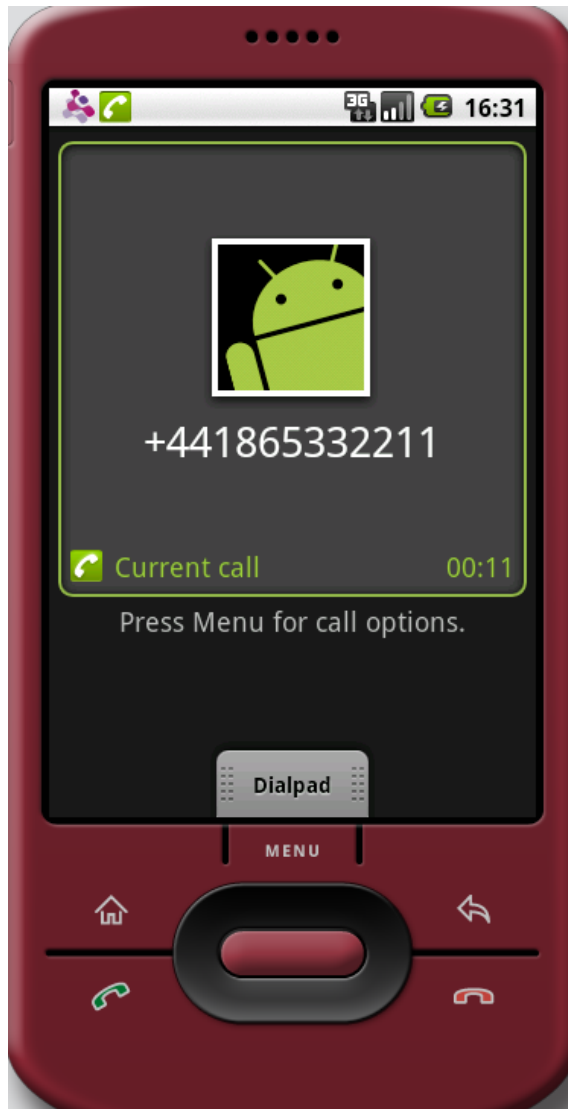
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## Summary

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- Two different ways to use ENUM that have different opportunities and user experiences
- There are opportunities already out there as well the unknown application
- Ray's application which demonstrates what can be done.
  
- As Nominet we have built and launched the ENUM registry
  - It exists, it's flexible and available
- We can help with
  - setting up as a registrar
  - We can work with you through business cases you may have
- We will continue to promote Public ENUM
  
- We're looking for registrars and partners who will create the services that will use the Public ENUM

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Thank you and Any questions?



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